To: Oregon Energy Facility Siting Council

From: Sarah Esterson, Senior Siting Analyst

Date: September 7, 2017

Subject: Agenda Item J – Columbia Ethanol Project Council Review of Proposed Order on Request for Amendment 1, and Comments Received on Proposed Order

BACKGROUND AND SUMMARY OF AMENDMENT REQUEST

The Oregon Energy Facility Siting Council (Council) issued a site certificate for the Columbia Ethanol Project (facility) on August 9, 2007, authorizing the construction and operation of an ethanol plant capable of producing 35 million gallons per year (MMgy) of ethanol located on a 25-acre parcel leased from the Port of Morrow in the Boardman Industrial Park, Port of Morrow, Morrow County, Oregon. Major plant components consist of buildings, storage tanks, bins, and a flare system.

The certificate holder submitted Request for Amendment (RFA) 1 on May 4, 2016. The amendment request includes the following facility modifications and site certificate condition amendments:

- Corn oil extraction system (constructed and in operation)
- Sugar addition system (constructed, short-term operation complete but infrastructure remains in place)
- Change in ethanol feedstock to include, in addition to the previously approved corn feedstock, a blend of corn and granulated sugar (short-term use, complete)
- Carbon Dioxide (CO₂) Capture Infrastructure (constructed and in operation)
- Increase the annual ethanol production from 35 to 44 million gallons per year
- Amendment of conditions (Conditions IV.C.2 and IV.C.4), imposed to ensure compliance with the Council’s Retirement and Financial Assurance standard

On June 24, 2016, the certificate holder submitted a supplemental information report to the Oregon Department of Energy (Department) providing additional information regarding the amendment request. The supplement also included information in response to Department and reviewing agency questions. On June 27, 2016, the Department sent the certificate holder an information request, and Pacific Ethanol Columbia, LLC responded on August 18, 2016.
On November 29, 2016, the Department sent the certificate holder an additional information request related to the evaluation of site decommissioning and restoration and received a response from the certificate holder on January 20, 2017. On August 8, 2017, the Department issued the proposed order, recommending approval of an amended site certificate, and issued public notice of the proposed order. The notice included a September 7, 2017 deadline for submitting, to the Department, written comments and requests for contested case on the proposed order. The Department received three comments; two comments were received from reviewing agencies and one comment was received from a tribal government; no requests for contested case on the proposed order were received.

**ASSESSMENT OF AMENDMENT REQUEST**

**Council Scope of Review**

Pursuant to Oregon Administrative Rule (OAR) 345-027-0070(10)(c), and (d), for this amendment request, the Council must consider:

- Whether the amendment would affect any finding made by the Council in an earlier order; and
- Whether the amount of the bond or letter of credit required under OAR 345-022-0050 is adequate.

**Staff Evaluation of Amendment Request and Summary of Proposed Order**

The proposed order addresses each of the Council standards, and recommends that the Council find that the amended facility complies with, or, with new or modified site certificate conditions, can comply with each of the Council standards. OAR 345-027-0070(10) requires that the Council apply the local land use criteria in effect on the date that the request for amendment is submitted.

As described in OAR 345-027-0070(10), the Department assessed the amendment request against all applicable Council standards and other applicable rules and statutes. The Department’s assessment concluded that for a number of Council standards, the amended facility would remain in compliance without new or amended conditions or would be in compliance subject to the existing site certificate conditions without modification. These standards include:

- General Standard of Review
- Organizational Expertise
- Structural Standard
- Soil Protection
- Land Use
- Protected Areas
• Fish and Wildlife Habitat
• Threatened and Endangered Species
• Scenic Resources
• Historic, Cultural, and Archaeological Resources
• Recreation
• Public Services
• Waste Minimization
• Noise Control Regulations
• Removal Fill
• Water Rights

For the standards and regulations listed above, the proposed order does not recommend any new conditions or changes to existing conditions in the site certificate.

In order to ensure the facility, as amended, continues to comply with the remaining Council standard not listed above, the Council’s Retirement and Financial Assurance standard (OAR 345-022-0050), the Department recommends findings and alternative findings, with conditions that apply to two compliance-demonstration scenarios proposed by the certificate holder, as described below.

The Retirement and Financial Assurance standard requires a finding that the facility site can be restored to a useful, non-hazardous condition at the end of the facility’s useful life, should either the certificate holder stop construction or should the facility cease to operate. In addition, it requires a demonstration that the certificate holder can obtain a bond or letter of credit to restore the site to a useful, non-hazardous condition.

For this standard, the certificate holder requests Council interpretation of the phrase “useful, non-hazardous condition” as referenced in OAR 345-022-0050(1). The Council’s historic interpretation of the phrase is that it refers to a condition that is, “consistent with the local comprehensive land use plan and land use regulations.” The certificate holder notes that while this interpretation was applied in the 2007 Final Order on the ASC, an evaluation of the specific level of restoration necessary to achieve conditions that are consistent with the local comprehensive land use plan and land use regulations was not provided. The certificate holder further explains that the phrase, “useful, non-hazardous” is not defined in rule or statute and expresses a belief that based upon the ambiguity of the Council’s previous findings and the lack of statutorily defined terms, that the Council has the discretion to interpret the phrase with more flexibility than solely based upon complete removal of all facility components.

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1 OAR 345-022-0050(1).
2 See e.g., Final Order on Perennial Wind Chaser Station, p.125; Final Order on Saddle Butte Wind Park, p.117; Final Order on the Klondike III Wind Project, p.16
Columbia Ethanol Project
Staff Report on Proposed Order on Request for Amendment 1
The certificate holder requests that the Council interpret the phrase, “useful, non-hazardous” as a condition allowing for aboveground infrastructure to remain in place, once appropriately cleaned. The certificate holder clarifies that the request for a differing Council interpretation is specific to the land use designation for the facility, Port Industrial (PI).

Historically, Council interpretation and decision on requirements necessary to satisfy the Council’s Retirement and Financial Assurance standard, specifically tasks and actions necessary to restore the site to a “useful, non-hazardous condition,” includes removal of all above-ground and in some cases below-ground facility components, and revegetation of the site. This interpretation has uniformly been applied across Council decisions on energy facilities, regardless of the underlying land use designation. The Department presents its evaluation of the certificate holder’s compliance demonstration consistent with Council’s historic interpretation under Scenario 1, and its evaluation of the alternative approach under Scenario 2 below, as presented in the proposed order.

The facility modifications in RFA 1, including the corn oil extraction system, sugar addition system, CO₂ capture infrastructure, and a change in ethanol feedstock to include both corn and a blend of corn and granulated sugar, could result in actions or tasks necessary to restore the site to a useful, non-hazardous condition that were not previously evaluated in the application for site certificate (ASC) or original final order. Therefore, the certificate holder provided an evaluation of the specific actions and tasks necessary for restoration of the site of the facility, as amended, to a useful, non-hazardous condition under two scenarios. In the first scenario, Scenario 1, the certificate holder evaluates the tasks necessary for the removal of all above-ground infrastructure to slab-grade, including new facility components included in the amendment request. In the second scenario, Scenario 2, the certificate holder evaluates the tasks necessary for removal and disposal of all hazardous and non-hazardous materials, and equipment cleaning and lock-out, with the above-ground infrastructure including buildings remaining in place.

Tasks and Actions Necessary to Restore the Site to a Useful, Non-Hazardous Condition

Removal of Aboveground Infrastructure to Slab-Grade (Scenario 1)

The tasks and actions represented by the certificate holder as necessary to restore the site to a useful, non-hazardous condition, assuming the removal of aboveground infrastructure to slab-grade, include the following:

- Survey and testing for hazardous materials
- Process streams including corn silos, conveyors, surge bin, hammer mills, front end mixing tanks and vessels would be drained, flushed and emptied
- Vacuum trucks would be used to drain and transport hazardous materials for proper disposal
- Minor additional non-hazardous cleanup and proper transport and disposal
- Lock-down of electrical equipment
- Utility disconnect; cut and cap all above- and belowground utilities
• Removal and disposal of buildings, tanks and equipment
• Mechanical systems lockout
• General site/area wash down
• Pumping of cooling tower water to city wastewater
• Removal of boiler blowdown water
• Wash-down of Fermentation and Distillation, Drying and Evaporation Building

The certificate holder’s consultant, Terry Freemen of the FCM Group, prepared the decommissioning task list and decommissioning/site restoration cost estimate for the amendment request. The certificate holder provided evidence of Mr. Freeman’s qualifications in preparing this type of evaluation and described that he was the construction manager for Pacific Ethanol’s facility in Stockton, California and therefore understands the actions necessary for decommissioning ethanol facilities.

*Aboveground Infrastructure Remains In-Place (Scenario 2)*

The tasks and actions represented by the certificate holder as necessary to restore the site to a useful, non-hazardous condition, assuming the aboveground infrastructure is cleaned of all contamination but remains in place, include the following:

• Survey and testing for hazardous materials
• Process streams including corn silos, conveyors, surge bin, hammer mills, front end mixing tanks and vessels would be drained, flushed and emptied
• Vacuum trucks would be used to drain and transport hazardous materials for proper disposal
• Minor additional non-hazardous cleanup and proper transport and disposal
• Lock-down of electrical equipment

The Department recommends, based on the analysis in the proposed order, that the Council consider the additional steps listed below as necessary for facility decommissioning under Scenario 2:

• General site/area wash down
• Pumping of cooling tower water to city wastewater
• Removal of boiler blowdown water
• Wash-down of Fermentation and Distillation, Drying and Evaporation Building

The certificate holder requests that because clean, empty tanks, infrastructure and buildings associated with the facility would be compatible with PI industrial zoning and use, the Council consider that a useful, non-hazardous condition would be achieved by leaving the infrastructure in place for future use by the Port of Morrow, who through an executed agreement (expected to be received and provided to the Council prior to the September 22, 2017 Council meeting) would establish a legally binding agreement allowing for above slab-grade infrastructure to remain in place and place responsibility of future site restoration and remediation on the Port.
To support an evaluation of the certificate holder’s request, the Department recommends that Council considers the county’s purpose of the PI zone which is to regulate development and provide for port-related industrial uses. Specifically, Morrow County Zoning Ordinance (MCZO) Section 3.073 states that, “The PI zone is intended to regulate development at portions of the Port of Morrow Industrial Park and other appropriate locations. The zone is intended to provide for port-related industrial uses and be an industrial sanctuary, limiting commercial uses to those appropriate and necessary to serve the needs of the workers employed within the zone.” [Emphasis added]. This purpose differs from the purpose of other industrial zones within the county, such as Rural Light Industrial (MCZO Section 3.075) and General Industrial (MCZO Section 3.070), which establish purposes for providing and protecting area for industrial development. [Emphasis added].

In addition, the Department recommends that Council consider a differing interpretation of the phrase, “useful, non-hazardous,” as reasonable within the context of the following points:

1. The land within the site boundary is owned by the Port of Morrow;
2. The Port is subject to the legal requirements and authorizations of ORS Chapter 777, which authorizes the Port to use land within its boundaries for industrial purposes;
3. The Port has provided a letter of support indicating that the land improvements made by the certificate holder as part of the construction and operation of the facility would continue to provide value to the Port following termination of the site certificate, following removal of hazardous materials, and
4. PEC has indicated that an executed agreement between PEC and the Port of Morrow would be provided to the Council, prior to the September 22, 2017, that is consistent with the draft agreement included as Attachment C of the proposed order, that provides for transfer of the improvements from PEC to the Port.

Estimated Cost of Site Restoration

In the 2007 Final Order on the ASC, the Council concluded that, based upon the evaluation of a third-party contractor hired by the Department, the cost of site restoration was estimated at $800,000 (2\textsuperscript{nd} Quarter 2007 dollars), excluding any deduction for scrap or salvage value. In the proposed order, the Department notes that the $800,000 site restoration estimate was based on a 2007 evaluation and that the bond amount currently required based upon inflation is $916,800.

Removal of Aboveground Infrastructure to Slab-Grade (Scenario 1)

For this scenario, if the Council concludes that in order to satisfy the requirements of the Retirement and Financial Assurance standard, restoration of the site to a useful non-hazardous condition shall be interpreted as removal of all aboveground infrastructure to slab-grade, the certificate holder requests that the cost of site restoration referenced in Condition IV.C.4 be updated based upon a more current and representative retirement and restoration cost
estimate. If Council finds that removal of aboveground infrastructure to slab-grade is necessary to satisfy the requirements of the standard, the Department recommends that Council amend Condition IV.C.4 to refer to $852,000 (rounded to the nearest thousand, in 4th Qrt 2016 dollars) based on the certificate holder’s updated decommissioning estimate as follows:

**Recommended Amended Condition IV.C.4 (Council Approval of Scenario 1):** Within 30 days after the effective date of the site certificate execution of the first amended site certificate, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit in the amount of $800,852,000 (in Second Fourth Quarter 200716 dollars) naming the State of Oregon, acting by and through the Council, as beneficiary or payee.

(a) The certificate holder shall adjust the amount of the bond or letter of credit to present value annually, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services’ “Oregon Economic and Revenue Forecast,” or by any successor agency (“Index”). If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust Second Fourth Quarter 200716 dollars to present value.

(b) The form of bond or letter of credit shall be subject to prior approval by the Council.

(c) The issuer of the bond or letter of credit shall be subject to prior approval by the Council.

(d) The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition (VI.B.6).

(e) The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility.

In the proposed order, the Department recommends Council find that a lesser bond or letter of credit amount than is currently required based on Condition IV.C.4 and inflation ($916,800) is acceptable based on several factors. The Department considers estimates, prepared by a qualified individual or entity, with relevant experience specific to the facility type (ethanol production), acceptable as the Department does not currently have guidance or recommended guidance for certificate holders in the preparation of facility decommissioning estimate. The Department also considers an estimate prepared in 2017 to represent a more current and reasonable estimate using actual facility information regarding tasks and actions necessary based upon reasonable, accepted costs, as verified. The Department also recommends that the Council conclude that because the original decommissioning estimate included several contingencies to cover future uncertainties and included acknowledged arbitrary values, that if the certificate holder is able to provide a more precise evaluation of decommissioning cost, that it is reasonable for the Council to consider a lesser overall cost to represent a more realistic and reasonable estimate, with fewer built-in uncertain values.
Aboveground Infrastructure Remains In-Place (Scenario 2)

In the alternative, if Council concludes that in order to satisfy the requirements of the Retirement and Financial Assurance standard, the Department recommends that the Council conclude that restoration of a site to a useful non-hazardous condition within land zoned PI (and with a legally binding agreement with the Port of Morrow to assume liability, as further discussed below) may be interpreted as allowing for aboveground infrastructure to remain in place. Further, to satisfy the requirements of the standard under Scenario 2, the Department recommends that Council impose an amended and new condition as presented below:

**Recommended Amended Condition IV.C.4:** Within 30 days after the effective date of the site certificate-execution of the first amended site certificate, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit in the amount of $800,295,172 (in Second Fourth Quarter 200716 dollars) naming the State of Oregon, acting by and through the Council, as beneficiary or payee.

(f) The certificate holder shall adjust the amount of the bond or letter of credit to present value annually, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services’ “Oregon Economic and Revenue Forecast,” or by any successor agency (“Index”). If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust Second Fourth Quarter 200716 dollars to present value.

(g) The form of bond or letter of credit shall be subject to prior approval by the Council.

(h) The issuer of the bond or letter of credit shall be subject to prior approval by the Council.

(i) The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition (VI.B.6).

(j) The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility.

**Recommended New Retirement and Financial Assurance Condition IV.C.13:**

(1) The certificate holder shall maintain a bond or letter of credit in an amount of $295,000 (in 4th Quarter 2016 dollars) naming the State of Oregon, acting by and through the Council, as beneficiary or payee.

(a) The certificate holder shall adjust the amount of the bond or letter of credit to present value annually, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services’ “Oregon Economic and Revenue Forecast,” or by any successor agency (“Index”). If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust Second Quarter 2007 dollars to present value.

(b) The form of bond or letter of credit shall be subject to prior approval by the Council.
(c) The issuer of the bond or letter of credit shall be subject to prior approval by the Council.
(d) The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition (VI.B.6).
(e) The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility.

(2) The certificate holder may not amend or terminate the agreement between the Port of Morrow and the certificate holder without either (1) prior consent of the Council, or (2) submission to the Department of a bond or letter of credit in the amount of $852,000 (in 4th Quarter 2016 dollars) and adjusted consistent with IV.C.13(1)(a-e).

(3) The certificate holder shall provide evidence to the Department on an annual basis, through reporting under Condition IV.B.6, of active property coverage under its commercial business insurance from high loss-catastrophic events, including but not limited to, onsite fire or explosion.

Amended Condition IV.C.4 and new Condition IV.C.13 establishes a requirement for the certificate holder to maintain a bond or letter of credit in the amount necessary to remove all hazardous and non-hazardous materials from the site, and to clean and shut-down all equipment. New Condition IV.C.13 also requires the certificate holder to provide evidence to the Department, on an annual basis, of active property coverage under its commercial business insurance policy from high loss catastrophic events including but not limited to an onsite explosion or fire to provide additional assurance that the site could be restored to a “useful, non-hazardous condition” following permanent cessation of facility operation.

In addition, the certificate holder requested that Council amend Condition IV.C.2(b) to reference restoration of the site suitable for industrial use, not agricultural use as currently referenced in the condition. The Department recommends that Council amend the condition as requested based on the underlying land use designation.

COMMENTS ON THE PROPOSED ORDER

Reviewing Agency and Tribal Government Comments

The Oregon Department of Fish and Wildlife and Oregon Department of State Lands submitted non-substantive comments confirming that their agencies had no concerns with the facility modifications included in the amendment request.

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) submitted comments expressing concern regarding the sufficiency of Exhibit S, or the certificate holder’s evaluation of compliance with the Council’s Historic, Cultural and Archeological Resources standard at OAR 345-022-0090. Specifically, CTUIR expresses concern that there are other burials in the project area adjacent to site 35MW13, previously identified by the facility during the ASC phase. Based on the timing of receipt of the CTUIR comments (September 7, 2017) and timing of issuance of meeting materials to Council members prior to the September 21-22, 2017 Council meeting
(also on September 7, 2017), these comments have not yet been fully evaluated by the Department, but are included as Attachment 1 to this staff report for Council review. The Department will present its analysis of the CTUIR comments during the September 22, 2017 Council meeting.

DEPARTMENT CONCLUSIONS AND RECOMMENDED COUNCIL ACTION

The Department recommends the Council first determine whether Scenario 1 or Scenario 2 satisfies the requirements of the Council’s Retirement and Financial Assurance standard, and direct staff to amend the proposed order based on Council’s findings and conclusions to be determined during the September 22, 2017 Council meeting. The Department then recommends that Council approve the amended proposed order and issue a final order authorizing a site certificate amendment consistent with the facility modifications requested in RFA 1.

Attachment: CTUIR Comments (September 7, 2017)
Please find attached the CTUIR’s comments on the request for amendment 1.

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The information in this e-mail may be confidential and intended only for the use and protection of the Confederated Tribes of the Umatilla Indian Reservation. If you have received this email in error, please immediately notify me by return e-mail and delete this from your system. If you are not an authorized recipient for this information, then you are prohibited from any review, dissemination, forwarding or copying of this e-mail and its attachments. Thank you.
MEMORANDUM

To:      Sarah Esterson, Siting Analyst  
          Oregon Department of Energy  
          Sent via email to: sarah.esterson@oregon.gov

From:   Eric Quaempts, Department of Natural Resources Director  
          Confederated Tribes of the Umatilla Indian Reservation  
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          EricQuaempts@ctuir.org  
          541-276-3447

Date:    September 7, 2017

RE:      Confederated Tribes of the Umatilla Indian Reservation's Comments on the Columbia Ethanol Project Proposed Order Issued on Request for Amendment 1

General Comments:
Thank you for contacting the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) regarding the Columbia Ethanol Project. The CTUIR offers the following concerns with the project.

Specific Comments:
The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Cultural Resources Protection Program (CRPP) reviewed the site certificate amendment request for the Columbia Ethanol Project. The CRPP believes that Exhibit S is incomplete. It references work done in 2006 by AINW, but there was a large cultural resource survey and testing done by in and adjacent to the project area by Churchill and Gall 2013 and 2016. This body of work is not referenced in Exhibit S. The work referenced in Exhibit S did not examine the entire 25 acre construction area. In Sharma and Ellis’s (2006) report they state that the project area was 23 acres. Shovel test probes were only excavated in the area of the purposed pipeline and not in other development areas. Exhibit S does not identify the area excluded in the 2006 field work or give reasons why it was excluded. Churchill and Gall (2016) located subsurface features and a burial and expanded the boundaries of site 35MW13 when conducting subsurface testing in the area adjacent to this project. Churchill and Gall (2016) considered the portion 35MW13 that was in their project area as eligible for inclusion to the National Register of Historic Places. Churchill and Gall also refers to this area as a traditional cultural property of the CTUIR which was also the conclusion of Farrow and Morning Owl (2002).

The CRPP is concerned about the other possible burials in this area adjacent to site 35MW13. In 2006, AINW investigated most of the project area, but not all of it. AINW's subsurface testing was only completed along the pipeline route and no shovel test probes were excavated in the remaining portions of the project area. The Columbia Ethanol Project Area is within a CTUIR traditional cultural property.
Churchill, Thomas E. and Alexander Gall

Churchill, Thomas E. and Alexander Gall

Farrow, Teara and Thomas Morning Owl
2002 Addendum to the Identification of Traditional Cultural Properties along the Bonneville, The Dalles, and John Day Reservoirs. Submitted to the U.S. Army Corps of Engineers, Portland District, under contract number DACW57-01-P-0283. Confederated Tribes of the Umatilla Indian Reservation Cultural Resources Protection Program, Mission, OR.

Sharma, Mini and David V. Ellis
BEFORE THE
ENERGY FACILITY SITING COUNCIL
OF THE STATE OF OREGON

In the Matter of the Request for Amendment 1 of the Site Certificate for the Columbia Ethanol Project

PROPOSED FINAL ORDER ON AMENDMENT #1 OF THE SITE CERTIFICATE

August September 2017
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3. Attachment C: Draft Final Executed Agreement
I. Introduction

The Oregon Energy Facility Siting Council Department of Energy (Department Council or EFSC) issues this proposed final order in accordance with Oregon Revised Statute (ORS) 469.405 and Oregon Administrative Rule (OAR) 345-027-0070 for the request by Pacific Ethanol Columbia, LLC (certificate holder or PEC) for Amendment #1 of the Columbia Ethanol Project (CEP) Site Certificate.

I.A Name and Address of Certificate Holder

Pacific Ethanol Columbia, LLC
71335 Rail Loop Drive
PO Box 469
Boardman, OR 97818

Individual Responsible for Submitting this Amendment Request:

Daniel Koch, Plant Manager
Pacific Ethanol Columbia, LLC
71335 Rail Loop Drive
PO Box 469
Boardman, OR 97818

Parent Company of Certificate Holder

Pacific Ethanol Columbia, Inc.
5711 N. West Avenue
Fresno, CA 93711

I.B Description of Approved Facility

The energy facility is an ethanol plant capable of producing 35 million gallons per year (MMgy) of ethanol located on a 25-acre parcel leased from the Port of Morrow in the Boardman Industrial Park, Port of Morrow, Morrow County, Oregon. Major plant components consist of buildings, storage tanks, bins, and a flare system. By means of an existing rail loop, corn is delivered to the site. In the processing building, ground corn is mixed with water and enzymes to make a mash, and the mash is cooked in a series of retention tanks to break the complex sugars down into fermentable sugars. The processing building houses steel storage tanks for aqueous ammonia, enzymes, sulfuric acid, sodium hydroxide, and urea.

In the fermentation building, yeast and additional enzymes are added to the mash, producing a liquid containing 10 to 15 percent ethanol, by weight. The liquid is piped to the distillation, drying and evaporation (DD&E) building where the solids (a by-product called distiller’s wet grain, or DWGS, suitable for animal feed) is separated and transported to a wet cake building.
for storage and ultimate trucking to local dairy or cattle operations for use as feed. The liquid ethanol is moved to ethanol storage tanks pending shipment to market by barge, rail or truck.

Additional plant components include grain storage bins, an administration building, a boiler building, a maintenance building, ethanol storage tanks, a diesel fuel storage tank, a flare system and a gasoline tank.

I.C Facility and Site Boundary Location

The facility is located on a 25-acre parcel of land in Section 2, Township 4 North, Range 25 East, within Morrow County, Oregon. This parcel is zoned Port Industrial, and comprises a portion of the Boardman Industrial Park owned and operated by the Port of Morrow.¹ The facility site boundary and location are presented below on Figure 1; the facility site layout, including the modifications included in the amendment request, are presented on Figure 2.

¹ Pursuant to MCZO Article 3, Section 3.073, “The PI zone is intended to regulate development at portions of the Port of Morrow Industrial Park and other appropriate locations. The zone is intended to provide for port-related industrial uses and be an industrial sanctuary, limiting commercial uses to those appropriate and necessary to serve the needs of the worker employed within the zone.”
FIGURE 1: FACILITY LOCATION AND SITE BOUNDARY
FIGURE 2: FACILITY SITE LAYOUT
I.D Requested-Approved Facility Modifications

In this final order, the certificate holder requests Energy Facility Siting Council (Council) approval approves construction and operation of the following facility amendments modifications, as further described below:

- Corn oil extraction system (constructed and in operation)
- Sugar addition system (constructed, short-term operation complete but infrastructure remains in place)
- Change in ethanol feedstock to include, in addition to the previously approved corn feedstock, a blend of corn and granulated sugar (short-term use, complete)
- Carbon Dioxide (CO₂) Capture Infrastructure (constructed and in operation)
- Increase the annual ethanol production from 35 to 44 million gallons per year
- Amendment of conditions (Conditions IV.C.2 and IV.C.4) imposed to ensure compliance with the Council’s Retirement and Financial Assurance standard

As explained in Section II.B Procedural History, of this order, the certificate holder expressed a belief that, prior to submitting the request for amendment, that the requested facility modifications were allowable within the terms and conditions of the site certificate and completed construction of the facility modifications prior to Council approval. Following the Department’s review of the requested facility modifications related to Council standards and site certificate conditions, the Department determined that an amendment to the site certificate was required. The Department’s Council’s evaluation of the certificate holder’s compliance with applicable Council standards, and recommended new or amended conditions are presented in Section III of this order.

Corn Oil Extraction System

The proposed corn oil extraction system would substantially modify the ethanol production process by adding a multi-phase process to the DWGS process. The multi-phase process includes new tanks (reactors, heated, flash and evaporative), a trim heater, centrifuges, piping and a jib crane which would be used to separate and heat the by-product produced during ethanol production for oil extraction. The extracted oil would then be piped to two, new heated storage tanks located within the ethanol storage area to age for a day before shipping while the remaining solids would be processed in the pre-existing evaporators.

Sugar Addition System/Change in ethanol feedstock to include, in addition to the previously approved corn feedstock, a blend of corn and granulated sugar

As described above, the ethanol production utilizes corn as the ethanol feedstock. The sugar addition system results in a change to the feedstock by replacing up to 15 percent of the corn feedstock with granulated sugar. The sugar addition system includes a 100-ton stainless steel tank/bin, rotary feeder, screw conveyor, and dust collector which required an Air Contaminant
Discharge Permit from the Oregon Department of Environmental Quality (DEQ). This permit was issued by DEQ in 2013.

**CEP-PEC** explained that construction and operation of the sugar addition system was a result of a short-term Department of Agriculture initiative and that operation of the system concluded in 2013. However, the sugar addition system was added and operated without prior notification to the Department or EFSC, and the fact that it may have been intended for short-term use does not obviate the need for an amendment to the site certificate or alter the amendment requirements. In addition, the sugar addition system remains in place at the energy facility, and the certificate holder stated that it could be used during future operations.

**CO₂ Capture Infrastructure**

As described in the September 10, 2014 letter to the Department re: Site Certificate Evaluation for the Carbon Dioxide Plant at Pacific Ethanol Columbia, a third-party (Kodiak Carbonics) installed, owns and operates a carbon dioxide (CO₂) processing plant within the existing energy facility site boundary, under sub-lease agreement with **CEP-PEC**. The new processing plant is currently operating, and includes new interconnecting components installed to transfer the CO₂ rich gas stream from CEP’s existing CO₂ scrubber to the CO₂ processing plant. **CEP-PEC** explained that the interconnecting components deliver up to 250 tons per day of raw gas to the processing facility and are estimated to require up to $100,000 to disassemble and retire.

*Increase the annual ethanol production from 35 to 44 million gallons per year*

The ethanol production capacity of CEP is described in Section III.A of the site certificate and previously indicates that the energy facility is capable of producing 35 million gallons per year (MMgy) of ethanol. **CEP proposes to Council authorizes an increase in** the maximum annual ethanol production from 35 to 44 MMgy, representing an annual increase of 25 percent. The certificate holder explained that the increase in production would not require any new infrastructure, but would result in an increase in water use and wastewater generation, but that the increase would be allowable within the limits of existing third-party permits used by the facility but owned by Port of Morrow.

*Amendment of conditions (Conditions IV.C.2 and IV.C.4) imposed to ensure compliance with the Council’s Retirement and Financial Assurance standard*

In the amendment request, **CEP-PEC** requested to amend Condition IV.C.2(b) to correctly reference the land use zone and previous land use, “industrial,” of the facility site, as follows:

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2 The certificate holder’s requested amendment of Condition IV.C.2 is presented in underline/strikethrough.
Requested Amended Condition IV.C.2: Two years before closure of the energy facility, the certificate holder shall submit to the Department a proposed final retirement plan for the facility and site, pursuant to OAR 345-027-0110, including:

(a) A plan for retirement that provides for completion of retirement within two years after permanent cessation of operation of the energy facility and that protects the public health and safety and the environment;

(b) A description of actions the certificate holder proposes to take to restore the site to a useful, non-hazardous condition suitable for agricultural or industrial use; and

(c) A detailed cost estimate, a comparison of that estimate with the dollar amount secured by a bond or letter of credit and any amount contained in a retirement fund, and a plan for assuring the availability of adequate funds for completion of retirement.

CEP-PEC further requested to amend Condition IV.C.4, which requires the certificate holder to submit and maintain a bond or letter of credit in an amount approved by Council and as necessary to decommission the facility and restore the site to a useful, non-hazardous condition. CEP-PEC specifically requested for the Council to evaluate facility decommissioning and site restoration based on the land use and land use zone (Port Industrial), and requested for the bond amount to be adjusted based on removal of all hazardous and non-hazardous materials, cleaning of equipment and equipment lockout, and an executed agreement with the Port of Morrow whereby the Port of Morrow assumes responsibility and liability of the site and agrees that leaving the aboveground infrastructure in place, for the Port’s potential future use, satisfies the requirement to restore the site to its previous condition and restoration to a useful, non-hazardous condition as required under the Council’s Retirement and Financial Assurance standard.

II. The Amendment Process

II.A Division 27 Rules

The Council has adopted administrative rules to determine when a site certificate amendment is necessary (OAR 345-027-0030 and -0050) and rules establishing the procedure for amending a site certificate (OAR 345-027-0060, -0070, and -0100). The Council’s amendment rules, OAR Chapter 345, Division 27, apply to this RFA.

Under OAR 345-027-0050(1), a certificate holder must submit a request to amend the site certificate to design, construct, or operate a facility in a manner different from the description in the site certificate if the proposed change could:

(a) Result in a significant adverse impact that the Council has not addressed in an earlier order and the impact affects a resource protected by Council standards;

(b) Impair the certificate holder’s ability to comply with a site certificate condition; or

(c) Require a new condition or a change to a condition in the site certificate.
An amendment to the CEP site certificate is necessary under OAR 345-027-0050(1)(c) because CEP-PEC proposed to “modify the Site Certificate to account for minor infrastructure improvements to the Facility,” and the proposed amendment requires “a new condition or change to a condition in the site certificate.” The certificate holder requested to change two conditions as described above. In order to ensure the facility modifications comply with EFSC standards and applicable requirements, the Department recommends the existing conditions IV.C.2 and IV.C.4 and imposes the several amended conditions as described below in this proposed final order. Therefore, the site certificate amendment requirements of OAR 345-027-0050(1)(c) are necessarily applied to the certificate holder’s amendment request.

OAR 345-027-0070 Review of a Request for Amendment

(10) In making a decision to grant or deny issuance of an amended site certificate, the Council shall apply the applicable substantive criteria, as described in OAR 345-022-0030, in effect on the date the certificate holder submitted the request for amendment and all other state statutes, administrative rules, and local government ordinances in effect on the date the Council makes its decision. The Council shall consider the following:

(a) For an amendment that would change the site boundary or the legal description of the site, the Council shall consider, for the area added to the site by the amendment, whether the facility complies with all Council standards;

(b) For an amendment that extends the deadlines for beginning or completing construction, the Council shall consider:

   a. Whether the Council has previously granted an extension of the deadline;

   b. Whether there has been any change of circumstances that affects a previous Council finding that was required for issuance of a site certificate or amended site certificate; and

   c. Whether the facility complies with all Council standards, except that the Council may choose not to apply a standard if the Council finds that:

      i. The certificate holder has spent more than 50 percent of the budgeted costs on construction of the facility;

      ii. The inability of the certificate holder to complete the construction of the facility by the deadline in effect before the amendment is the result of unforeseen circumstances that are outside the control of the certificate holder;

      iii. The standard, if applied, would result in an unreasonable financial burden on the certificate holder; and

      iv. The Council does not need to apply the standard to avoid a significant threat to the public health, safety or the environment;
(c) For any amendment not described above, the Council shall consider whether the amendment would affect any finding made by the Council in an earlier order.

(d) For all amendments, the Council shall consider whether the amount of the bond or letter of credit required under OAR 345-022-0050 is adequate.

The amendment request would not modify the previously approved site boundary and does not include an extension of construction deadlines, and as such subsections (a) and (b) are not applicable. Subsection (c) and (d) however, apply, as the amendment request includes changes to the energy facility and related and supporting facilities, and includes an amendment of two previously approved conditions imposed to satisfy the requirements of the Council’s Retirement and Financial Assurance standard.

The applicable EFSC standards are established in OAR Chapter 345 divisions 22, 23 and 24, as further described in the proposed-final order. The Department-Council applied these standards to the amendment request.

II.B Procedural History

In February 2016, after review of the certificate holder’s change request evaluation prepared pursuant to OAR 345-027-0050(5) and responses to the Department’s information request, the Department notified the certificate holder that a site certificate amendment was required for the facility modifications described in Section I.D of this order. The certificate holder submitted an evaluation of the facility modifications under the cover of a change request, versus a request for amendment, and expressed a belief that the modifications were allowable within the terms and conditions of the site certificate and therefore proceeded with the construction and operation of those facility modifications without seeking prior Council approval through the Council’s site certificate amendment process.

Following the Department’s review of the change request, the certificate holder complied with the Department’s request for submittal of an amendment request. The Council was notified during its January 18, 2017 Council meeting, during a staff project update presentation, of the certificate holder’s request for amendment and explained that the facility modifications had been completed without prior Council approval as the certificate holder’s initial evaluation concluded that the facility modifications were allowable within the terms and conditions of the site certificate. At that meeting, there were no comments or concerns raised by members of the Council.

PEC submitted RFA No. 1 on May 4, 2016. The Department then distributed a notice of receipt of the RFA to reviewing agencies, Tribal Governments, the Special Advisory Group (Morrow County Board of County Commissioners), the EFSC general mailing list, the special list maintained for the facility, and the adjacent property owners as listed by Pacific Ethanol.
Columbia, LLC in the amendment request. The amendment request was also posted to the Department’s website. The Department requested receipt of comments from all interested parties by August 5, 2016.

Public and agency comments are, as applicable to Council standards, discussed in the appropriate Council standard sections in Section IV of this proposed order. On June 24, 2016, the certificate holder submitted a supplemental information report to ODOE providing additional information regarding the amendment request. The supplement also included information in response to ODOE and reviewing agency questions. On June 27, 2016, ODOE sent the certificate holder an information request, and Pacific Ethanol Columbia, LLC responded on August 18, 2016. On November 29, 2016, the Department sent the certificate holder an additional information request related to the evaluation of site decommissioning and restoration and received a response from the certificate holder on January 20, 2017.

On August 8, 2017, the Department issued the proposed order, recommending approval of an amended site certificate. The Department issued notice of the proposed order to the persons, agencies, tribes and local governments who received notice of the amendment request; and, to an updated property owner information obtained from Columbia County’s current tax assessment roll data. The notice included a September 7, 2017 deadline for submitting, to the Department, written comments and requests for contested case on the proposed order. The Department received two non-substantive comments from reviewing agencies; there were no requests for contested case on the proposed order received.

The Council considered the proposed order at the September 22, 2017 Council meeting held in Boardman, Oregon. At the September 22, 2017 Council meeting, the Council voted to approve RFA 1 and issue a final order, authorizing amendment of the site certificate.

Pursuant to ORS 469.403, only parties to a contested case proceeding may appeal the Council’s decision on the site certificate amendment request to the Oregon Supreme Court. Because there were requests for contested case, there were subsequently no parties to a contested case. Therefore, no party has standing to appeal this final order.

II.C Comments Received on Amendment Request

The Department received comments on RFA No. 1 from the following reviewing agencies and Tribal Governments:

- Confederated Tribes of the Umatilla Indian Reservation (CTUIR)
- Oregon PUC Safety, Reliability, and Security Division (OPUC)

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3 The Council appointed the Morrow County Court as the Special Advisory Group for the Columbia Ethanol Project on May 17, 2016 following receipt of the Site Certificate Amendment Request #1 in May 2016.

4 There were no public comments received on CEP’s PEC’s amendment request.
Comments related to a Council standard are addressed in Section III.A below.

II.D Comments Received on Proposed Order

The Department received non-substantive comments from two reviewing agencies, ODFW and DSL, confirming that neither agency had concerns with the compliance evaluation of the facility modifications included in RFA 1.5

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) submitted comments expressing concern regarding the sufficiency of Exhibit S, or the certificate holder’s evaluation of compliance with the Council’s Historic, Cultural and Archeological Resources standard at OAR 345-022-0090. Specifically, CTUIR expresses concern that there are other burials in the project area adjacent to site 35MW13, previously identified by the facility during the ASC phase. Based on the timing of receipt of the CTUIR comments (September 7, 2017) and timing of issuance of meeting materials to Council members prior to the September 21-22, 2017 Council meeting (also on September 7, 2017), these comments have not yet been fully evaluated by the Department, but are included as Attachment 1 to September 7, 2017 staff report provided to Council in preparation for the September 22, 2017 Council meeting. The Department will present its analysis of the CTUIR comments during the September 22, 2017 Council meeting and will incorporate Council’s analysis findings into the final order following the meeting.

II.ED Recommended Council Conclusion on Amendment Request

Based upon review of this request for amendment and the comments and recommendations received by state agencies and local government, the Department recommends the Council approves and grants an amendment to the Columbia Ethanol Project Site Certificate (site certificate) subject to the existing site certificate conditions and recommended new or modified conditions set forth in this proposed final order.

5 During the comment period on the proposed order, on August 9 and August 17, 2017, the Department received non-substantive comments from ODFW and DSL, respectively.
III. Amendment Review and Applicable Standards

III.A Evaluation of Council Division 22 Standards

III.A.1 General Standard of Review, OAR 345-022-0000

(1) To issue a site certificate for a proposed facility or to amend a site certificate, the Council shall determine that the preponderance of evidence on the record supports the following conclusions:

(a) The facility complies with the requirements of the Oregon Energy Facility Siting statutes, ORS 469.300 to ORS 469.570 and 469.590 to 469.619, and the standards adopted by the Council pursuant to ORS 469.501 or the overall public benefits of the facility outweigh the damage to the resources protected by the standards the facility does not meet as described in section (2);

(b) Except as provided in OAR 345-022-0030 for land use compliance and except for those statutes and rules for which the decision on compliance has been delegated by the federal government to a state agency other than the Council, the facility complies with all other Oregon statutes and administrative rules identified in the project order, as amended, as applicable to the issuance of a site certificate for the proposed facility. If the Council finds that applicable Oregon statutes and rules, other than those involving federally delegated programs, would impose conflicting requirements, the Council shall resolve the conflict consistent with the public interest. In resolving the conflict, the council cannot waive any applicable state statute.

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(4) In making determinations regarding compliance with statutes, rules and ordinances normally administered by other agencies or compliance with requirements of the Council statutes if other agencies have special expertise, the [Department] of Energy shall consult with such other agencies during the notice of intent, site certificate application and site certificate amendment processes. Nothing in these rules is intended to interfere with the state’s implementation of programs delegated to it by the federal government.

Findings of Fact

OAR 345-022-0000 provides the Council’s General Standard of Review and requires the Council to find that a preponderance of evidence on the record supports the conclusion that the amended facility complies with the requirements of the Oregon Energy Facility Siting statutes and the siting standards adopted by the Council and that the amended facility complies with all
other Oregon Statutes and administrative rules identified in the project order and as applicable to the issuance of a site certificate for the amended facility.

The requirements of OAR 345-022-0000 are discussed in the sections that follow. The Department consulted with other state agencies and Morrow County during review of RFA #1 to aid in the evaluation of whether the facility, as amended, would maintain compliance with statutes, rules and ordinances otherwise administered by other agencies. Additionally, in many circumstances the Department relied upon these reviewing agencies’ special expertise in evaluating compliance with the requirements of Council standards.

Based on the following analysis, the Department recommends the Council amends several existing conditions and impose 3 a new condition in the site certificate, as presented in this Section III.A of this proposed order and in Attachment A (Proposed Amended Site Certificate) of this proposed-final order. Based upon compliance with the existing, recommended amended, and recommended new site certificate conditions, the Department recommends that the Council finds that the facility, as amended, satisfies the requirements of OAR 345-022-0000.

Conclusions of Law

Based on the recommended findings of fact and conclusions of law provided in the following sections, and subject to compliance with existing, recommended amended, and recommended new conditions, the Department recommends that the Council finds that the amended facility satisfies the requirements of OAR 345-022-0000.

III.A.2 Organizational Expertise, OAR 345-022-0010

(1) To issue a site certificate, the Council must find that the applicant has the organizational expertise to construct, operate and retire the proposed facility in compliance with Council standards and conditions of the site certificate. To conclude that the applicant has this expertise, the Council must find that the applicant has demonstrated the ability to design, construct and operate the proposed facility in compliance with site certificate conditions and in a manner that protects public health and safety and has demonstrated the ability to restore the site to a useful, non-hazardous condition. The Council may consider the applicant’s experience, the applicant’s access to technical expertise and the applicant’s past performance in constructing, operating and retiring other facilities, including, but not limited to, the number and severity of regulatory citations issued to the applicant.

(2) The Council may base its findings under section (1) on a rebuttable presumption that an applicant has organizational, managerial and technical expertise, if the applicant has an ISO 9000 or ISO 14000 certified program and proposes to design, construct and operate the facility according to that program.
(3) If the applicant does not itself obtain a state or local government permit or approval for which the Council would ordinarily determine compliance but instead relies on a permit or approval issued to a third party, the Council, to issue a site certificate, must find that the third party has, or has a reasonable likelihood of obtaining, the necessary permit or approval, and that the applicant has, or has a reasonable likelihood of entering into, a contractual or other arrangement with the third party for access to the resource or service secured by that permit or approval.

(4) If the applicant relies on a permit or approval issued to a third party and the third party does not have the necessary permit or approval at the time the Council issues the site certificate, the Council may issue the site certificate subject to the condition that the certificate holder shall not commence construction or operation as appropriate until the third party has obtained the necessary permit or approval and the applicant has a contract or other arrangement for access to the resource or service secured by that permit or approval.

Findings of Fact

Subsections (1) and (2) of the Council’s Organizational Expertise standard require that the “applicant” (i.e. certificate holder) demonstrate its ability to design, construct and operate the facility in compliance with Council standards and all site certificate conditions, as well as its ability to restore the site to a useful, non-hazardous condition. The Council may consider the applicant’s (i.e. certificate holder’s) experience and past performance in constructing, operating and retiring other facilities in determining compliance with the Council’s Organizational Expertise standard. Subsections (3) and (4) address third party permits.

The Council addressed the Organizational Expertise standard in the 2007 Final Order on the ASC. The Council found that, based upon compliance with Condition IV.B.1 through IV.B.5, the certificate holder had the expertise to construct, operate and retire the facility in compliance with Council standards and that it had a reasonable likelihood of obtaining all third party permits necessary.6

PEC is a subsidiary of Pacific Ethanol, Inc. (“PEI”). The Council previously evaluated and relied upon the organizational experience and expertise of PEI to determine that the certificate holder, with the experience and expertise of its parent company, had the ability to construct and operate the energy facility.

The amendment request did not identify any changes to the organizational expertise of the certificate holder, or its parent company. Therefore, the Department recommends that because there have been no changes in the organizational structure or expertise of the certificate holder or its parent company, that the Council finds that the facility modifications included in the

6 CEPAPPDoc56 CEP Final Order 2007-08-09 (p.10-11)
amendment request would not impact the Council’s prior findings and would not cause a change to the certificate holder’s ability to construct, operate and retire the facility, as amended, in compliance with Council standards and conditions of the site certificate.

**Conclusions of Law**

Based on the evidence in the record, and subject to compliance with the existing site certificate conditions, the Department recommends that the Council find that the certificate holder would continue to satisfy the requirements of the Council’s Organizational Expertise standard.

**III.A.3 Structural Standard, OAR 345-022-0020**

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that:

(a) The applicant, through appropriate site-specific study, has adequately characterized the site as to the Maximum Considered Earthquake Ground Motion as shown for the site in the 2009 International Building Code and maximum probable ground motion, taking into account ground failure and amplification for the site specific soil profile under the maximum credible and maximum probable seismic events; and

(b) The applicant can design, engineer, and construct the facility to avoid dangers to human safety presented by seismic hazards affecting the site that are expected to result from maximum probable ground motion events. As used in this rule “seismic hazard” includes ground shaking, ground failure, landslide, liquefaction, lateral spreading, tsunami inundation, fault displacement, and subsidence;

(c) The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soils hazards of the site and its vicinity that could, in the absence of a seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed facility; and

(d) The applicant can design, engineer and construct the facility to avoid dangers to human safety presented by the hazards identified in subsection (c).

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**Findings of Fact**

As provided in section (1) above, the Structural Standard generally requires the Council to evaluate whether the applicant (i.e. certificate holder) has adequately characterized the potential seismic, geological and soil hazards of the site, and that the applicant (i.e. certificate holder)
holder) can design, engineer and construct the facility to avoid dangers to human safety from these hazards.⁷

The Council addressed the Structural Standard in the 2007 Final Order on the ASC. The Council imposed Conditions IV.E.1 through IV.E.4, which are mandatory conditions regarding geotechnical investigation and protection of the public from potential seismic, geological and soils hazards. The Council previously found that PEC, through appropriate site-specific study, adequately characterized the site as to seismic zone and expected ground motion and ground failure, taking into account amplification, during the maximum credible and maximum probable seismic events. The Council also found that the certificate holder had the ability to design, engineer, and construct the facility to avoid dangers to human safety presented by seismic hazards affecting the site that were expected to result from all maximum probable seismic events.

As explained in Section I.C of the proposed final order, the facility site is located within a permanently disturbed industrial area, leased from the Port of Morrow. All facility modifications included in RFA #1 would be located within the previously approved site boundary, in previously disturbed areas, as presented on Figures 1 and 2. The certificate holder asserted that the facility modifications included in RFA #1 would not impact or result in greater potential geological and soils hazards than was previously evaluated in the ASC. The Council’s Structural Standard has been updated since the original site certificate was issued to reference the 2009 version of the International Building Code. While the code reference has changed since the original site certificate and assessment in the final order, the risk to the site from seismic and non-seismic hazards, including the requested facility amendment components modifications approved in RFA 1, remains low.

For the reasons described above, the Department recommends that the Council finds that the facility, as amended, continues to comply with the Council’s Structural Standard.

Conclusions of Law

Based on the foregoing analysis and conclusions, and subject to compliance with the mandatory site certificate conditions, the Department recommends that the Council finds that the facility, as amended, continues to comply with the Council’s Structural Standard.

⁷ OAR 345-022-0020(2) and (3) do not apply to the facility, as amended, because the facility is not a wind, solar or geothermal facility or a special criteria facility under OAR 345-015-0310.
III.A.4 Soil Protection, OAR 345-022-0022

To issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in a significant adverse impact to soils including, but not limited to, erosion and chemical factors such as salt deposition from cooling towers, land application of liquid effluent, and chemical spills.

Findings of Fact

The Soil Protection standard requires the Council to find that, taking into account mitigation, the design, construction and operation of a facility are not likely to result in a significant adverse impact to soils. The Council addressed the Soil Protection standard in the 2007 Final Order on the ASC and found that the design, construction, and operation of the facility, when taking into account mitigation, would not result in a significant adverse impact to soils. In the original site certificate the Council adopted six conditions (Conditions IV.F.1 through IV.F.6) to control and mitigate potential adverse impact to soils and to mitigate the risk of soil contamination during construction and operation.⁸

Facility modifications included-requested in RFA #1 including increases in cooling tower flow rate resulting from a 25 percent increase in annual ethanol production and operation of the corn oil extraction system and increases in cooling tower flow rate resulting from the sugar addition system and a 25 percent increase in annual ethanol production could result in soil impacts. Operation of the corn oil extraction system could result in soil impacts from sediment run off during transfer of corn oil from storage tanks to tanker trunks. The increase in cooling tower flow rate could result in an increase in cooling tower drift (i.e. deposition of solids), which could increase chemical factors impacting soils, vegetation and other adjacent land uses.

The certificate holder confirmed that a bioswale system was installed at the site and is designed to capture any stormwater runoff from the site for up to a 100-year 24-hour rain event. Based on this system, the 1200-Z permit previously issued by DEQ for construction-related stormwater impacts (in December 2014) was cancelled as no actual run-off was occurring on-site. The certificate holder also explained that ground surfaces within the site boundary are predominately non-permeable, paved surfaces.⁹ Based on the installation and operation of the bioswale system, and predominately non-permeable surfaces throughout the site boundary, the Council finds that operation of the corn oil extraction system, and subsequent stormwater runoff potential during corn oil transfer is relatively low and would not be likely to result in significant adverse impacts to offsite soils.

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⁸ CEPAPPDoc56 2007-07-02 (p. 25-26)
⁹ CEPAMD1Doc27 2017-08-18
The certificate holder confirmed that there would be no change in the cooling tower water recirculation rate or drift rate from the cooling towers, and therefore requested that the Council rely upon its previous findings which determined that because the drift analysis prepared for Coyote Springs Cogeneration Project showed that cooling tower drift would not result in significant effects to surrounding natural resources, that cooling drift from CEP (representing a system that is 20 percent of the size of the Coyote Springs system) would also not be likely to result in significant adverse impacts to soils within the analysis area.

As explained in Section I.C of the proposed-final order, the facility site is located within a permanently disturbed industrial area, leased from the Port of Morrow. All facility modifications included in RFA #1 would be located in the previously approved site boundary. Based on the scope and location of the facility modifications, the Department recommends that the Council finds that the facility, as amended, would not result in any soil impacts that have not been addressed by the Council or otherwise affect the certificate holder’s ability to design, construct, and operate the facility without significant adverse impact to soils, and that new or amended conditions would not be necessary for the facility, as amended, to satisfy the standard.

Conclusions of Law

Based on the reasoning discussed above, and subject to continued compliance with the related existing conditions in the amended-site certificate, the Department recommends that the Council finds that the facility, as amended, would continue to comply with the Council’s Soil Protection standard.

III.A.5 Land Use, OAR 345-022-0030

(1) To issue a site certificate, the Council must find that the proposed facility complies with the statewide planning goals adopted by the Land Conservation and Development Commission.

(2) The Council shall find that a proposed facility complies with section (1) if:

(a) The applicant elects to obtain local land use approvals under ORS 469.504(1)(a) and the Council finds that the facility has received local land use approval under the acknowledged comprehensive plan and land use regulations of the affected local government; or

(b) The applicant elects to obtain a Council determination under ORS 469.504(1)(b) and the Council determines that:

(A) The proposed facility complies with applicable substantive criteria as described in section (3) and the facility complies with any Land Conservation and Development Commission administrative rules and goals and any land use statutes directly applicable to the facility under ORS 197.646(3);
(B) For a proposed facility that does not comply with one or more of the applicable substantive criteria as described in section (3), the facility otherwise complies with the statewide planning goals or an exception to any applicable statewide planning goal is justified under section (4); or

(C) For a proposed facility that the Council decides, under sections (3) or (6), to evaluate against the statewide planning goals, the proposed facility complies with the applicable statewide planning goals or that an exception to any applicable statewide planning goal is justified under section (4).

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For the amendment request, the Council will continue to make its land use determination under ORS 469.504(1)(b), which requires:

(A) The facility complies with applicable substantive criteria from the affected local government’s acknowledged comprehensive plan and land use regulations that are required by the statewide planning goals and in effect on the date the application is submitted, and with any Land Conservation and Development Commission administrative rules and goals and any land use statutes that apply directly to the facility under ORS 197.646.

(B) For an energy facility or a related or supporting facility that must be evaluated against the applicable substantive criteria pursuant to subsection (5) of this section, that the proposed facility does not comply with one or more of the applicable substantive criteria but does otherwise comply with the applicable statewide planning goals, or that an exception to any applicable statewide planning goal is justified under subsection (2) of this section.

(C) For a facility that the council elects to evaluate against the statewide planning goals pursuant to subsection (5) of this section, that the proposed facility complies with the applicable statewide planning goals or that an exception to any applicable statewide planning goal is justified under subsection (2) of this section.10

ORS 469.504(5) provides, in relevant part that:

Upon request by the State Department of Energy, the special advisory group established under ORS 469.480 shall recommend to the council, within the time stated in the request, the applicable substantive criteria under subsection (1)(B)(A) of this section. If the special advisory group does not recommend applicable substantive criteria within

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10 ORS 469.504(b)(2) provides the exceptions process for a facility that does not otherwise comply with one or more of the statewide planning goals. No party has identified the need for any exception in this amendment request.
the time established in the department’s request, the council may either determine and apply the applicable substantive criteria under subsection (1)(b) of this section or determine compliance with the statewide planning goals under subsection (1)(b)(B) or (C) of this section.

Findings of Fact

The Land Use standard requires the Council to find that the amended facility complies with the statewide planning goals adopted by the Land Conservation and Development Commission (LCDC). As described above, the Council may find compliance with the statewide planning goals by applying the applicable substantive criteria from the local governing body under ORS 469.504(1)(b)(A) or ORS 469.504(1)(b)(B).

As described in Section I.C, the facility is located within the Port Industrial (PI) Zoning District, as identified in the Morrow County Comprehensive Plan (1986) and Morrow County Zoning and Subdivision Code (2001). Both the Comprehensive Plan and the Zoning and Subdivision Code identify the facility site as PI. The PI District (Development Code Section 3.073) lists specific uses that are permitted outright. Such uses include: chemical and primary metal industrial uses that are port-related [3.073(A)(3)] and manufacturing, refining, processing or assembling of any agricultural, mining or industrial products [3.073(A)(7)]. During the initial ASC phase, PEC included in its application a copy of a letter from the Morrow County Planning Department stating that “[t]he proposed use, processing of ethanol, is an outright use in the Port Industrial Zone.” That determination addressed the facility, together with the related or supporting natural gas pipeline, electric supply line and ethanol pipeline.11

In the original application, the Council made a determination of compliance under ORS 469.504(1)(b)(B) and found that the proposed facility complied with the provisions of MCZO Article 3, Section 3.073(A)(3) and (7), or the applicable substantive criteria.12 Because the facility modifications included in RFA #1 would be located in the previously approved site boundary, of which is permanently disturbed from previous use, and does not change the primary use of the facility, the Department recommends that the Council finds that the certificate holder and facility, as amended, would continue to satisfy the requirements of the Land Use standard.

Conclusions of Law

Based on reasons identified and discussed above, and subject to compliance with existing site certificate conditions, the Department recommends that the Council finds that the facility, as amended, would continue to satisfy the requirements of the Council’s Land Use standard.

11 CEPAPDoc56 2007-07-02. (p.18-19)
12 Id.
III.A.6 Protected Areas, OAR 345-022-0040

(1) Except as provided in sections (2) and (3), the Council shall not issue a site certificate for a proposed facility located in the areas listed below. To issue a site certificate for a proposed facility located outside the areas listed below, the Council must find that, taking into account mitigation, the design, construction and operation of the facility are not likely to result in significant adverse impact to the areas listed below. Cross-references in this rule to federal or state statutes or regulations are to the version of the statutes or regulations in effect as of May 11, 2007:

(a) National parks, including but not limited to Crater Lake National Park and Fort Clatsop National Memorial;

(b) National monuments, including but not limited to John Day Fossil Bed National Monument, Newberry National Volcanic Monument and Oregon Caves National Monument;

(c) Wilderness areas established pursuant to The Wilderness Act, 16 U.S.C. 1131 et seq. and areas recommended for designation as wilderness areas pursuant to 43 U.S.C. 1782;

(d) National and state wildlife refuges, including but not limited to Ankeny, Bandon Marsh, Baskett Slough, Bear Valley, Cape Meares, Cold Springs, Deer Flat, Hart Mountain, Julia Butler Hansen, Klamath Forest, Lewis and Clark, Lower Klamath, Malheur, McKay Creek, Oregon Islands, Sheldon, Three Arch Rocks, Umatilla, Upper Klamath, and William L. Finley;

(e) National coordination areas, including but not limited to Government Island, Ochoco and Summer Lake;

(f) National and state fish hatcheries, including but not limited to Eagle Creek and Warm Springs;

(g) National recreation and scenic areas, including but not limited to Oregon Dunes National Recreation Area, Hell’s Canyon National Recreation Area, and the Oregon Cascades Recreation Area, and Columbia River Gorge National Scenic Area;

(h) State parks and waysides as listed by the Oregon Department of Parks and Recreation and the Willamette River Greenway;

(i) State natural heritage areas listed in the Oregon Register of Natural Heritage Areas pursuant to ORS 273.581;

(j) State estuarine sanctuaries, including but not limited to South Slough Estuarine Sanctuary, OAR Chapter 142;

(k) Scenic waterways designated pursuant to ORS 390.826, wild or scenic rivers designated pursuant to 16 U.S.C. 1271 et seq., and those waterways and rivers listed as potentials for designation;
(l) Experimental areas established by the Rangeland Resources Program, College of Agriculture, Oregon State University: the Prineville site, the Burns (Squaw Butte) site, the Starkey site and the Union site;

(m) Agricultural experimental stations established by the College of Agriculture, Oregon State University, including but not limited to: Coastal Oregon Marine Experiment Station, Astoria

*(n)* Research forests established by the College of Forestry, Oregon State University, including but not limited to McDonald Forest, Paul M. Dunn Forest, the Blodgett Tract in Columbia County, the Spaulding Tract in the Mary's Peak area and the Marchel Tract;

(o) Bureau of Land Management areas of critical environmental concern, outstanding natural areas and research natural areas;

(p) State wildlife areas and management areas identified in OAR chapter 635, Division 8.

(2) Notwithstanding section (1), the Council may issue a site certificate for a transmission line or a natural gas pipeline or for a facility located outside a protected area that includes a transmission line or natural gas or water pipeline as a related or supporting facility located in a protected area identified in section (1), if other alternative routes or sites have been studied and determined by the Council to have greater impacts. Notwithstanding section (1), the Council may issue a site certificate for surface facilities related to an underground gas storage reservoir that have pipelines and injection, withdrawal or monitoring wells and individual wellhead equipment and pumps located in a protected area, if other alternative routes or sites have been studied and determined by the Council to be unsuitable.

(3) The provisions of section (1) do not apply to transmission lines or natural gas pipelines routed within 500 feet of an existing utility right-of-way containing at least one transmission line with a voltage rating of 115 kilovolts or higher or containing at least one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 psig.

Findings of Fact

The Protected Areas standard requires the Council to find that, taking into account mitigation, the design, construction and operation of a facility are not likely to result in significant adverse impacts to any protected area as defined by OAR 345-022-0040. As required under OAR 345-

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13 OAR 345-001-0010(53) defines “Significant” as “…having an important consequence, either alone or in combination with other factors, based upon the magnitude and likelihood of the impact on the affected human population or natural resources, or on the importance of the natural resource affected, considering the context of the action or impact, its intensity and the degree to which possible impacts are caused by the proposed action. Nothing in this definition is intended to require a statistical analysis of the magnitude or likelihood of a particular impact.”
021-0010(L), during the ASC phase the certificate holder identified the protected areas within the analysis area and confirmed that there were eleven protected areas: Umatilla National Wildlife Refuge, Irrigon Hatchery, Umatilla Hatchery, Crow Butte State Park (WA), Hermiston Agricultural Research and Extension Center, National Historic Oregon Trail ACEC, Horn Butte ACEC, Coyote Springs Wildlife Area, Irrigon Wildlife Area, Power City Wildlife Area, and Willow Creek Wildlife Area. Potential impacts on these protected areas were evaluated in the 2007 Final Order on the ASC based on noise, traffic, water use and wastewater disposal, and visual impacts.

Evaluation of Potential Impacts to Protected Areas

Noise Impacts

To evaluate potential noise impacts at protected areas during facility operation, the Council previously relied upon the certificate holder’s evaluation of distance and noise attenuation, which asserted that the nearest protected area was located 1.3 miles southeast of the facility and that operational noise would not be audible due to noise attenuation at a distance of 1.3 miles. The Council previously concluded that the facility would not result in significant adverse noise impacts at protected areas.

Facility modifications included in RFA #1 that could result in increased operational noise include operation of the corn oil extraction system, sugar addition system, and CO\(_2\) capture infrastructure. Infrastructure associated with the corn oil extraction system is located within the processing building, minimizing outdoor audible noise by being located within an enclosure. The sugar addition system is electrically-powered and comprised of a stainless steel bin, rotary feeder, and screw conveyor. Further, the sugar addition system does not include any significant sources of noise generation such as an engine or motorized equipment. Similarly, the CO\(_2\) capture infrastructure does not include any significant sources of noise generation, such as an engine or motorized equipment. Therefore, the certificate holder asserts and the Department Council agrees that noise impacts at protected areas within the analysis area from the facility, as amended, would not be likely to result in significant adverse noise impacts at protected areas.

Traffic Impacts

The Council addressed the Public Services standard in the 2007 Final Order on the ASC. The analysis area for public services was previously identified as the area within and extending 30-miles from the site boundary.

The amendment request included facility modifications that could result in changes to daily vehicle trips, specifically the construction and operation of a corn oil extraction system, a sugar addition system, and a 25 percent increase in annual ethanol production, that could result in changes to daily vehicle trips.
The certificate holder asserted that operation of the corn oil extraction system, while it would result in daily truck trips to ship out produced corn oil, would not result in an increase in the number of daily truck trips at the site because the corn oil extraction process would result in a proportionate reduction in the number of daily truck trips for transporting previously generated feedstock out of the site.

In the amendment request, the certificate holder explained that the maximum number of truck trips generated by the facility, as amended, would not exceed 284 trips per day, as originally forecasted in the ASC as a worst-case scenario, and determined by the Council not to result in a significant adverse impact to the ability of transportation providers to provide a public service. Moreover, the certificate holder argued that the peak number of truck trips, 284 trips per day, that could occur at the facility, as amended, remains below the number of trips per day recommended by Morrow County as the number that would trigger a requirement for a Traffic Impact Assessment, or 400 vehicle trips per day. The certificate holder also stated that most of the corn shipments to the facility are by rail, and most of the ethanol shipments out of the facility are by barge, and that truck traffic has been much less than 284 trips per day in recent years. Finally, the certificate holder stated that what truck material is shipped into and out of the facility only occurs during weekdays, not weekends, when most users of local protected areas are likely to occur.14

The Department recommends that For the reasons described above, the Council finds that potential traffic-related impacts during construction and operation of the facility, as amended, would not change from originally forecasted in the ASC as a worse-case scenario, and as such, is not likely result in significant adverse impacts to any protected areas.

Water Use and Wastewater Disposal

The amendment request included facility modifications, specifically the construction and operation of a corn oil extraction system, a sugar addition system, and a 25 percent increase in annual ethanol production that could result in changes to onsite water use and wastewater generation.

The certificate holder explained that the requested 25 percent increase in ethanol production would not require new or modified infrastructure, but that it would result in a 25 increase in water use and wastewater generation. The certificate holder further asserted that operation of the sugar addition system would result in a slight reduction (5 percent) in water use during the mash process, and confirmed that there would be no impact on wastewater quantities generated onsite. As expressed in the amendment request, the anticipated water use and wastewater generation from the facility, as amended, would be allowable within the limitations of the existing third-party wastewater discharge permits held by the Port of Morrow, as used by the facility.

14 RFA, Section IV. CEPAMD1Doc1 2016-5-4
Therefore, the Department recommends that the Council finds that water use and disposal during construction and operation of the facility, as amended, would not affect water quantity or water quality within any protected area.

Visual Impacts

As explained in the 2007 Final Order on the ASC, the Council analyzed the visibility of the facility’s cooling tower and 150-foot distillation towers, and of air emissions from the facility, at protected areas within the analysis area. The Council found that because none of the protected areas from which the facility could be visible were managed for their visual qualities, that any potential visibility of the facility would be compatible with scenic or visual goals, objectives or policies identified in the applicable federal and local management plans. The amended facility does not include any structure taller than those previously approved and would not otherwise be visible from protected areas. As such, the Council’s previous findings that the facility would not cause a significant adverse visual impact to protected areas is still valid for the amended facility.

The Department recommends that the Council concludes that the facility modifications included in the amendment request would not result in any impacts to protected areas that have not been addressed by the Council in a previous order, or otherwise affect the certificate holder’s ability to design, construct and operate the facility without significant adverse impact to protected areas.

Conclusions of Law

Based on the analysis above, the Department recommends that the Council finds that the facility, as amended, would satisfy the requirements of the Protected Areas standard.

III.A.7 Retirement and Financial Assurance, OAR 345-022-0050

To issue a site certificate, the Council must find that:

(1) The site, taking into account mitigation, can be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation of the facility.

(2) The applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition.

Columbia Ethanol Project
Proposed Final Order on Request for Amendment 1
August-September 2017
**Findings of Fact**

The Retirement and Financial Assurance standard requires a finding that the facility site can be restored to a useful, non-hazardous condition at the end of the facility’s useful life, should either the certificate holder stop construction or should the facility cease to operate.\(^{15}\) In addition, it requires a demonstration that the applicant (i.e., certificate holder) can obtain a bond or letter of credit to restore the site to a useful, non-hazardous condition.

For this standard, the certificate holder requests Council interpretation of the phrase “useful, non-hazardous condition” as referenced in OAR 345-022-0050(1). The Council’s historic interpretation of the phrase is that it refers to a condition that is, “consistent with the local comprehensive land use plan and land use regulations.”\(^{16}\) The certificate holder notes that while this interpretation was applied in the 2007 Final Order on the ASC, an evaluation of the specific level of restoration necessary to achieve conditions that are consistent with the local comprehensive land use plan and land use regulations was not provided. The certificate holder further explains that the phrase, “useful, non-hazardous” is not defined in rule or statute and expresses a belief that based upon the ambiguity of the Council’s previous findings and the lack of statutorily defined terms, that the Council has the discretion to interpret the phrase with more flexibility than solely based upon complete removal of all facility components.

The certificate holder requests that the Council interpret the phrase, “useful, non-hazardous” as a condition allowing for aboveground infrastructure to remain in place, once appropriately cleaned. The certificate holder clarifies that the request for a differing Council interpretation is specific to the land use designation for the facility, Port Industrial.

The Department Council notes while there are several energy facilities located in industrial zones, the Columbia Ethanol Project is the only energy facility located in a Port Industrial zone. Based upon the Department’s Council’s review of historic Council decisions, restoration of a site to a “useful, non-hazardous condition” includes removal of all above-ground, and in some cases below-ground, facility components, and revegetation of the site. This interpretation has uniformly been applied across Council decisions on energy facilities, regardless of the underlying land use designation. The Department’s Council’s evaluation of the certificate holder’s requested interpretation and its consistency with Morrow County’s land use zoning requirements for a Port Industrial zone is provided in the following section.

Restoration of the Site Following Cessation of Construction or Operation

OAR 345-022-0050(1) requires the Council to find that the site of the facility, as amended, can be restored to a useful non-hazardous condition at the end of the facility’s useful life. While the

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\(^{15}\) OAR 345-022-0050(1).

\(^{16}\) See e.g., Final Order on Perennial Wind Chaser Station, p.125; Final Order on Saddle Butte Wind Park, p.117; Final Order on the Klondike III Wind Project, p.16
certificate holder originally estimated that the facility’s useful life would extend for 30-years, or through 2037 based on the date of the original final order, the site certificate does not establish an operational limit. The facility may continue to operate into perpetuity, assuming that the facility continues to operate as an energy facility under EFSC jurisdiction and in substantial compliance with the terms and conditions of the site certificate.

As explained in the 2007 Final Order on the ASC, the following conditions were imposed to ensure compliance with OAR 345-022-0050(1):

**Existing Condition IV.C.1:** The certificate holder shall retire the facility if the certificate holder permanently ceases construction or operation of the facility. The certificate holder shall retire the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110, and prepared pursuant to Condition (IV.C.2).

**Existing Condition IV.C.2:** Two years before closure of the energy facility, the certificate holder shall submit to the Department a proposed final retirement plan for the facility and site, pursuant to OAR 345-027-0110, including:

(d) A plan for retirement that provides for completion of retirement within two years after permanent cessation of operation of the energy facility and that protects the public health and safety and the environment;

(e) A description of actions the certificate holder proposes to take to restore the site to a useful, non-hazardous condition suitable for agricultural use; and

(f) A detailed cost estimate, a comparison of that estimate with the dollar amount secured by a bond or letter of credit and any amount contained in a retirement fund, and a plan for assuring the availability of adequate funds for completion of retirement.

**Existing Condition IV.C.3:** The certificate holder shall prevent the development of any conditions on the site that would preclude restoration of the site to a useful, non-hazardous condition to the extent that prevention of such site conditions is within the control of the certificate holder.

The certificate holder requested Modifications included in the amendment request include amending that the Council amend Condition IV.C.2(b), and IV.C.4 as further described below. Condition IV.C.2 currently-previously indicated that the site shall be restored to a condition suitable for agricultural use, which the Department recommends the Council concludes is was a Scrivener’s error and was incorrect based on the actual land use zoning designation, Port Industrial, as applied by the County. Therefore, the Department recommends that the Council amends Condition IV.C.2(b) to reference restoration of the site suitable for industrial use, not agricultural use, based upon the zoned land use of the facility site, consistent with the certificate holder’s request:
**Recommended Amended Condition IV.C.2:** Two years before closure of the energy facility, the certificate holder shall submit to the Department a proposed final retirement plan for the facility and site, pursuant to OAR 345-027-0110, including:

(a) A plan for retirement that provides for completion of retirement within two years after permanent cessation of operation of the energy facility and that protects the public health and safety and the environment;

(b) A description of actions the certificate holder proposes to take to restore the site to a useful, non-hazardous condition suitable for agricultural or industrial use; and

(c) A detailed cost estimate, a comparison of that estimate with the dollar amount secured by a bond or letter of credit and any amount contained in a retirement fund, and a plan for assuring the availability of adequate funds for completion of retirement.

The facility modifications in RFA 1, as proposed in the amendment request approved in this final order, including the corn oil extraction system, sugar addition system, CO₂ capture infrastructure, and a change in ethanol feedstock to include both corn and a blend of corn and granulated sugar could result in actions or tasks necessary to restore the site to a useful, non-hazardous condition that were not previously evaluated in the ASC or original final order. Therefore, the certificate holder provided an evaluation of the specific actions and tasks necessary for restoration of the site of the facility, as amended, to a useful, non-hazardous condition.

The certificate holder requested that the Council consider two scenarios for determining compliance with the Retirement and Financial Assurance standard. In the first scenario, Scenario 1, the certificate holder evaluated the tasks necessary for the removal of all above-ground infrastructure to slab-grade, including new facility components included in the amendment request. Scenario 1 represents the traditional evaluation for decommissioning and site restoration as historically reviewed and approved by Council. The certificate holder provided an updated retirement cost estimate, as developed by a qualified, third-party contractor, based on the currently operating facility and accounting for all facility modifications included in the amendment request. As explained below, the certificate holder’s retirement cost estimate represents a lesser value than the current bond requirement. The Department’s Council’s assessment of the adequacy of the retirement cost estimate is further evaluated below.

In the second scenario, Scenario 2, the certificate holder evaluates the tasks necessary for removal and disposal of all hazardous and non-hazardous materials, and equipment cleaning and lock-out, with the above-ground infrastructure including buildings remaining in place. Scenario 2 represents a unique evaluation for decommissioning and site restoration, utilizing an interpretation of the language of the standard not previously considered by Council. The certificate holder provided a retirement cost estimate, as developed by a qualified, third-party contractor, based on the currently operating facility and accounting for all facility modifications included in the amendment request. The Department’s Council’s assessment of the adequacy
of the retirement cost estimate is further evaluated below. For this scenario, the certificate holder proposes to maintain a bond or letter of credit in the amount necessary for the removal and disposal of all hazardous and non-hazardous materials, and equipment cleaning and lock-out. The bond or letter of credit does not include costs associated with removal of the above-ground infrastructure, which are proposed in Scenario 2 to including buildings remaining in place. The certificate holder also proposes to submitted an executed agreement between the certificate holder PEC and the Port of Morrow, where the Port of Morrow accepts all future liability of the facility. The Department’s Council’s compliance evaluation and recommended new site certificate conditions are presented below. The certificate holder requests Council approval of Scenario 2 but provided Scenario 1 in the alternative.

The certificate holder’s evaluation of tasks and actions necessary to restore the site to a useful, non-hazardous condition is based on three categories: demolition of buildings and plant facility; facility decommissioning; and, removal of hazardous materials. The certificate holder represents that all three categories apply to the assessment based on removal of all aboveground infrastructure to slab-grade; and the removal of hazardous materials category applies to the scenario where aboveground infrastructure would be appropriately cleaned of all contamination but would remain in place. As described below, the Department recommends that the Council concludes that several of the actions described for facility decommissioning shall be applied to the certificate holder’s second assessment for Scenario 2.

Removal of Aboveground Infrastructure to Slab-Grade (Scenario 1)

The tasks and actions represented by the certificate holder as necessary to restore the site to a useful, non-hazardous condition, assuming the removal of aboveground infrastructure to slab-grade, include the following:

- Survey and testing for hazardous materials
- Process streams including corn silos, conveyors, surge bin, hammer mills, front end mixing tanks and vessels would be drained, flushed and emptied
- Vacuum trucks would be used to drain and transport hazardous materials for proper disposal
- Minor additional non-hazardous cleanup and proper transport and disposal
- Lock-down of electrical equipment
- Utility disconnect; cut and cap all above- and belowground utilities
- Removal and disposal of buildings, tanks and equipment
- Mechanical systems lockout
- General site/area wash down
- Pumping of cooling tower water to city wastewater
- Removal of boiler blowdown water
- Wash-down of Fermentation and Distillation, Drying and Evaporation Building
The certificate holder’s consultant, Terry Freemen of the FCM Group, prepared the decommissioning task list and decommissioning/site restoration cost estimate for the amendment request. The certificate holder provided evidence of Mr. Freeman’s qualifications in preparing this type of evaluation and described that he was the construction manager for Pacific Ethanol’s facility in Stockton, California and therefore understands the actions necessary for decommissioning ethanol facilities. The Department recommends that the Council concludes that Mr. Freeman and the FCM Group have the experience necessary to adequately and accurately prepare a list of actions and tasks necessary for the decommissioning of an ethanol facility.

**Aboveground Infrastructure Remains In-Place (Scenario 2)**

The tasks and actions represented by the certificate holder as necessary to restore the site to a useful, non-hazardous condition, assuming the aboveground infrastructure is cleaned of all contamination but remains in place, include the following:

- Survey and testing for hazardous materials
- Process streams including corn silos, conveyors, surge bin, hammer mills, front end mixing tanks and vessels would be drained, flushed and emptied
- Vacuum trucks would be used to drain and transport hazardous materials for proper disposal
- Minor additional non-hazardous cleanup and proper transport and disposal
- Lock-down of electrical equipment

As described above, the Department recommends that the Council concludes that the additional steps listed below, identified by the certificate holder as necessary for facility decommissioning, also apply to this assessment:

- General site/area wash down
- Pumping of cooling tower water to city wastewater
- Removal of boiler blowdown water
- Wash-down of Fermentation and Distillation, Drying and Evaporation Building

As explained in Section III.A.4 and in the 2007 Final Order on the ASC, the facility site is located within the Port Industrial (PI) Zoning District, as identified in the Morrow County Comprehensive Plan (1986) and Morrow County Zoning and Subdivision Code (2001). The PI District (Development Code Section 3.073) lists specific uses that are permitted outright including: chemical and primary metal industrial uses that are port-related [3.073(A)(3)] and manufacturing, refining, processing or assembling of any agricultural, mining or industrial products [3.073(A)(7)]. During the ASC phase, the certificate holder provided a copy of a letter from the Morrow County Planning Department stating that “[t]he proposed use, processing of ethanol, is an outright use in the Port Industrial Zone.” That determination addressed the
facility, together with the related or supporting natural gas pipeline, electric supply line and ethanol pipeline.

In the 2007 Final Order on the ASC, the Council determined that restoring the site to a "useful and non-hazardous" condition refers to a condition that is “...consistent with the applicable local comprehensive land use plan and land use regulations." The certificate holder asserts that there is nothing in the underlying comprehensive plan and land use regulations that requires an industrial zoned facility, upon retirement, to have all above ground structures dismantled and removed. The certificate holder further states that while EFSC may have the statutory authority to create the requirement that a certificate holder return a site to a useful and non-hazardous condition, EFSC rules do not define what is considered a “useful, non-hazardous condition.”

The certificate holder requests that because clean, empty tanks, infrastructure and buildings associated with the facility would be compatible with PI industrial zoning and use, the Council consider that a useful, non-hazardous condition would be achieved by leaving the infrastructure in place for future use by the Port of Morrow, who through executed agreement would have confirmed agreement to leaving above slab-grade infrastructure in place and accepts responsibility of future site restoration and remediation responsibility.

To support an evaluation of the certificate holder’s request, the Department Council considers the county’s purpose of the PI zone which is to regulate development and provide for port-related industrial uses. Specifically, MCZO Section 3.073 states that, “The PI zone is intended to regulate development at portions of the Port of Morrow Industrial Park and other appropriate locations. The zone is intended to provide for port-related industrial uses and be an industrial sanctuary, limiting commercial uses to those appropriate and necessary to serve the needs of the workers employed within the zone.” [Emphasis added]. This purpose differs from the purpose of other industrial zones within the county, such as Rural Light Industrial (MCZO Section 3.075) and General Industrial (MCZO Section 3.070), which establish purposes for providing and protecting area for industrial development. [Emphasis added].

Therefore, the Department Council considers that the county’s PI zone purpose is to provide for industrial use, and that for other industrial zones, the purpose is to provide area for industrial development. Therefore, if the Council were to interpret the phrase, “useful, non-hazardous” as a condition where above-ground infrastructure were to remain in place, once cleaned, that the interpretation should appropriately only be applied to energy facilities located within a PI zone or to energy facilities located within zones that are specifically designed to provide for industrial use, and would not include industrial areas where the purpose intended to provide and protect area for industrial development. The Department Council considers the certificate holder’s request to leave the remaining above-ground infrastructure in place, once cleaned, to be consistent with the PI zone purpose to provide for industrial use, but that it would not be
consistent with a zone purpose that included protection for industrial development as the area would not be available for development if above-ground infrastructure remained.

In addition, the Department-Council considers the following: (1) the land within the site boundary is owned by the Port of Morrow, (2) the Port is subject to the legal requirements and authorizations of ORS Chapter 777, which authorizes the Port to use land within its boundaries for industrial purposes, (3) the Port has provided a letter of support indicating that the land improvements made by the certificate holder as part of the construction and operation of the facility would continue to provide value to the Port following termination of the site certificate, following removal of hazardous materials, and (4) the Port and CEP-PEC have proposed to executed enter into an agreement that would provide for transfer of the improvements from CEP-PEC to the Port.

Based on the above considerations, the Department recommends that the Council could reasonably conclude that a bond or letter of credit sufficient to cover the tasks and actions listed in this section would be sufficient to restore the site to a useful, non-hazardous condition. Provided that the Council adopts Condition IV.C.13 and confirms receipt of, below and that certificate holder provides a copy of a fully executed agreement between the certificate holder and the Port of Morrow that is materially consistent with the draft agreement attached here to as Attachment C prior to adoption of a final order to the proposed order (provided as Attachment C to the final order).

The Department recommends that the Council consider hereby finds that applying a differing interpretation of the phrase, “useful, non-hazardous,” to be is appropriate within the context of the purpose of Morrow County’s PI zone purpose, receipt of a copy of the executed execution of a legally binding agreement with the Port of Morrow, and the certificate holder’s proposal obligation to maintain a present-value bond or letter of credit in an amount necessary to restore the site to a “useful, non-hazardous condition,” covering the tasks and actions presented above under Scenario 2.

Estimated Cost of Site Restoration

In the 2007 Final Order on the ASC, the Council concluded that, based upon the evaluation of a third-party contractor hired by the Department, the cost of site restoration was estimated at $800,000 (2nd Quarter 2007 dollars), excluding any deduction for scrap or salvage value. In the proposed order, The Department noted, and the Council understands, that the $800,000 site restoration estimate was based on a 2007 evaluation and that the bond amount currently required based upon inflation is $916,800.

Removal of Aboveground Infrastructure to Slab-Grade (Scenario 1)

For this scenario, if the Council concludes that in order to satisfy the requirements of the Retirement and Financial Assurance standard, restoration of a site to a useful non-hazardous
condition shall be interpreted as removal of all aboveground infrastructure to slab-grade, the certificate holder requests that the cost of site restoration referenced in Condition IV.C.4 be updated based upon a more current and representative retirement and restoration cost estimate. The certificate holder’s request is based on an assertion that the facility modifications proposed in the amendment request amount to less than 5 percent of the overall facility cost.

The existing bond amount referenced in Condition IV.C.4 includes approximately $80,000 in contingency to cover future developments. Because the certificate holder provided an updated decommissioning estimate, including the cost of removal of the facility modifications described in the amendment request, the Department recommends that if Council finds that removal of aboveground infrastructure to slab-grade is necessary to satisfy the requirements of the standard, the Council amends Condition IV.C.4 to refer to $852,000 (rounded to the nearest thousand, in 4th Qrt 2016 dollars) based on the certificate holder’s updated decommissioning estimate as follows:

**Recommended Amended Condition IV.C.4 (Council Approval of Scenario 1):** Within 30 days after the effective date of the site certificate execution of the first amended site certificate, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit in the amount of $800,852,000 (in Second Fourth Quarter 200716 dollars) naming the State of Oregon, acting by and through the Council, as beneficiary or payee.

(a) The certificate holder shall adjust the amount of the bond or letter of credit to present value annually, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services’ “Oregon Economic and Revenue Forecast,” or by any successor agency (“Index”). If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust Second Fourth Quarter 200716 dollars to present value.

(b) The form of bond or letter of credit shall be subject to prior approval by the Council.

(c) The issuer of the bond or letter of credit shall be subject to prior approval by the Council.

(d) The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition (VI.B.6).

(e) The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility.

The Department’s recommendation to Council finds to accept at a lesser bond or letter of credit amount than is currently required based on Condition IV.C.4 and inflation ($916,800) is acceptable based on several factors. The Department recommends that the Council considers estimates, prepared by a qualified individual or entity, with relevant experience specific to the facility type (ethanol production), acceptable as the Department does not currently have guidance or recommended guidance for certificate holders in the preparation of facility decommissioning estimate. The Department also recommends that the Council also considers
an estimate prepared in 2017 to represent a more current and reasonable estimate using actual
facility information regarding tasks and actions necessary based upon reasonable, accepted
costs, as verified. The Department also recommends Council finds that because the original
decommissioning estimate included several contingencies to cover future uncertainties and
included acknowledged arbitrary values, that if the certificate holder is able to provide a more
precise evaluation of decommissioning cost, that it is reasonable for the Council to consider a
lesser overall cost to represent a more realistic and reasonable estimate, with fewer built-in
uncertain values.

Aboveground Infrastructure Remains In-Place (Scenario 2)

In the alternative, if Council concludes that in order to satisfy the requirements of the
Retirement and Financial Assurance standard, restoration of a site to a useful non-hazardous
condition within land zoned PI (and with an agreement with the Port of Morrow to assume
liability, as further discussed below) may be interpreted as allowing for aboveground
infrastructure to remain in place, the Department recommends the Council impose several an
amended and new and amended conditions.

To support its evaluation of the certificate holder’s proposal for Scenario 2, the Department
requested that the certificate holder provide an updated site restoration cost estimate based
upon removal and disposal of all materials (hazardous and non-hazardous). In the response to
the Department’s request, the certificate holder provided a cost estimate of $81,480 for
Scenario 2. As explained above, the certificate holder’s consultant, Mr. Freeman with FCM
Group, prepared the decommissioning cost estimates. The amendment request includes a list
of 10 relevant projects ranging in cost from $4 to $170 million where FCM Group was
responsible for facility construction and/or preparing a decommissioning estimate, and
specifically included projects that, when decommissioned, would require handling of
contaminated soils, ash handling systems, oil and piping systems, tanks systems, sodium
hydroxide, ammonia, and other various chemical systems. The Department recommends that
the-Council concludes that Mr. Freeman and the FCM Group have the experience necessary to
adequately and accurately prepare a cost estimate for the decommissioning of an ethanol
facility.

As described above, the Department recommends that the Council consider the tasks
identified by the certificate holder for material removal and cleanup and facility
decommissioning as necessary for Scenario 2, that the retirement cost estimate for this
scenario is, more accurately, $295,172, which includes the certificate holder’s cost estimates for
removal of hazardous materials, material removal and cleanup, and facility decommissioning,
and that Condition IV.C.4 be amended as follows. If Council agrees to adopt amended Condition
IV.C.4, the Department recommends that Council also adopt recommended Condition IV.C.13,
which would require that the certificate holder provide the Council with an executed
agreement between the certificate holder and the Port of Morrow, confirming that the Port of
Morrow agrees to accept responsibility and liability of the facility post-decommissioning.

Condition IV.C.13 is further discussed below: evidence of property insurance, annually, to ensure that property damage from high-loss events such as explosion or fire, would be covered by the certificate holder’s insurance provider, and that the certificate holder demonstrates ongoing active coverage for such unplanned and catastrophic events.

**Recommended Amended Condition IV.C.4:** Within 30 days after the effective date of the site certificate, execution of the first amended site certificate, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit in the amount of $800,000 (in Second Fourth Quarter 2007 dollars) naming the State of Oregon, acting by and through the Council, as beneficiary or payee.

(f) The certificate holder shall adjust the amount of the bond or letter of credit to present value annually, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services’ “Oregon Economic and Revenue Forecast,” or by any successor agency (“Index”). If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust Second Fourth Quarter 2007 dollars to present value.

(g) The form of bond or letter of credit shall be subject to prior approval by the Council.

(h) The issuer of the bond or letter of credit shall be subject to prior approval by the Council.

(i) The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition (VI.B.6).

(j) The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility.

**Ability of the Applicant (Certificate Holder) to Obtain a Bond or Letter of Credit**

OAR 345-022-0050(2) requires the Council to find that the certificate has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount necessary to restore the facility site to a useful non-hazardous condition. A bond or letter of credit provides a site restoration remedy to protect the state of Oregon and its citizens if the certificate holder fails to perform its obligation to restore the site. The bond or letter of credit must remain in force until the certificate holder has restored the site.

As explained in the 2007 Final Order on the ASC, the following conditions were imposed to ensure compliance with OAR 345-022-0050(2):

**Existing Condition IV.C.4:** Within 30 days after the effective date of the site certificate, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit in the amount of $800,000 (in Second Quarter 2007 dollars) naming the State of Oregon, acting by and through the Council, as beneficiary or payee.
(a) The certificate holder shall adjust the amount of the bond or letter of credit to present value annually, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' “Oregon Economic and Revenue Forecast,” or by any successor agency (“Index”). If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust Second Quarter 2007 dollars to present value.

(b) The form of bond or letter of credit shall be subject to prior approval by the Council.

(c) The issuer of the bond or letter of credit shall be subject to prior approval by the Council.

(d) The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition (VI.B.6).

(e) The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility.

Existing Condition IV.C.5: If the certificate holder elects to use a bond to meet the requirements of Condition (IV.C.4), the certificate holder shall ensure that the surety is obligated to comply with the requirements of applicable statutes, Council rules and this site certificate when the surety exercises any legal or contractual right it may have to assume construction, operation or retirement of the energy facility. The certificate holder shall also ensure that the surety is obligated to notify the Council that it is exercising such rights and to obtain any Council approvals required by applicable statutes, Council rules and this site certificate before the surety commences any activity to complete construction or to operate or retire the energy facility.

Existing Condition IV.C.6: Not later than ten years after the date of commercial operation of the energy facility, and each ten years thereafter during the life of the energy facility, the certificate holder shall complete an independent Phase I Environmental Site Assessment of the energy facility site. Within 30 days after its completion, the certificate holder shall deliver the Phase I Environmental Site Assessment report to the Department.

Existing Condition IV.C.7: In the event that any Phase I Environmental Site Assessment identifies improper handling or storage of hazardous substances or improper record keeping procedures, the certificate holder shall correct such deficiencies within six months after completion of the corresponding Phase I Environmental Site Assessment. It shall promptly report its corrective actions to the Department. The Council shall determine whether the corrective actions are sufficient.

Existing Condition IV.C.8: The certificate holder shall report to the Department any release of hazardous substances, pursuant to DEQ regulations, within one working day after the discovery of such release. This obligation shall be in addition to any other reporting requirements applicable to such a release.
Existing Condition IV.C.9: If the certificate holder has not remedied a release consistent with applicable Oregon Department of Environmental Quality standards or if the certificate holder fails to correct deficiencies identified in the course of a Phase I Environmental Site Assessment within six months after the date of the release or the date of completion of the Phase I Environmental Site Assessment, the certificate holder shall submit to the Council for its approval an independently prepared estimate of the additional cost of remediation or correction within such six-month period.

(a) Upon approval of an estimate by the Council, the certificate holder shall increase the amount of its bond or letter of credit by the amount of the estimate.

(b) In no event, however, shall the certificate holder be relieved of its obligation to exercise all due diligence in remediing a release of hazardous substances or correcting deficiencies identified in the course of a Phase I Environmental Site Assessment.

Existing Condition IV.C.10: All funds received by the certificate holder from the salvage of equipment and buildings shall be committed to the restoration of the energy facility site to the extent necessary to fund the approved site restoration and remediation.

Existing Condition IV.C.11: The certificate holder shall pay the actual cost to restore the site to a useful, non-hazardous condition at the time of retirement, notwithstanding the Council’s approval in the site certificate of an estimated amount required to restore the site.

Existing Condition IV.C.12: If the Council finds that the certificate holder has permanently ceased construction or operation of the facility without retiring the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110 and prepared pursuant to Condition (IV.C.2), the Council shall notify the certificate holder and request that the certificate holder submit a proposed final retirement plan to the Department within a reasonable time not to exceed 90 days.

(a) If the certificate holder does not submit a proposed final retirement plan by the specified date, the Council may direct the Department to prepare a proposed a final retirement plan for the Council’s approval.

(b) Upon the Council’s approval of the final retirement plan, the Council may draw on the bond or letter of credit described in Condition (IV.C.4) to restore the site to a useful, non-hazardous condition according to the final retirement plan, in addition to any penalties the Council may impose under OAR Chapter 345, Division 29.

(c) If the amount of the bond or letter of credit is insufficient to pay the actual cost of retirement, the certificate holder shall pay any additional cost necessary to restore the site to a useful, non-hazardous condition.

(d) After completion of site restoration, the Council shall issue an order to terminate the site certificate if the Council finds that the facility has been retired according to the approved final retirement plan.
The Department notes that the existing site certificate conditions, as referenced above, provide a reasonable level of assurance that the facility site is being maintained and evaluated for release of hazardous and non-hazardous materials. Specifically, the facility is required to complete independent Phase I Environmental Site Assessments every 10-years, and address any issues identified during the site assessment within 6-months of the evaluation or provide an estimate to the Council of the cost for remediation, which would then be added to the amount required for the retirement bond or letter of credit. These conditions, with the exception of amendments to Condition IV.C.4, would continue to apply as currently imposed in the site certificate to the facility, regardless of the Council’s decision on the phrase interpretation of the language of the standard. Amended Condition IV.C.4 only applies if Council finds that, in order to satisfy the requirements of the Retirement and Financial Assurance standard, the certificate holder must remove all above-ground infrastructure to slab-grade, as required under the terms and conditions of the original site certificate.

In the amendment request, the certificate holder supports the Council’s review of Scenario 2 by explaining that the Port of Morrow prefers for any and all above-ground infrastructure to remain in place upon retirement of the facility and has provided an executed legally binding agreement with that the Port of Morrow is willing to enter a legally binding agreement that: (1) states that leaving the above ground infrastructure after cleaning and removing any chemicals, fuels or other hazardous materials, would return the site to a “useful, non hazardous condition; and: (2) shifts any legal liability for removing above ground infrastructure to the Port and away from EFSC on behalf of the State of Oregon and PEC.  

As described above, the existence of an executed agreement containing such terms is one of the factors supporting the Department’s determination that Scenario 2 is appropriate. Therefore, the Department recommends that the Council not issue a final order approving Scenario 2 unless and until certificate holder submits an executed agreement between the Port of Morrow and the certificate holder that is materially consistent with the draft agreement attached hereto as Attachment C. If the certificate holder submits such an agreement to the satisfaction of the Council, and if the Council accepts the certificate holder’s evaluation under Scenario 2 and agrees to impose recommended amended Condition IV.C.4, the Department recommends the Council also imposes a new condition, Condition IV.C.13 as follows:

**New Retirement and Financial Assurance Condition IV.C.13:**

(1): The certificate holder shall maintain a bond or letter of credit in an amount of $295,000 (in 4th Quarter 2016 dollars) naming the State of Oregon, acting by and through the Council, as beneficiary or payee.

(a) The certificate holder shall adjust the amount of the bond or letter of credit to present value annually, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services’ “Oregon Economic and Revenue Forecast,” or by any

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18 RFA, Section v, CEPAMD1Doc1 2016-5-4.
successor agency ("Index"). If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust Second Quarter 2007 dollars to present value.

(b) The form of bond or letter of credit shall be subject to prior approval by the Council.

(c) The issuer of the bond or letter of credit shall be subject to prior approval by the Council.

(d) The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition (VI.B.6).

(e) The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility.

(2) The certificate holder may not amend or terminate the agreement between the Port of Morrow and the certificate holder without either (1) prior consent of the Council, or (2) submission to the Department of a bond or letter of credit in the amount of $852,000 (in 4th Quarter 2016 dollars) and adjusted consistent with IV.C.13(1)(a-e).

(3) The certificate holder shall provide evidence to the Department on an annual basis, through reporting under Condition IV.B.6, of active property coverage under its commercial business insurance from high loss-catastrophic events, including but not limited to, onsite fire or explosion.

The certificate holder is currently in compliance with the requirements of existing Condition IV.C.4, and maintains a bond in an amount and form satisfactory to the Council for facility retirement. Therefore, the Department recommends that the Council concludes that the certificate holder has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition. Moreover, the certificate holder submitted in the amendment request a draft agreement between the facility and Port of Morrow, and the certificate holder asserts the Port of Morrow accepts the terms of the draft agreement, although the agreement is not yet executed. The Port of Morrow provided formal comments to the Department in September 2016 supporting the terms of the draft agreement.

As presented in the recommended, new Condition IV.C.13 would only be imposed if the certificate holder submits an executed agreement between CEP and the Port of Morrow to the Department, for the Council’s review, prior to Council’s evaluation of the final order. Recommended, new Condition IV.C.13 applies only if Council finds that, in order to satisfy the requirements of the Retirement and Financial Assurance standard, the certificate holder may leave aboveground infrastructure in place once all hazardous and non-hazardous materials are removed and equipment cleaned and locked-out. New Condition IV.C.13 then establishes a requirement for the certificate holder to maintain a bond or letter of credit in the amount necessary to remove all hazardous and non-hazardous materials from the site, and to clean and shut-down all equipment. The Department also recommends, through New Condition IV.C.13 also requires that the certificate holder to provide evidence to the Department, on an annual
basis, of active property coverage under its commercial business insurance policy from high loss catastrophic events including but not limited to an onsite explosion or fire. **Under Scenario 2,** the Department recommends the Council finds that this condition provision to further reduces any future liability of the Council or the Port of Morrow in the event of unanticipated catastrophic events that could impact the condition of the site or the certificate holder’s ability to restore the site to a useful, non-hazardous condition.

**Conclusions of Law**

**[Council Approval of Scenario 1]**

Based on the evidence in the record, and subject to compliance with the existing and, recommended amended, and recommended new site certificate conditions, the Department recommends that the Council finds that the certificate holder would, under either Scenario 1 or Scenario 2 only, continue to satisfy the requirements of the Council’s Retirement and Financial Assurance standard.

**[Council Approval of Scenario 1 or 2]**

Based on the evidence in the record, and subject to compliance with the existing, amended, and new site certificate conditions, the Council finds that the certificate holder would, under either Scenario 1 or Scenario 2, continue to satisfy the requirements of the Council’s Retirement and Financial Assurance standard.

**III.A.8 Fish and Wildlife Habitat, OAR 345-022-0060**

To issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are consistent with the fish and wildlife habitat mitigation goals and standards of OAR 635-415-0025 in effect as of September 1, 2000.

**Findings of Fact**

The Fish and Wildlife Habitat standard requires the Council to find that the design, construction, and operation of a facility are consistent with fish and wildlife habitat mitigation goals as set forth in OAR 635-415-0025.

The Council addressed the Fish and Wildlife Habitat standard in the 2007 Final Order on the ASC and imposed Conditions IV.H.1 through IV.H.3, which required the certificate holder to restore temporarily disturbed areas using a pre-approved seed mix; implement a Habitat Mitigation Plan; and, minimize permanent facility impacts, implement best management practices to prevent loss of topsoil during construction, and control noxious weeds. The Council previously found that the facility had the ability to satisfy the requirements of the Fish and Wildlife Habitat
standard, subject to compliance with the site certificate conditions, because the facility would not impact habitat Categories 1, 2, 3 or 4; and, the facility would meet the mitigation goal for its permanent impacts to Category 5 habitat by implementing a Habitat Mitigation Plan.

As explained in Section I.C of the proposed final order, the facility site is located within a permanently disturbed industrial area, leased from the Port of Morrow. All facility modifications included in RFA #1 would be located in the previously approved site boundary. The certificate holder asserts that the facility modifications included in RFA #1 would not impact or result in greater impacts to fish and wildlife habitat than was previously evaluated in the ASC. ODFW submitted a letter on the RFA, stating that it had no comments as the requested amended facility components will not include any ground disturbing activities outside of the originally permitted facility footprint.\(^{19}\)

For the reasons described above, the Department recommends that the Council finds that the facility, as amended, would not affect the certificate holder’s ability to satisfy the requirements of the Fish and Wildlife Habitat standard.

**Conclusions of Law**

Based on the foregoing analysis and conclusions, and subject to compliance with the existing site certificate conditions, the Department recommends that the Council finds that the facility, as amended, would continue to comply with the Council’s Fish and Wildlife Habitat standard.

### III.A.9 Threatened and Endangered Species, OAR 345-022-0070

To issue a site certificate, the Council, after consultation with appropriate state agencies, must find that:

1. For plant species that the Oregon Department of Agriculture has listed as threatened or endangered under ORS 564.105(2), the design, construction and operation of the proposed facility, taking into account mitigation:
   a. Are consistent with the protection and conservation program, if any, that the Oregon Department of Agriculture has adopted under ORS 564.105(3); or
   b. If the Oregon Department of Agriculture has not adopted a protection and conservation program, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species; and

2. For wildlife species that the Oregon Fish and Wildlife Commission has listed as threatened or endangered under ORS 496.172(2), the design, construction and operation of the proposed facility, taking into account mitigation, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species.

\(^{19}\) CEPAMD1Doc23 2016-7-7
Findings of Fact

The Threatened and Endangered Species standard requires the Council to find that the design, construction, and operation of the facility is not likely to cause a significant reduction in the likelihood of survival or recovery of a fish, wildlife, or plant species listed as threatened or endangered by Oregon Department of Fish and Wildlife (ODFW) or Oregon Department of Agriculture (ODA). For threatened and endangered plant species, the Council must also find that the facility is consistent with an adopted protection and conservation program from ODA.

Threatened and endangered species are those listed under ORS 564.105(2) for plant species and ORS 496.172(2) for fish and wildlife species. For the purposes of this standard, threatened and endangered species are those identified as such by either the Oregon Department of Agriculture or the Oregon Fish and Wildlife Commission.\(^{20}\)

The analysis area for threatened or endangered plant and wildlife species is the area within and extending five-miles from the site boundary. The Council addressed the Threatened and Endangered Species standard in the 2007 Final Order on the ASC.

In the Final Order on the ASC, Council described that no state-or federal-listed threatened or endangered wildlife species were known to occur in the analysis area, though it was noted that several species were identified as having the potential to occur in the analysis area.

The Council previously found that the design, construction and operation of the facility were not likely to result in direct or indirect impacts to candidate fish or wildlife species or their habitat on the energy facility site. ODFW submitted a letter on the RFA, stating that it had no comments as the requested amended facility components will not include any ground disturbing activities outside of the originally permitted facility footprint.\(^{21}\) Oregon Department of Agriculture, Native Plant Conservation Program, did not comment on the amendment request.

Because the facility modifications included in RFA #1 would be located in the previously approved site boundary, of which is permanently disturbed from previous use, the Department recommends that the Council finds that the design, construction, and operation of the facility, as amended, are not likely to cause a significant reduction in the likelihood of survival or recovery of any Threatened or Endangered Species.

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\(^{20}\) Although the Council’s standard does not address federally-listed threatened or endangered species, certificate holders must comply with all applicable federal laws, including laws protecting those species, independent of the site certificate.

\(^{21}\) CEPAMD1Doc23_2016-7-7
**Conclusions of Law**

Based on the foregoing findings of fact and conclusions, and subject to compliance with the existing site certificate conditions, the Department recommends that the Council finds that the facility, as amended, would continue to satisfy the requirements of the Council’s Threatened and Endangered Species standard.

**III.A.10 Scenic Resources, OAR 345-022-0080**

(1) Except for facilities described in sections (2), to issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to scenic resources and values identified as significant or important in local land use plans, tribal land management plans and federal land management plans located within the analysis area described in the project order. ***

**Findings of Fact**

OAR 345-022-0080 requires the Council to determine that the design, construction and operation of a facility would not have a “significant adverse impact” to any significant or important scenic resources and values in the analysis area. In applying the standard set forth in OAR 345-022-0080(1), the Council assesses the visual impacts of facility structures on significant or important scenic resources described in “local land use plans, tribal land management plans and federal land management plans for any lands located within the analysis area described in the project order.” For purposes of this rule, “local land use plans” includes applicable state management plans.

The Council previously addressed the Scenic Resources standard in the 2007 Final Order on the ASC and evaluated potential impacts to “significant” scenic resources within a 30-mile analysis area. The Council made findings regarding the potential visibility of facility structures and vegetation impacts and associated visual impacts at the five “significant” sites and segments identified along the Oregon National Historic Trail High Potential Sites. The Council found that because the five sites and segments would be located between 14.1 (nearest site) and 25.8 miles (farthest site) from the facility, that facility structures and steam plume during operation would not likely be visible at these scenic resources due to distance, haze, humidity, background landscape, light conditions or weather. No other scenic resources were identified as significant or important.

Because the facility modifications included in RFA #1 would be located in the previously approved site boundary, of which is permanently disturbed from previous use, the Department recommends that the Council finds that the facility modifications would not be likely to result in new impacts to important scenic resources that have not been addressed by the Council or...
otherwise affect the certificate holder’s ability to design, construct and operate the facility, as amended, without significant adverse impact to important scenic resources.

The Department recommends that the Council finds that the design, construction, and operation of the facility, as amended, would not be likely to result in significant adverse impact to any identified scenic resources and values.

Conclusion of Law

Based on the foregoing findings of fact and conclusions of law, the Department recommends that the Council finds that the design, construction, and operation of the facility, as amended, would not be likely to result in significant adverse impact to any identified scenic resources and values.

III.A.11 Historic, Cultural and Archaeological Resources, OAR 345-022-0090

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impacts to:

(a) Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places;

(b) For a facility on private land, archaeological objects, as defined in ORS 358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c); and

(c) For a facility on public land, archaeological sites, as defined in ORS 358.905(1)(c). ***

Findings of Fact

Section (1) of the Historic, Cultural and Archaeological Resources standard generally requires the Council to find that a facility is not likely to result in significant adverse impacts to identified historic, cultural, or archaeological resources.

The Council previously addressed the Historic, Cultural and Archaeological Resources standard in the 2007 Final Order on the ASC and made findings to support imposing six conditions (IV.K.1 through IV.K.6). The conditions included requirements such as an additional pre-construction investigation, in consultation with the Oregon Historic Preservation Office and the Confederated Tribes of the Umatilla Indian Reservation, to define the vertical and horizontal extent of archeological resources in the vicinity of the ethanol pipeline; onsite archeological monitors during construction; and, a stop-work requirement in the event of an advertent discovery of any archeological or cultural resource. The certificate holder would remain subject to the requirements of these conditions.
As explained in Section I.D of the proposed final order, while some of the facility modifications included in RFA #1 (corn oil extraction system, sugar addition system) resulted in ground disturbance, all ground disturbing activities would have been located within the previously disturbed and approved site boundary. Therefore, based upon compliance with the existing site certificate conditions, the Department recommends that the Council finds that the construction and operation of the facility, as amended, would not be likely to result in significant adverse impacts to historic, cultural, or archaeological resources.

Conclusions of Law

Based on the foregoing findings and the evidence in the record, and subject to compliance with the existing site certificate conditions, the Department recommends that the Council finds that the facility, as amended, would continue to comply with the Council’s Historic, Cultural, and Archaeological Resources standard.

III.A.12 Recreation, OAR 345-022-0100

(1) Except for facilities described in section (2), to issue a site certificate, the Council must find that the design, construction and operation of a facility, taking into account mitigation, are not likely to result in a significant adverse impact to important recreational opportunities in the analysis area as described in the project order. The Council shall consider the following factors in judging the importance of a recreational opportunity:

(a) Any special designation or management of the location;
(b) The degree of demand;
(c) Outstanding or unusual qualities;
(d) Availability or rareness;
(e) Irreplaceability or irretrievability of the opportunity. ***

Findings of Fact

The Recreation standard requires the Council to find that the design, construction and operation of a facility are not likely to result in significant adverse impacts to “important”

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22 In a comment letter, the Confederated Tribes of Umatilla Reservation (CTUIR) expressed concern that the existing facility and facility modifications included in RFA #1 were located within a historic property of religious and cultural significance to the CTUIR, which in 2014 was determined eligible for the National Register by the Keeper of the National Register. CTUIR further states that construction of the facility and recent improvement have had an adverse effect to the historic property. Additionally, CTUIR states that the barge load out area and barge traffic could affect CTUIR tribal members’ ability to exercise their reserved treaty rights, such as fishing. The barge load-out area is not part of the energy facility or considered a related and supporting facility. The Council approved the facility and its site in 2007, and did not at that time consider the referenced property of religious and cultural significance. Because the facility modifications would be located entirely within a previously approved site boundary, and would not result in new ground-disturbing activities outside of the previously approved site boundary, the Department recommends that the Council not consider this comment further.
recreational opportunities. Therefore, the Council’s Recreation standard applies to only those
recreation areas that the Council finds “important” using the factors listed in the sub-
paragraphs of section (1) of the standard. The project order identified the analysis area for the
Recreation standard as the area within and extending five miles from the site boundary.

The Council addressed the Recreation standard in the 2007 Final Order on the ASC and
previously identified five recreational opportunities within the analysis area including the
Umatilla National Wildlife Refuge, Columbia River, Coyote Springs Wildlife Area, Columbia River
Heritage Trail, and The Marina Park at Boardman.

The amendment request includes facility modifications, specifically the construction and
operation of a corn oil extraction system, a sugar addition system, and a 25 percent increase in
annual ethanol production, that could result in changes to onsite water use and wastewater
generation, and daily vehicle trips.

The certificate holder asserts that operation of the corn oil extraction system, while it would
result in daily truck trips to ship out produced corn oil, would not result in an increase in the
number of daily truck trips at the site because the corn oil extraction process would result in a
proportionate reduction in the number of daily truck trips for transporting previously generated
feedstock out of the site. In the amendment request, the certificate holder explained that the
maximum number of truck trips generated by the facility, as amended, would not exceed 284
trips per day, as originally forecasted in the ASC as a worst-case scenario, and determined by
the Council not to result in a significant adverse traffic impact at any recreational opportunity
within the analysis area.

Moreover, the certificate holder argued that the peak number of truck trips, 284 trips per day,
that could occur at the facility, as amended, remains below the number of trips per day
recommended by Morrow County as the number that would trigger a requirement for a Traffic
Impact Assessment, or 400 vehicle trips per day. The certificate holder also stated that most of
the corn shipments to the facility are by rail, and most of the ethanol shipments out of the
facility are by barge, and that truck traffic has been much less than 284 trips per day in recent
years. Finally, the certificate holder stated that what truck material is shipped into and out of
the facility only occurs during weekdays, not weekends, when most users of local recreational
facilities are likely to occur. 23

The certificate holder explained that the requested 25 percent increase in ethanol production
would not require new or modified infrastructure, but that it would result in a 25 increase in
water use and wastewater generation. The certificate holder further asserted that operation
of the sugar addition system would result in a slight reduction (5 percent) in water use during
the mash process, and confirmed that there would be no impact on wastewater quantities
generated onsite. As expressed in the amendment request, the anticipated water use and

23 RFA, Section iv.
wastewater generation from the facility, as amended, would be allowable within the limitations of the third-party wastewater discharge permits held by the Port of Morrow, as used by the facility and would not result in significant adverse water or wastewater impacts at any recreational opportunity within the analysis area.

Based upon the foregoing, the Department recommends that the Council finds that the facility, as amended, would not be likely to result in significant adverse impacts to any recreational opportunity within the analysis area.

**Conclusions of Law**

Based on the foregoing, the Department recommends that the Council finds that the design, construction and operation of the facility, as amended, would not be likely to result in a significant adverse impact to any important recreational opportunities in the analysis area and therefore the facility, as amended, complies with the Council’s Recreation standard.

**III.A.13 Public Services, OAR 345-022-0110**

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to the ability of public and private providers within the analysis area described in the project order to provide: sewers and sewage treatment, water, storm water drainage, solid waste management, housing, traffic safety, police and fire protection, health care and schools. ***

**Findings of Fact**

The Council’s Public Services standard requires the Council to identify likely significant adverse impacts on the ability of public and private service providers to supply sewer and sewage treatment, water, stormwater drainage, solid waste management, housing, traffic safety, police and fire protection, health care, and schools.

The Council addressed the Public Services standard in the 2007 Final Order on the ASC. The analysis area for public services was previously identified as the area within and extending 30-miles from the site boundary.

The amendment request included facility modifications, specifically the corn oil extraction system, a sugar addition system, and a 25 percent increase in annual ethanol production, that could result in changes to onsite water use and wastewater generation, and daily vehicle trips.

The certificate holder asserted that operation of the corn oil extraction system, while it would result in daily truck trips to ship out produced corn oil, would not result in an increase in the
number of daily truck trips at the site because the corn oil extraction process would result in a proportionate reduction in the number of daily truck trips for transporting previously generated feedstock out of the site. In the amendment request, the certificate holder explained that the maximum number of truck trips generated by the facility, as amended, would not exceed 284 trips per day, as originally forecasted in the ASC as a worst-case scenario, and determined by the Council not to result in a significant adverse impact to the ability of transportation providers to provide a public service. Moreover, the certificate holder argued that the peak number of truck trips, 284 trips per day, that could occur at the facility, as amended, remains below the number of trips per day recommended by Morrow County as the number that would trigger a requirement for a Traffic Impact Assessment, or 400 vehicle trips per day. The certificate holder also stated that most of the corn shipments to the facility are by rail, and most of the ethanol shipments out of the facility are by barge, and that truck traffic has been much less than 284 trips per day in recent years. As such, this represents a level of daily vehicle traffic that would not likely result in significant adverse impacts to transportation routes or providers of transportation services. Morrow County did not comment on the amendment request or proposed order any issues related to potential impacts to traffic and transportation services.

The certificate holder explained that the requested 25 percent increase in ethanol production would not require new or modified infrastructure, but that it would result in a 25 percent increase in water use and wastewater generation. As expressed in the amendment request, the anticipated water use and wastewater generation from the facility, as amended, would be allowable within the limitations of the third-party wastewater discharge permits held by the Port of Morrow, as used by the facility.

The facility amendments occur within the previously approved site boundary. As such, it is not expected to alter stormwater runoff. The facility amendment components are located entirely within the previously approved site boundary and is not expected to have a significant increase in fire risk. The certificate holder also stated in its amendment request (page 13) that the facility, as amended, would not require additional employees. The amended facility is unlikely to cause an increased impact to housing, health care, schools, or police.

Based upon the foregoing, the Department recommends that the Council find that the facility, as amended, would not be likely to result in significant adverse impacts to the ability of public and private providers to provide public services.

Conclusions of Law

Based on the foregoing analysis, the Department recommends that the Council finds that the facility, as amended, would continue to satisfy the requirements of the Council’s Public Services standard.

24 RFA, Section iv.
IIIA.14 Waste Minimization, OAR 345-022-0120

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that, to the extent reasonably practicable:

(a) The applicant’s solid waste and wastewater plans are likely to minimize generation of solid waste and wastewater in the construction and operation of the facility, and when solid waste or wastewater is generated, to result in recycling and reuse of such wastes;

(b) The applicant’s plans to manage the accumulation, storage, disposal and transportation of waste generated by the construction and operation of the facility are likely to result in minimal adverse impact on surrounding and adjacent areas. ***

Findings of Fact

The Waste Minimization standard requires the Council to find that the certificate holder will minimize the generation of solid waste and wastewater, and that the waste generated will be managed to result in minimal adverse impacts on surrounding and adjacent areas.

The Council addressed the certificate holder’s ability to satisfy the requirements of the Waste Minimization standard in the 2007 Final Order on the ASC. The Council previously found that there was no anticipated adverse impact on surrounding or adjacent areas from wastes generated at the facility during construction, operation, or retirement due to the small quantity and inert nature of most of the potential waste. Further, the certificate holder proposed to minimize waste through minimization and recycling measures implemented during construction, operation and retirement of the facility.

In the amendment request, the certificate holder asserted that the facility modifications would not increase the amount of waste, but that the amendments would increase the quantity of wastewater generated at the site by 25%. The certificate holder stated that it would continue to implement minimization and recycling measures to reduce waste and wastewater generation. However, the increase in wastewater is within the permitted discharge quantity in the Port of Morrow’s wastewater permit. Therefore, based upon compliance with existing reduction measures, the Department recommends that the Council finds that the certificate holder would minimize and manage solid waste and wastewater, resulting in minimal adverse impacts on surrounding and adjacent areas.

Conclusions of Law

The Department recommends that the Council finds that the facility, as amended, would continue to satisfy the requirements of the Waste Minimization standard.
III.C Other Applicable Regulatory Requirements Under Council Jurisdiction

III.C.1 Noise Control Regulations: OAR 340-035-0035

(1) Standards and Regulations:

***

(a) New Noise Sources:

(A) New Sources Located on Previously Used Sites. No person owning or controlling a new industrial or commercial noise source located on a previously used industrial or commercial site shall cause or permit the operation of that noise source if the statistical noise levels generated by that new source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 8, except as otherwise provided in these rules. For noise levels generated by a wind energy facility including wind turbines of any size and any associated equipment or machinery, subparagraph (1)(b)(B)(iii) applies.

***

Findings of Fact

The Council addressed the noise control regulations in the 2007 Final Order on the ASC and, because the site itself had not been previously used by an industrial or commercial noise source during the 20 years prior to the proposed date of operation, applied DEQ’s noise standards for “new industrial or commercial noise sources on previously unused industrial or commercial sites.”

In the final order on site certificate application, the Council found that based on the certificate holder’s analysis and predicted noise levels, using the Cadna-A noise modeling program and the near-field data obtained at a similar facility owned by the same company (the Front Range Energy facility in Colorado), that the noise predicted to radiate from the facility would be in compliance with the DEQ noise regulations including the maximum hourly statistical noise levels and the limitation of a 10 dBA maximum increase in the ambient hourly $L_{10}$ or $L_{50}$ statistical noise levels at any noise sensitive receiver.

Facility modifications included in RFA #1 that could result in increased operational noise include operation of the corn oil extraction system, sugar addition system, and CO$_2$ capture infrastructure. Infrastructure associated with the corn oil extraction system is located within the processing building, which minimizes outdoor audible noise by being located within an enclosure. The sugar addition system is electrically-powered and comprised of a stainless steel

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25 While the facility components included in RFA #1 have already been constructed, the DEQ noise regulations exempt construction noise.

26 The nearest sensitive receptor identified during the ASC review was approximately 9/10 of a mile from the facility, with no other sensitive receptor within 1.5 miles.
bin, rotary feeder, and screw conveyer. Further, the sugar addition system does not include any significant sources of noise generation such as an engine or motorized equipment. Similarly, the CO₂ capture infrastructure does not include any significant sources of noise generation, such as an engine or motorized equipment. Therefore, the certificate holder asserted and the Department Council agrees that noise impacts from the facility modifications included in the amendment request would not be likely to result in greater noise impacts at the nearest sensitive receptor than was previously evaluated.

Because the facility, as amended, would be located entirely within the existing site boundary and would not result in any significant new sources of noise generating equipment not previously evaluated, the Department recommends that the Council concludes that the facility, as amended, would continue to comply with the applicable provisions of DEQ’s Noise Control Regulation.

Conclusions of Law

Based on the foregoing findings, the Department recommends that the Council find that the facility, as amended, would continue to comply with the Noise Control Regulations in OAR 340-035-0035(1)(b)(B).

III.C.2 Removal-Fill Law

The Oregon Removal-Fill Law (ORS 196.795 through 196.990) and Department of State Lands (DSL) regulations (OAR 141-085-0500 through 141-085-0785) require a removal-fill permit if 50 cubic yards or more of material is removed, filled, or altered within any “waters of the state.” 27 The Council, in consultation with DSL, must determine whether a removal-fill permit is needed and if so, whether a removal-fill permit should be issued. The analysis area for wetlands and other waters of the state is the area within the site boundary.

Findings of Fact

The Council addressed the Removal Fill Law in the 2007 Final Order on the ASC and found that because there were no wetlands identified within the analysis area, no impacts to wetlands or other waters of the state would occur as a result of the facility and that a DSL removal-fill permit would not be required for facility construction or operation.

RFA #1 seeks requested approval for facility modifications that could result in new ground disturbance, including construction and operation of the corn oil extraction system and the sugar addition system. However, these proposed facility modifications would be located within the existing facility site and site boundary, which was previously permanently disturbed and paved or graveled, impacts to new wetlands not previously identified could not occur.

27 ORS 196.800(15) defines “Waters of this state.” The term includes wetlands and certain other waterbodies.
Therefore, the Department recommends that the Council finds that the proposed amendments would not alter the conclusion that the facility, as amended, would not require a removal-fill permit.

Conclusions of Law

The Department recommends that the Council concludes that the facility, as amended, would continue to not require a state removal-fill permit.

III.C.3 Water Rights

Under ORS Chapters 537 and 540 and OAR Chapter 690, the Oregon Water Resources Department (OWRD) administers water rights for appropriation and use of the water resources of the state. Under OAR 345-022-0000(1), the Council must determine whether the facility would comply with these statutes and administrative rules.

Findings of Fact

The certificate holder relies upon the Port of Morrow for water and wastewater discharge service needed during facility construction and operation. Specifically, the certificate holder relies upon the Port of Morrow’s water right held by the City of Boardman assumed to be third-party permits.

RFA #1 seeks requested approval for facility modifications that could result in an increase in water use, including operation of the corn oil extraction system, sugar addition system, and an increase in annual throughput. The certificate holder confirmed that the existing water right issued to the Port of Morrow did not need to be amended as a result of the facility modifications and would continue to be used for water use for the facility, as amended.\(^{28}\)

Based on the scope of facility modifications included in RFA #1, the Department recommends that the Council finds that water use at the facility, as amended, would continue to not require an individual water right, transfer, or limited license.

Conclusions of Law

For the reasons discussed above, the Department recommends that the Council concludes that the facility, as amended, would continue to comply with the applicable water rights statutes and regulations and does not need a water right, transfer, or limited license.

\(^{28}\) CEPAMD1Doc5 2016-01-15
IV. Proposed General Conclusions and Final Order

Request for Amendment 1 of Columbia Ethanol Project’s site certificate would allow:

- Construction and operation of a corn oil extraction system
- Construction and operation of a sugar addition system
- Change in ethanol feedstock to include, in addition to the previously approved corn feedstock, a blend of corn and granulated sugar
- Increase in the annual ethanol production from 35 to 44 million gallons per year
- Amendment of conditions (Conditions IV.C.2 and IV.C.4) imposed to ensure compliance with the Council’s Retirement and Financial Assurance standard

Based on the recommended findings and conclusions included in this order, the Department recommends that the Council makes the following findings:

1. Request for Amendment 1 of Columbia Ethanol Project’s site certificate complies with the requirements of the Oregon Energy Facility Siting statutes, ORS 469.300 to ORS 469.570 and ORS 469.590 to ORS 469.619.
2. Request for Amendment 1 of Columbia Ethanol Project’s site certificate complies with the applicable standards adopted by the Council pursuant to ORS 469.501.
3. Request for Amendment 1 of Columbia Ethanol Project’s site certificate complies with the statewide planning goals adopted by the Land Conservation and Development Commission.
4. Request for Amendment 1 of Columbia Ethanol Project’s site certificate complies with all other Oregon statutes and administrative rules that were included in and governed by the original site certificate and are applicable to the amendment of the site certificate.

Accordingly, the Department recommends that the Council finds that the facility, as amended, would comply with the General Standard of Review (OAR 345-022-0000). The Department recommends that the Council finds, based on a preponderance of the evidence on the record, that the site certificate may be amended as requested.
**Proposed Final Order**

The Department recommends that the Council approve Request for Amendment #1 and issues an amended site certificate for Columbia Ethanol Project, subject to the terms and conditions set forth above.

Issued **August 8th, September 22, 2017**

The Oregon Department of Energy Facility Siting Council

By: _____________________________________________

Barry Beyeler, Chair

Energy Facility Siting Council

Attachments

Attachment A: **Proposed** Amended Site Certificate

Attachment B: Department’s Request for Additional Information and Certificate Holder Responses

Attachment C: **Draft-Final Executed** Agreement
Notice of the Right to Appeal
[Text to be added to Final Order]
Attachment A: Draft Amended Site Certificate
AMENDED SITE CERTIFICATE
FOR THE
COLUMBIA ETHANOL PROJECT

ISSUED BY
OREGON ENERGY FACILITY SITING COUNCIL
625 MARION STREET NE,
SALEM OR 97301-3742

503.378.4040
503.373.7806 FAX

JULY 2, 2007 MONTH 2017
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AMENDED SITE CERTIFICATE
FOR THE
COLUMBIA ETHANOL PROJECT

I. INTRODUCTION
This Amended Site Certificate for the Columbia Ethanol Project (“CEP”) is issued and executed in the manner provided by ORS chapter 469, by and between the State of Oregon (“State”), acting by and through its Energy Facility Siting Council (“Council”), and Pacific Ethanol Columbia, LLC (“PEC” or “certificate holder”). This site certificate is a binding agreement between the State, acting by and through the Council, and the certificate holder.

The findings of fact, reasoning and conclusions of law underlying the terms and conditions of this Amended Site Certificate are set forth in the: (1) Council's Final Order in the Matter of the Request for Amendment 1 of the Site Certificate for the Columbia Ethanol Project (“Final Order on Amendment 1”), which the Council granted on DATE; and (2) Council’s Final Order in the Matter of the Application for a Site Certificate for the Columbia Ethanol Project (“Final Order on the ASC”), which the Council granted on July 2, 2007, and which by this reference are incorporated herein.

In interpreting this site certificate, any ambiguity shall be clarified by reference to the following, in order of priority: (1) this amended Site Certificate; (2) the Final Order on Amendment 1; (3) the Final Order on the ASC Application for a Site Certificate; and (4) the record of the proceedings that led to the all Final Orders on the Application for a Site Certificate.

The terms used in this amended site certificate shall have the same meaning set forth in ORS 469.300 and OAR 345-001-0010, except where otherwise stated or where the context clearly indicates otherwise.

II. SITE CERTIFICATION
A. To the extent authorized by State law and subject to the conditions set forth herein, the State authorizes the certificate holder to construct, operate and retire an ethanol plant, together with certain related or supporting facilities, at the site in Morrow County, Oregon, as described in Section III of this Site Certificate. ORS 469.401(1).

B. This site certificate shall be effective until it is terminated pursuant to OAR 345-027-0110 or the rules in effect on the date that termination is sought or until the site certificate is revoked pursuant to ORS 469.440 and OAR 345-029-0100 or the statutes and rules in effect on the date that revocation is ordered. ORS 469.401(1).

C. This Site Certificate does not address, and is not binding with respect to, matters that were not addressed in the Council's Final Order on the Application for a Site Certificate. These matters include, but are not limited to: building code compliance; wage, hour and other labor regulations; local government fees and charges; other design or operational issues that do not relate to siting the facility (ORS 469.401(4); and permits issued under...
D. Both the State and the certificate holder shall abide by local ordinances and state law and the rules of the Council in effect on the date this site certificate is executed. In addition, upon a clear showing of a significant threat to the public health, safety or the environment that requires application of later-adopted laws or rules, the Council may require compliance with such later-adopted laws or rules. ORS 469.401(2).

E. For a permit, license or other approval addressed in and governed by this site certificate, the certificate holder shall comply with applicable state and federal laws adopted in the future to the extent that such compliance is required under the respective state agency statutes and rules. ORS 469.401(2).

F. Subject to the conditions herein, this site certificate binds the State and all counties, cities and political subdivisions in this state as to the approval of the site and the construction, operation and retirement of the facility as to matters that are addressed in and governed by this site certificate. ORS 469.401(3).

G. Each affected state agency, county, city and political subdivision in Oregon with authority to issue a permit, license or other approval addressed in or governed by this site certificate shall, upon submission of the proper application and payment of the proper fees, but without hearings or other proceedings, issue such permit, license or other approval subject only to conditions set forth in this site certificate. ORS 469.401(3).

H. After issuance of this site certificate, each state agency or local government agency that issues a permit, license or other approval for the facility shall continue to exercise enforcement authority over such permit, license or other approval. ORS 469.401(3).

I. After issuance of this amended site certificate, the Council shall have continuing authority over the site and may inspect, or direct the Department to inspect, or request another state agency or local government to inspect, the site at any time in order to assure that the facility is being operated consistently with the terms and conditions of this site certificate. ORS 469.430.

III. DESCRIPTIONS

A. THE FACILITY

The energy facility is an ethanol plant capable of producing 35-44 million gallons per year (MMgy) of ethanol located on a 25-acre parcel in the Boardman Industrial Park, Port of Morrow, Morrow County, Oregon. Major plant components consist of buildings, storage tanks and bins. By means of an existing rail loop, corn will be delivered to the site. In the processing building, ground corn will be mixed with water and enzymes to make a mash, and the mash will be cooked in a series of retention tanks to break the complex sugars down into fermentable
sugars. The processing building will house steel storage tanks for aqueous ammonia, enzymes, sulfuric acid, sodium hydroxide, and urea.

In the fermentation building, yeast and additional enzymes will be added to the mash, producing a liquid containing 10 to 20% ethanol, by weight. The liquid will be piped to the distillation, drying and evaporation (DD&E) building where the solids (a by-product called distiller’s wet grain that would be suitable for animal feed) will be separated and transported to a wet cake building for storage and ultimate trucking to local dairy or cattle operations for use as feed. The liquid ethanol will be moved to ethanol storage tanks pending shipment to market by barge, rail or truck.

Additional plant components include grain storage bins, an administration building, a boiler building, a maintenance building, ethanol storage tanks, a diesel fuel storage tank, and a gasoline tank.

The facility is currently under construction pursuant to an exemption granted by the Council on May 19, 2006. Consequently, this order does not include certain conditions ordinarily requiring satisfaction by the certificate holder in advance of beginning construction of a proposed facility.

### B. RELATED OR SUPPORTING FACILITIES

The facility includes the following related or supporting facilities:

1. **Natural Gas Pipeline.** Natural gas for operation of the plant boilers will be provided by means of a 1,700-foot, 4-inch diameter carbon steel pipeline interconnecting with the existing Cascade Natural Gas system. The pipeline is installed underground along Columbia Lane on property owned by the Port of Morrow.

2. **Electric Power Supply Line.** Electricity for operation of the energy facility will be provided by means of a 13.5-kV, 1,700-foot power supply line interconnecting with the existing Umatilla Electric Cooperative system. The power supply line is mounted on 40-foot wood poles spaced at about 300 feet and located along Columbia Lane on property owned by the Port of Morrow.

3. **Ethanol Pipeline.** PEC proposes to transport some of the ethanol produced at the energy facility by barge from an existing barge-loading facility operated by Tidewater, Inc. In order to move the ethanol to the barge-loading facility, PEC proposes to install a 2,500-foot, 8-inch diameter welded steel pipeline from the energy facility to the barge-loading facility. After leaving the production plant, the pipeline would be installed underground at a depth of at least 3½ feet until it crosses the right of way for the existing Union Pacific rail line. It will cross the rail line by underground bore. North of the rail line, the pipeline will be placed above ground on footings in order to avoid a potential archeological site. Its entire corridor is located on property owned by the Port of Morrow, and would require
no new right-of-way. PEC would be responsible for construction of about 2,200 feet of the pipeline (up to the high water line of the Columbia River). Tidewater, Inc., would be responsible for obtaining necessary permits and constructing the remaining 300 feet of the pipeline for connection with the barge-loading facility.

4. **Corn Oil Extraction System.** The corn oil extraction system utilizes a multi-phase process to the DWGS process. The multi-phase process includes tanks (reactors, heated, flash and evaporative), a trim heater, centrifuges, piping and a jib crane which would be used to separate and heat the by-product produced during ethanol production for oil extraction. The extracted oil is piped to two heated storage tanks located within the ethanol storage area to age for a day before shipping while the remaining solids are processed in the pre-existing evaporators.

5. **Sugar Addition System and Change in ethanol feedstock to include, in addition to the previously approved corn feedstock, a blend of corn and granulated sugar.** The sugar addition system replaces 15 percent of the corn feedstock with granulated sugar. The sugar addition system includes a 100-ton stainless steel tank/bin, rotary feeder, screw conveyor, and dust collector which required an Air Contaminant Discharge Permit from the Oregon Department of Environmental Quality (DEQ). This permit was issued by DEQ in 2013.

Construction and operation of the sugar addition system was a result of a short-term Department of Agriculture initiative and that operation of the system concluded in 2013. The sugar addition system remains in place at the energy facility and could be used during future operations.

6. **CO2 Capture Infrastructure.** A third-party (Kodiak Carbonics) installed, owns and operates a carbon dioxide (CO2) processing plant within the existing energy facility site boundary, under sub-lease agreement with CEP. The new processing plant is currently operating, and includes new interconnecting components installed to transfer the CO2 rich gas stream from CEP’s existing CO2 scrubber to the CO2 processing plant. The interconnecting components deliver up to 250 tons per day of raw gas to the processing facility and are estimated to require up to $100,000 to disassemble and retire.

C. **LOCATION OF THE FACILITY**

The facility is located on a 25-acre parcel of land in Section 2, Township 4 North, Range 25 East, Morrow County, Oregon. This parcel comprises a portion of the Boardman Industrial Park owned and operated by the Port of Morrow.

IV. **SPECIAL FACILITY CONDITIONS**

The conditions listed in this section include conditions based on representations in the application for a site certificate and supporting record. The Council deems these representations
to be binding commitments made by the certificate holder. These conditions are required under
OAR 345-027-0020(10).

This section includes other specific facility conditions the Council finds necessary to
ensure compliance with siting standards of OAR Chapter 345, Divisions 22 and 24, and to
protect the public health and safety.

A. GENERAL STANDARD OF REVIEW, OAR 345-022-0000
[No conditions]

B. ORGANIZATIONAL EXPERTISE, OAR 345-022-0010

(IV.B.1) The certificate holder shall report promptly to the Department any change in its
corporate relationship with Pacific Ethanol, Inc. The certificate holder shall report
promptly to the Department any change in its access to the resources, expertise
and personnel of Pacific Ethanol, Inc., and Delta-T.

(IV.B.2) If the certificate holder chooses a third-party contractor to operate the facility, the
certificate holder shall submit to the Council the identity of the contractor so the
Council may review the qualifications and capability of the contractor to meet the
standards of OAR 345-0022-0010. If the Council finds that a new contractor
meets these standards, the Council shall not require an amendment to the site
certificate for the certificate holder to hire the contractor.

(IV.B.3) Any matter of non-compliance under the site certificate shall be the responsibility
of the certificate holder. Any notice of violation issued under the site certificate
shall be issued to the certificate holder. Any civil penalties assessed under the site
certificate shall be levied on the certificate holder.

(IV.B.4) The certificate holder shall contractually require the EPC contractor and all
independent contractors and subcontractors involved in the construction and
operation of the facility to comply with all applicable laws and regulations and
with the terms and conditions of the site certificate. Such contractual provision
shall not operate to relieve the certificate holder of responsibility under the site
certificate.

(IV.B.5) The certificate holder shall obtain, or shall ensure that its contractors obtain,
necessary state and local permits or approvals required for the construction,
operation and retirement of the facility.

(IV.B.6) Prior to construction of the PEC portion of the ethanol pipeline that will connect
CEP to the Tidewater ethanol pipeline, the certificate holder shall demonstrate to
the Energy Facility Siting Council (“Council”) that Tidewater, Inc., has obtained
all necessary permits and approvals for construction of the ethanol pipeline from
the Ordinary High Water (“OHW”) line of the Columbia River to its point of
attachment with the barge-loading facility.
Prior to commercial operation, the certificate holder shall provide the Council with documentation showing that DEQ has modified the Port of Morrow’s WPCF permit to include the wastewater discharge from the CEP.

C. RETIREMENT AND FINANCIAL ASSURANCE, OAR 345-022-0050

The certificate holder shall retire the facility if the certificate holder permanently ceases construction or operation of the facility. The certificate holder shall retire the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110, and prepared pursuant to Condition (IV.C.2).

Two years before closure of the energy facility, the certificate holder shall submit to the Department a proposed final retirement plan for the facility and site, pursuant to OAR 345-027-0110, including:

(a) A plan for retirement that provides for completion of retirement within two years after permanent cessation of operation of the energy facility and that protects the public health and safety and the environment;

(b) A description of actions the certificate holder proposes to take to restore the site to a useful, non-hazardous condition suitable for agricultural industrial use; and

(c) A detailed cost estimate, a comparison of that estimate with the dollar amount secured by a bond or letter of credit and any amount contained in a retirement fund, and a plan for assuring the availability of adequate funds for completion of retirement.

The certificate holder shall prevent the development of any conditions on the site that would preclude restoration of the site to a useful, non-hazardous condition to the extent that prevention of such site conditions is within the control of the certificate holder.

Within 30 days after execution of the first amended site certificate the effective date of the site certificate, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit in the amount of $8,085,000 (in Second-Fourth Quarter 2007-2016 dollars) naming the State of Oregon, acting by and through the Council, as beneficiary or payee.

(a) The certificate holder shall adjust the amount of the bond or letter of credit to present value annually, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services’ “Oregon Economic and Revenue Forecast,” or by any successor agency (“Index”). If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust Second-Fourth Quarter 2007-2016 dollars to present value.

(b) The form of bond or letter of credit shall be subject to prior approval by the Council.
(c) The issuer of the bond or letter of credit shall be subject to prior approval by the Council.

(d) The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition (VI.B.6).

(e) The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility. (Amendment 1, Scenario 1)

(V.I.C.5) If the certificate holder elects to use a bond to meet the requirements of Condition (IV.C.4), the certificate holder shall ensure that the surety is obligated to comply with the requirements of applicable statutes, Council rules and this site certificate when the surety exercises any legal or contractual right it may have to assume construction, operation or retirement of the energy facility. The certificate holder shall also ensure that the surety is obligated to notify the Council that it is exercising such rights and to obtain any Council approvals required by applicable statutes, Council rules and this site certificate before the surety commences any activity to complete construction or to operate or retire the energy facility.

(V.I.C.6) Not later than ten years after the date of commercial operation of the energy facility, and each ten years thereafter during the life of the energy facility, the certificate holder shall complete an independent Phase I Environmental Site Assessment of the energy facility site. Within 30 days after its completion, the certificate holder shall deliver the Phase I Environmental Site Assessment report to the Department.

(V.I.C.7) In the event that any Phase I Environmental Site Assessment identifies improper handling or storage of hazardous substances or improper record keeping procedures, the certificate holder shall correct such deficiencies within six months after completion of the corresponding Phase I Environmental Site Assessment. It shall promptly report its corrective actions to the Department. The Council shall determine whether the corrective actions are sufficient.

(V.I.C.8) The certificate holder shall report to the Department any release of hazardous substances, pursuant to DEQ regulations, within one working day after the discovery of such release. This obligation shall be in addition to any other reporting requirements applicable to such a release.

(V.I.C.9) If the certificate holder has not remedied a release consistent with applicable Oregon Department of Environmental Quality standards or if the certificate holder fails to correct deficiencies identified in the course of a Phase I Environmental Site Assessment within six months after the date of the release or the date of completion of the Phase I Environmental Site Assessment, the certificate holder shall submit to the Council for its approval an independently prepared estimate of the additional cost of remediation or correction within such six-month period.
(a) Upon approval of an estimate by the Council, the certificate holder shall increase the amount of its bond or letter of credit by the amount of the estimate.

(b) In no event, however, shall the certificate holder be relieved of its obligation to exercise all due diligence in remedying a release of hazardous substances or correcting deficiencies identified in the course of a Phase I Environmental Site Assessment.

(IV.C.10) All funds received by the certificate holder from the salvage of equipment and buildings shall be committed to the restoration of the energy facility site to the extent necessary to fund the approved site restoration and remediation.

(IV.C.11) The certificate holder shall pay the actual cost to restore the site to a useful, non-hazardous condition at the time of retirement, notwithstanding the Council’s approval in the site certificate of an estimated amount required to restore the site.

(IV.C.12) If the Council finds that the certificate holder has permanently ceased construction or operation of the facility without retiring the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110 and prepared pursuant to Condition (IV.C.2), the Council shall notify the certificate holder and request that the certificate holder submit a proposed final retirement plan to the Department within a reasonable time not to exceed 90 days.

(a) If the certificate holder does not submit a proposed final retirement plan by the specified date, the Council may direct the Department to prepare a proposed final retirement plan for the Council’s approval.

(b) Upon the Council’s approval of the final retirement plan, the Council may draw on the bond or letter of credit described in Condition (IV.C.4) to restore the site to a useful, non-hazardous condition according to the final retirement plan, in addition to any penalties the Council may impose under OAR Chapter 345, Division 29.

(c) If the amount of the bond or letter of credit is insufficient to pay the actual cost of retirement, the certificate holder shall pay any additional cost necessary to restore the site to a useful, non-hazardous condition.

(d) After completion of site restoration, the Council shall issue an order to terminate the site certificate if the Council finds that the facility has been retired according to the approved final retirement plan.

(IV.C.13) (1) The certificate holder shall maintain a bond or letter of credit in an amount of $295,000 (in 4th Quarter 2016 dollars) naming the State of Oregon, acting by and through the Council, as beneficiary or payee.

(a) The certificate holder shall adjust the amount of the bond or letter of credit to present value annually, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services’ “Oregon Economic and Revenue Forecast,” or by any successor agency (“Index”). If at any time the Index is no longer
published, the Council shall select a comparable calculation to adjust
Second Quarter 2007 dollars to present value.
(b) The form of bond or letter of credit shall be subject to prior approval by
the Council.
(c) The issuer of the bond or letter of credit shall be subject to prior approval
by the Council.
(d) The certificate holder shall describe the status of the bond or letter of
credit in the annual report submitted to the Council under Condition
(VI.B.6).
(e) The bond or letter of credit shall not be subject to revocation or reduction
before retirement of the facility.
(2) The certificate holder may not amend or terminate the agreement between the Port of
Morrow and the certificate holder without either (1) prior consent of the Council, or (2)
submission to the Department of a bond or letter of credit in the amount of $852,000 (in
4th Quarter 2016 dollars) and adjusted consistent with IV.C.13(1)(a-e).
(3) The certificate holder shall provide evidence to the Department on an annual basis,
through reporting under Condition IV.B.6, of active property coverage under its
commercial business insurance from high loss-catastrophic events, including but not
limited to, onsite fire or explosion.
(Amendment 1, Scenario 2)

D. LAND USE, OAR 345-022-0030
[No conditions]

E. STRUCTURAL STANDARD, OAR 345-022-0020
(IV.E.1) The certificate holder shall design, engineer and construct the facility to avoid
dangers to human safety presented by seismic hazards affecting the site that are
expected to result from all maximum probable seismic events. As used in this
condition, “seismic hazard” includes ground shaking, landslide, liquefaction,
lateral spreading, tsunami inundation, near field effects, hanging wall effects, fault
rupture, fault displacement, and subsidence.
(IV.E.2) The certificate holder shall notify the Department, the State Building Codes
Division and DOGAMI promptly if site investigations or trenching reveal that
conditions in the foundation rocks differ significantly from those described in the
application for a site certificate. After the Department receives the notice, the
Council may require the certificate holder to consult with the Department of
Geology and Mineral Industries and the Building Codes Division and to propose
mitigation actions.
(IV.E.3) The certificate holder shall notify the Department, the State Building Codes
Division and the Department of Geology and Mineral Industries promptly if shear
zones, artesian aquifers, deformations, or clastic dikes are found or suspected at or
in the vicinity of the site.
The certificate holder shall design, engineer and construct the facility to avoid dangers to human safety presented by non-seismic or aseismic hazards affecting the site. As used in this condition, “non-seismic or aseismic hazards” includes settlement, landslides, groundwater, flooding, and erosion.

F.  **Soil Protection, OAR 345-022-0022**

(IV.F.1) Throughout construction of the facility and post-construction restoration, the certificate holder shall use temporary erosion and sediment control measures, such as a bioswale system, sediment barrier fence, ditch checks, catch basin inlet protection, and construction site entrance and exit treatments.

(IV.F.2) Throughout construction of the facility and post-construction restoration, the certificate holder shall install permanent erosion control measures, as necessary.

(IV.F.3) Upon completion of construction of in an area, the certificate holder shall vegetate temporarily disturbed areas to limit soil exposure to wind and water erosion.

(IV.F.4) Before beginning operation of the facility, the certificate holder shall obtain a NPDES Storm Water Discharge General Permit #1200-Z (for industrial activities) from the Oregon Department of Environmental Quality.

(IV.F.5) Upon completion of retirement of the facility, the certificate holder shall vegetate temporarily disturbed areas to limit soil exposure to wind and water erosion.


G.  **Protected Areas, OAR 345-022-0040**

[No conditions]

H.  **Fish and Wildlife Habitat, OAR 345-022-0060**

(IV.H.1) After completion of construction of the facility, the certificate holder shall restore areas subject to temporary disturbance to pre-construction conditions using a seed mix approved by ODFW and the Morrow County Soil and Water Conservation District.

(IV.H.2) The certificate holder shall implement the habitat mitigation plan submitted on March 30, 2007 and shown as Attachment A to this Order.

(IV.H.3) During construction of the facility, the certificate holder shall implement the following measures:
(a) Design the facility components to be the minimum size needed for operations;
(b) Use best management practices to prevent loss of topsoil during construction; and
(c) Control noxious weeds in areas disturbed by construction activities.

I. **THREATENED AND ENDANGERED SPECIES, OAR 345-022-0070**

[No conditions]

J. **SCENIC RESOURCES, OAR 345-022-0080**

[No conditions]

K. **HISTORIC, CULTURAL AND ARCHAEOLOGICAL RESOURCES, OAR 345-022-0090**

(IV.K.1) Before beginning construction of the proposed related or supporting ethanol pipeline, the certificate holder shall conduct additional investigation to better define the vertical and horizontal extent of the archaeological resources in the vicinity of the proposed ethanol pipeline in consultation with the Oregon Historic Preservation Office (“SHPO”) and the Confederated Tribes of the Umatilla Indian Reservation. The investigation shall include protocols and procedures for protection of known cultural sites, including the identification of sites in the field and on project construction maps, and for accidental discovery of additional sites.

(IV.K.2) During construction of the facility, the certificate holder shall ensure that a qualified person instructs construction personnel in the identification of archaeological and cultural resources, and ensure that archaeological construction monitors are present to prevent accidental impacts to known cultural resources or to any newly discovered resources.

(IV.K.3) During construction of the facility, in the event any archaeological or cultural resources are discovered, the certificate holder shall cease all ground-disturbing activities in the immediate area until a qualified archaeologist can evaluate the significance of the find. If the archaeologist determines that the resources are significant, the certificate holder shall make recommendations to the Council for mitigation in consultation with the State Historic Preservation Office (“SHPO”), the Department, the Confederated Tribes of the Umatilla Indian Reservation, and other appropriate parties. Mitigation measures shall include avoidance or data recovery. The certificate holder shall not restart work in the affected area until it has demonstrated to the Department that it has complied with the archaeological permit requirements administered by SHPO.

(IV.K.4) The location of the ethanol pipeline will be moved as shown on Figure C-2 rev. 2, dated 2/15/07. The boundary between the certificate holder’s portion and Tidewater’s portion is as shown on this figure.

(IV.K.5) The pipeline may be constructed underground between the ethanol production plant and the existing loop track. The pipeline will cross the loop track by horizontal bore. On the north side of the existing loop track, the pipeline will be
placed above ground on footings designed substantially as shown in the Norwest
Engineering Drawing provided to the Oregon Department of Energy and dated
2/21/07.

(IV.K.6) The certificate holder shall ensure that a qualified archeological monitor is on site
during excavation of the trench and subsequent boring of the pipeline.

L. RECREATION, OAR 345-022-0100
[No conditions]

M. PUBLIC SERVICES, OAR 345-022-0110
[No conditions]

N. WASTE MINIMIZATION, OAR 345-022-0120
[No conditions]

V. OTHER APPLICABLE REGULATORY REQUIREMENTS

A. REQUIREMENTS UNDER COUNCIL JURISDICTION

1. NOISE CONTROL REGULATIONS, OAR 340-035-0035
[No conditions]

2. REMOVAL-FILL LAW
[No conditions]

3. PUBLIC HEALTH AND SAFETY
(V.A.1) The certificate holder shall consult with the Oregon Public Utility Commission
staff to ensure that its designs and specifications for the electrical transmission
line and natural gas pipeline are consistent with applicable codes and standards.

(V.A.2) With respect to the related or supporting natural gas pipeline, the certificate
holder shall design, construct and operate the pipeline in accordance with the
requirements of the U.S. Department of Transportation as set forth in Title 49,
Code of Federal Regulations, Part 192 and the certificate holder shall develop and
implement a program using the best available practical technology to monitor the
proposed pipeline to ensure protection of public health and safety.

VI. CONDITIONS REQUIRED OR RECOMMENDED BY COUNCIL RULES

This section lists conditions specifically required by OAR 345-027-0020 (Mandatory
Conditions in Site Certificates), OAR 345-027-0028 (Monitoring Conditions), and OAR Chapter
345, Division 26 (Construction and Operation Rules for Facilities). These conditions should be
read together with the specific facility conditions included in Sections IV and V to ensure
compliance with the siting standards of OAR Chapter 345, Divisions 22 and 24, and to protect
the public health and safety. The certificate holder shall comply with all site certificate conditions.

The Council recognizes that many specific tasks related to the design, construction, operation and retirement of the facility will be undertaken by the certificate holder’s agents or contractors. Nevertheless, the certificate holder is responsible for ensuring compliance with all provisions of the site certificate.

A. MANDATORY CONDITIONS IN SITE CERTIFICATES

(VI.A.1) The Council shall not change the conditions of the site certificate except as provided for in OAR 345, Division 27.

(VI.A.2) The certificate holder shall submit a legal description of the site to the Department of Energy within 90 days after beginning operation of the facility. The legal description required by this rule means a description of metes and bounds or a description of the site by reference to a map and geographic data that clearly and specifically identifies the outer boundaries that contain all parts of the facility.

(VI.A.3) The certificate holder shall design, construct, operate, and retire the facility:
(a) Substantially as described in the site certificate;
(b) In compliance with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances in effect at the time the site certificate is issued; and
(c) In compliance with all applicable permit requirements of other state agencies.

B. OTHER CONDITIONS BY RULE

(VI.B.1) With respect to the related or supporting natural gas pipeline, the certificate holder shall submit to the Department copies of all incident reports involving the pipeline required under 49 CFR §191.15.

(VI.B.2) Before beginning operation of the facility, the certificate holder shall submit to the Department a legal description of the permanent right-of-way where the applicant has built a pipeline or transmission line within an approved corridor. The site of the pipeline or transmission line subject to the site certificate is the area within the permanent right-of-way.

(VI.B.3) If the certificate holder becomes aware of a significant environmental change or impact attributable to the facility, the certificate holder shall, as soon as possible, submit a written report to the Department describing the impact on the facility and any affected site certificate conditions.
Within 30 days after the effective date of the site certificate, the certificate holder shall implement a plan that verifies compliance with all site certificate terms and conditions and applicable statutes and rules and shall submit a copy of the plan to the Department. The certificate holder shall document the compliance plan and maintain it for inspection by the Department or the Council.

Within 30 days after the effective date of the site certificate, and every six months thereafter during construction of the facility and related or supporting facilities, the certificate holder shall submit a semi-annual construction progress report to the Department. In each construction progress report, the certificate holder shall describe any significant changes to major milestones for construction. When the reporting date coincides, the certificate holder may include the construction progress report within the annual report described in Condition (VI.B.6) below.

By April 30 of each year after beginning construction, the certificate holder shall submit an annual report to the Department addressing the subjects listed in OAR 345-026-0080(2). The Council Secretary and the certificate holder may, by mutual agreement, change the reporting date.

To the extent that information required by OAR 345-026-0080(2) is contained in reports the certificate holder submits to other state, federal or local agencies, the certificate holder may submit excerpts from such other reports to satisfy this condition. The Council reserves the right to request full copies of such excerpted reports.

The certificate holder and the Department shall exchange copies of all correspondence or summaries of correspondence related to compliance with statutes, rules and local ordinances on which the Council determined compliance, except for material withheld from public disclosure under state or federal law or under Council rules. The certificate holder may submit abstracts of reports in place of full reports; however, the certificate holder shall provide full copies of abstracted reports and any summarized correspondence at the request of the Department.

The certificate holder shall notify the Department within 72 hours of any occurrence involving the facility if:

(a) There is an attempt by anyone to interfere with its safe operation;
(b) A natural event such as an earthquake, flood, tsunami or tornado, or a human-caused event such as a fire or explosion, affects or threatens to affect the public health and safety or the environment; or,
(c) There is any fatal injury at the facility.

VII. GENERAL CONDITIONS
(VII.1) The general arrangement of the Columbia Ethanol Project shall be substantially as shown in the ASC and as described in Request for Amendment 1.

(VII.2) The certificate holder shall ensure that related or supporting facilities are constructed in the corridors described in the ASC and in the manner described in the ASC.

(VII.3) Before any transfer of ownership of the facility or ownership of the site certificate holder, the certificate holder shall inform the Department of the proposed new owners. The requirements of OAR 345-027-0100 shall apply to any transfer of ownership that requires a transfer of the site certificate.

(VII.4) If any provision of this site certificate is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and conditions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the site certificate did not contain the particular provision held to be invalid. In the event of a conflict between the conditions contained in the site certificate and the Council’s order, the conditions contained in this site certificate shall control.

(VII.5) The laws of the State of Oregon shall govern this site certificate.

(VII.6) Any litigation or arbitration arising out of this agreement shall be conducted in an appropriate forum in Oregon.

IN WITNESS WHEREOF, this Site Certificate has been executed by the State of Oregon, acting by and through its Energy Facility Siting Council, and by Pacific Ethanol Columbia, LLC.

ENERGY FACILITY SITING COUNCIL

By: _________________________________  By: _________________________________
    David Ripma, Barry Beyeler, Chair
    Oregon Energy Facility Siting Council

PACIFIC ETHANOL COLUMBIA, LLC

Print: _________________________________

Date: _________________________________ Date: _________________________________
Attachment B: Department’s Request(s) for Additional Information and Certificate Holder Responses
Lyndon and Dave,

Based on the department’s initial review of CEP’s request for amendment (RFA), additional information is requested to support in drafting legally defensible findings for inclusion in the proposed order. Upon receipt of the requested information and further evaluation of the RFA, additional information may be requested in the future. As noted in the attached letter, please provide responses or red-line and clean version of the RFA within 30-days.

Let me know if you have questions or would like to discuss.

Thanks,
Sarah

Sarah T. Esterson
Energy Facility Siting Analyst
Oregon Department of Energy
625 Marion Street N.E.
Salem, OR 97301
P: (503) 373-7945
C: (503) 385-6128
Oregon.gov/energy

Leading Oregon to a safe, clean, and sustainable energy future.
June 27, 2016

Mr. Lyndon T. Jones, Plant Manager
Pacific Ethanol, Inc.
71335 Rail Loop Drive
PO Box 469
Boardman, Oregon 97818

Sent via email: ljoness@pacificethanol.com; vanthofd30@gmail.com; drichards@pacificethanol.com;
paulk@pacificethanol.com

RE: Columbia Ethanol Project’s Request for Amendment No. 1 (RFA1) – Additional Information Request

Dear Mr. Jones,

The Oregon Department of Energy (department) has completed initial review of Columbia Ethanol Project’s (CEP) request for amendment (RFA)-1 to the site certificate. The department identified additional information requests (AIR) included as Attachment 1, to support in drafting legally defensible findings for inclusion in the proposed order.

CEP may provide responses to these AIR’s in a separate document or as red-lined track changes to the RFA; however, if red-lined track changes are used, please also provide a “clean” version of the document(s) without track changes, in both electronic and hard-copy version within 30‐days of receipt of this request.

If you have any questions, please do not hesitate to call or email. If desired, I am available for an in‐person meeting or conference call to discuss the information requests in detail.

Sincerely,

Sarah Esterson
Energy Facility Siting Analyst
Sarah.esterson@state.or.us
(503) 373-7945

CC (via e‐mail): Todd Cornett, Oregon Department of Energy
Virginia Gustafson, Oregon Department of Energy
Renee France, Oregon Department of Justice
Duane Kilsdonk, Oregon Department of Energy
Columbia Ethanol Project Request for Amendment (RFA) No. 1 - Additional Information Request (AIR)

Issued June 27, 2016

### Certificate Holder Information

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<tr>
<th>AIR Number</th>
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<tbody>
<tr>
<td>AIR-1</td>
<td></td>
<td>Please provide proof of registration to do business in Oregon.</td>
<td>Amendment requests (and site certificate applications) from a limited liability company not registered in Oregon must provide proof of registration to do business in Oregon. The amendment request may incorporate by reference information previously submitted to the department or already included in the administrative record for CEP, the reference must be specific to a section and/or page number of a previously-submitted document. ASC Exhibit A, dated September 12, 2006, includes a cover page for Appendix A-2 Authorization for Submitting the Application; however Appendix A-2 does not appear to have been included in the original ASC, nor was it provided in this amendment request. Rule: OAR 345-021-0010(1)(a)(H)(iv)</td>
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### Project Description

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<tr>
<td>AIR-2</td>
<td></td>
<td>Please provide a description of the foam building, fire pump house, ammonia containment facility, and flare.</td>
<td>A foam building, fire pump house, ammonia containment facility and flare system are identified on the updated site map but are not described in the request for amendment. These facilities represent chemical and fuel storage and fire prevention systems for the “energy facility.” Please provide a description of these facilities, in accordance with OAR 345-021-0010(1)(b)(A)(iv) and (v) for inclusion in the amended site certificate. Rule: OAR 345-021-0010(1)(b)(A)(iv) and (v)</td>
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## Project Description

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<td>AIR-3</td>
<td></td>
<td>Please identify and explain any changes in the request for amendment compared to ASC Exhibit B related to the facility description.</td>
<td>The request for amendment includes a description of the Processing Building with a 25,000-gallon aqueous ammonia tank. The Processing Building as described in ASC Exhibit B includes a 12,000-gallon aqueous ammonia tank. Please provide an accurate description of existing facilities or equipment used to store chemicals for inclusion in the amended site certificate. &lt;br&gt;&lt;br&gt;&lt;br&gt;<strong>Rule:</strong> OAR 345-021-0010(1)(b)(A)(iv)</td>
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<td>AIR-4</td>
<td></td>
<td>Please verify and correct the reactor tank capacities provided for the corn oil extraction system.</td>
<td>The request for amendment includes a description of equipment associated with the corn oil extraction system. The 10,000-gallon capacity for each of two reactor tanks is inconsistent with the 14,340-gallon capacity provided by the facility on January 22, 2016. Please verify and correct the reactor tank capacities. &lt;br&gt;&lt;br&gt;&lt;br&gt;<strong>Rule:</strong> OAR 345-021-0010(1)(b)(A)(iv)</td>
</tr>
<tr>
<td>AIR-5</td>
<td></td>
<td>Please add the 5,560-gallon evaporative flash tank to the corn oil extraction equipment list and a process description.</td>
<td>The request for amendment includes, as an attachment, the air contaminant discharge permit (ACDP) issued by the Oregon Department of Air Quality. The ACDP includes an evaporative flash tank; this equipment was not included in the equipment description for the corn oil extraction system and should be included for consistency and accurate evaluation of facility components. &lt;br&gt;&lt;br&gt;&lt;br&gt;<strong>Rule:</strong> OAR 345-021-0010(1)(b)(A)(iv)</td>
</tr>
<tr>
<td>AIR-6</td>
<td></td>
<td>Please provide a construction schedule and construction cost estimate for all components and facility modifications included in the request for amendment.</td>
<td>The request for amendment does not provide a construction schedule for any of the facility modifications requested for inclusion in the amended site certificate. Please provide the start and completion date for each facility modification and an estimated or actual cost associated with the construction of each facility modification. &lt;br&gt;&lt;br&gt;&lt;br&gt;<strong>Rule:</strong> OAR 345-021-0010(1)(b)(F)</td>
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## Solid Waste/Wastewater

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| AIR-7      |             | Please explain why a 1200-C and/or 1200-Z permit was not required for management of construction related stormwater. | The request for amendment describes water and concrete use during construction. However, it does not explain whether a 1200-C or 1200-Z stormwater permit was needed during construction of the facility modifications, nor does it explain how stormwater was managed during construction. Please explain the permits and/or measures implemented during construction of all facility modifications included in the request for amendment to manage stormwater.  
*Rule: OAR 345-021-0010(1)(v)(E)* |
| AIR-8      |             | Please provide estimated quantities of materials used during construction of the facility modifications and in current operation of the facility. | The request for amendment provides cubic yards of concrete used during construction of the corn oil extraction system and sugar addition system, but in several instances relies upon percentages to describe material usage. In addition, because there are several changes in equipment dimensions and structures/facilities used to store chemicals and provide fire prevention identified in the updated site map, but not described in the request for amendment, please provide an inventory of both hazardous and nonhazardous materials used during construction of the proposed facility modification and operation of the existing facility (with modifications) (including estimated quantities versus percentages).  
*Rule: OAR 345-021-0010(1)(v)(D)* |
| AIR-9      |             | Please provide a description of hazardous and non-hazardous waste management during construction and operation of the facility modifications. | The request for amendment explains that the facility modifications would not have significant adverse impacts related to the Waste Minimization standard. Please explain the plans and measures implemented to ensure spill prevention and containment during construction and operation of the facility modifications. Please provide a copy of any plans used for waste management and minimization, and spill prevention and control, if applicable.  
*Rule: OAR 345-021-0010(1)(v)(D)-(F)* |
### Water Use

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| AIR-10     |             | Please provide the total estimated quantity of water needed and description of water used for construction and operation of the facility modifications. | The request for amendment relies upon percentages to explain the water used during construction and operation of the facility modifications. Please provide actual quantities and a description of water use (i.e. compaction, concrete foundations, dust control, etc.) during construction and operation of facility modifications.  
**Rule:** OAR 345-021-0010(1)(o)(B) |

### Land Use

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| AIR-11     |             | Please identify all applicable substantive criteria and land use approvals from Morrow County that apply to the facility modifications | The request for amendment provides evidence that building permits were obtained for the corn oil extraction system. However, please identify all applicable Morrow County substantive criteria for all required land use approvals for each facility modification and describe the date the building permit applications were submitted and date each permit was issued.  
**Rule:** OAR 345-021-0010(1)(k)(B)(ii) and (C)(ii) |
### Historic and Cultural Resources

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| AIR-12     |             | Please describe avoidance and protection measures for known resources within or in close proximity to the site boundary. | Please provide an evaluation of potential impacts to archeological site 35MW13 from construction and operation of the facility modifications.  
**Rule:** OAR 345-021-0010(1)(s)(D) |

### Site Restoration

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| AIR-13     |             | Please provide a cost estimate, in current dollars, of the total cost of restoring the site to a useful, non-hazardous condition, including calculations and assumptions, for all facility modifications included in the request for amendment. | OAR 345-021-0010(1)(w) requires a “discussion and justification of the methods and assumptions used to estimate site restoration costs.” In 2006-2007 EFSC determined that it will no longer accept inclusion of material scrap and salvage value in the restoration cost estimate for future energy facilities or new components of previously approved energy facilities. Please exclude the value of scrap and salvage material in the site restoration cost estimate. Please include a cost estimate for restoring the site to slab grade with and without removal of aboveground infrastructure.  
**Rule:** OAR 345-021-0010(1)(w)(D) and OAR 345-022-0050 |
| AIR-14     |             | Please provide language of the legally binding agreement, and any other supporting evidence, to support an alternative “form” of bond or letter of credit. | The request for amendment describes two options related to an alternative form to a bond or letter of credit to cover the potential cost of site restoration. In order for the department to evaluate whether an alternative to a bond or letter of credit would be sufficient to meet the Retirement and Financial Assurance standard, the certificate holder must submit either in draft or authorized form the agreement along with any other existing lease agreements or other legal contracts establishing Port of Morrow’s financial liability for CEP.  
**Rule:** OAR 345-022-0050 |
### Site Restoration

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<td>AIR-15</td>
<td></td>
<td>Please provide supporting evidence from Port of Morrow related to aboveground infrastructure following facility retirement.</td>
<td>The request for amendment states that, “The Port now is of the position that it would prefer PEC to leave any and all above-ground infrastructure in place upon retirement of the Facility.” However, no evidence or reference to actual communication was provided to support this claim. Please provide supporting evidence from Port of Morrow establishing, as the land owner, their position on site restoration following retirement of CEP and confirming whether Port of Morrow would allow or agree to allow aboveground structures to remain in place.</td>
</tr>
<tr>
<td>AIR-16</td>
<td></td>
<td>Please provide the calculations and assumptions associated with the request to modify Condition IV.C.4 from $800 to $250k.</td>
<td>The request for amendment requests the Council to consider modifying the retirement bond amount established in Condition IV.C.4 from $800 to $250k. However, the assumptions, calculations and basis for this request are not clearly described, if at all. Please explain, based on the site restoration cost estimate excluding any scrap value, the basis for reducing the bond amount.</td>
</tr>
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Rule: OAR 345-022-0050
Hi Sarah,

I just want to start off by saying that your patience with our response has been very much appreciated, I was not involved with this submittal in my previous position so I have had a lot to catchup on.

Attached is our response for the Additional Information Request (AIR) received June 27th, 2016 for the Columbia Ethanol Project (CEP)

Attached is an outline of our response, as well as the business registry information needed for AIR-1, and the Port of Morrow opinion letter mentioned in AIR-15.

If there is anything missing, a preferred format that was not met, a different delivery system, or anything else you find unsatisfactory please let me know.

I look forward to working with you more in finalizing this amendment,

Thank you,

Daniel Koch
Plant Manager
Pacific Ethanol Columbia, LLC | 71335 Rail Loop Dr., PO Box 469, Boardman, OR 97818
Office: 541.945.4954 | Mobile: 209.542.0617 | dkoch@pacificethanol.com
AIR-1: Attached is the current proof of registration in good standing with the Oregon Secretary of State Office for Pacific Ethanol Columbia, LLC. It shows the registration status is active.

AIR-2: The fire pump house and foam building comprise part of the fire suppression system at the site and were installed with the original facility. The pump house, a brick building approximately 30’ x 15’, contains a diesel fueled fire pump used in the event of a fire system activation. The fire pump is 227 HP and capable of dispensing 2,500 gpm. The foam building, a metal sided structure approximately 12’x26’, contains a 1,900 gallon tank containing AFFF fire suppressant which is mixed into the fire system in the event of a fire. Both buildings contain piping and equipment associated with the operation of the facility fire suppression system. The ammonia containment is a cement wall barrier which surrounds the ammonia and sulfuric acid tanks, with a partition between to prevent mixing. It is meant to contain any failure of the vessels. The flare system is comprised of a 60 gallon metal knockout pot, used to condense the vapors. The vapors are fed into a natural gas stream that combine to feed into a flare unit that is used during ethanol loading to burn off any hazardous vapors created during the loading process. All of these structures were installed as part of the original construction.

AIR-3: A 25,000 gallon aqueous ammonia tank was installed as part of the original construction. (150” diameter by 27’ 3” height). That was not consistent with the original description of the proposed facility in Exhibit B of the site certificate application, which specified a 12,000 gallon aqueous ammonia tank. The Site Certificate should be amended to reflect that the tank is 25,000 gallons and not 12,000 gallons. The other tanks described in the original application and site certificate were installed as described.

AIR-4: The reactor tanks for the corn oil extraction system are in fact two 14,340 gallon tanks as specified on the drawings and the information provided in January. The Request for Amendment incorrectly stated there were two 10,000 gallon tanks.

AIR-5: The evaporative flash tank was an addition to the existing evaporator system and was installed at the same time as the corn oil extraction system. The Site Certificate description should be amended to state: “An additional 5,560 gallon evaporative flash tank was installed at the time of the corn oil extraction system to receive product from the beer column on its way to the whole stillage and flash off the excess heat that is then supplied to the second effect evaporator.”

AIR-6: Construction Schedule for Additional Components:
Sugar Addition System: October 10th, 2013 – December 1st, 2013; cost of ~ $320,000
CO2 System: September 10th, 2014 – September 20th, 2014 (CEP portion described in the amendment application only); as noted, almost all construction was completed by Kodiak, in-house construction costs were ~ $50,000
Corn Oil Extraction System: February 27th, 2015 – October 1st, 2015 (The system originally started July 17th, 2015, but modifications took place until the end date); cost of $3 million

AIR-7: Storm water – The Facility secured a Permit 1200-Z for storm water discharge effective July 1st, 2007, prior to startup. The Permit 1200-Z remained in place until December 2014 when it was cancelled due to lack of need at the suggestion of the DEQ. It was determined there was not enough rainfall at the Facility to justify continuing the permit. The Facility receives on average only 8 inches of rainfall a year. A bioswale system was installed at the Facility and was designed and remains maintained to capture any storm water runoff from the site for up to a 100-year 24-hour rain event. With this in place, the permit was closed as no actual run-off was occurring on-site. Ground surfaces at the site consist of paved surfaces and buildings, and unpaved surfaces where either rocks are placed or natural vegetation encouraged to grow. As a good housekeeping practice, all raw materials are stored in covered locations. Prior to the additional construction, DEQ determined that no stormwater permit was necessary for either construction or ongoing operation of the Facility. During the additional construction, efforts were taken to minimize any drainage issues and all construction waste material, including concrete wash-water was collected in a central location and disposed of.

AIR-8: As described in the amendment application, no hazardous materials were used in construction/installation of the additional systems (sugar, corn oil and CO2). Nor did the changes result in any increase in hazardous materials stored on site. Other than very minor amounts of steel used as supports for additional tanks under the additions, no additional steel was used. The additional concrete used for pads is outlined in AIR-10 and, as described in the amendment application, was minimal compared to the concrete used in the original construction.

AIR-9: Stormwater Best Management Practices (BMP’s), as well as the facility integrated contingency plan, and emergency response plan, were in place during the additional construction. They were the same BMP’s and plans in place under the original construction. For instance, BMP’s were in place for controlling erosion during construction. Dig material was moved to a separate area on-site and allowed to develop into natural vegetation. Construction material, including concrete wash-water was collected in a central location and disposed of appropriately by the construction company.

AIR-10: There are no records of actual water use during the additional construction but we estimate the following amounts of water were used during the additional construction:

Sugar addition system: 1,680 gallons (based on 24 cubic yards of concrete)
CO2 system (CEP portion only): 1,260 gallons (based on 18 cubic yards of concrete)
Corn oil extraction system: 27,370 gallons (based on 391 cubic yards of concrete)

For ongoing operations:
Sugar addition system: No additional water
CO2 system (CEP portion only): No additional water
Corn oil extraction system: 35,000 gallons per day

AIR-11: Please see the comment letter from Morrow County which attached all building permits for the additional construction and confirmed that all the additional construction was an allowed use under the Morrow County Code. There were no land use criteria that applied to the additional construction.

AIR-12: All new modifications took place within the “inner-ring” of the plant in very close proximity to existing equipment and within the existing concrete footprint of the Facility. No land was disturbed outside of the existing concrete footprint of the Facility during the additions, so no new archeological inspections were needed.

AIR-13/16: Assuming that all above ground infrastructure at the time of closure is required to be removed, as provided under the Site Certificate, the additional cost of removing the corn oil, sugar addition, and CO2 components would be $50,000. That estimate excludes any scrap value.1 Accordingly, the new estimate for removal of all above ground improvements (original and additional combined) is approximately $950,000 (current bonded amount plus $50,000).

However, if EFSC should agree with the proposal presented in our amendment application, the new bonding amount for the Facility (original and additional combined) would be reduced to $313,000 (rounded to nearest $1000). That amount is based on the itemized list of bonding costs in the Final Order at Table 1, Page 15 (copied below). It would eliminate the costs for (1) removal of buildings; (2) removal of tanks and equipment; (3) general costs; and (4) future developments contingency. It would continue to include the costs for (1) utility disconnects; (2) preliminary work; (3) performance bond; (4) administrative and project management costs; and (5) hazardous materials assessment, testing and cleanup (as itemized in Table 1 below).

1 The Parsons Group made the original cost of removal estimates with the original application. They did not respond in time for this submittal concerning the new additions. Assuming a similar cost of construction versus cost to dismantle ratio as was applied to the plant on a whole, however, and the fact that these new system would not be dismantled independently so there would be synergies with the overall deconstruction, the estimated additional cost would be $50,000. The additional tankage and concrete work is minimal in comparison to the larger facility.
AIR-14: Based on conversations with EFSC staff and DOJ counsel, Pacific Ethanol understands that the minimum terms required for an agreement between the Port and Pacific Ethanol will need to be established with input from EFSC. Accordingly, a draft agreement is not yet prepared but will be in the coming month provided EFSC staff should agree with presenting the modified retirement/bonding concept to the EFSC.

AIR-15: Please see the attached letter from the Port of Morrow confirming they now prefer that above ground structures remain in place and that they agree to take ownership and sole liability for any remaining improvements after closure of the Facility.

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**Entity Name**: PACIFIC ETHANOL COLUMBIA, LLC

**Foreign Name**

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**Please click [here](#) for general information about registered agents and service of process.**

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**CSZ**: SALEM OR 97301 | UNITED STATES OF AMERICA |

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Please read before ordering Copies.

## Summary History

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August 12, 2016

Dear Energy Facility Siting Council;

This letter is to confirm that the Port has agreed in principle to take over ownership and exclusive legal liability for the improvements made by Pacific Ethanol at its ethanol facility site leased from the Port at the Port of Morrow once the ethanol facility use is terminated under its Site Certificate with the Oregon Energy Facility Siting Council (EFSC). Such transfer would apply to any improvements that Pacific Ethanol should choose to leave at the site and not remove for its own use elsewhere. It would not apply to any hazardous materials, such as oils, paints and chemicals that are located at the site at the time of retirement. Pacific Ethanol will be obligated to remove those hazardous materials prior to transfer of ownership of any remaining improvements and would continue to bond for the potential costs of such hazardous materials remediation as it has proposed in its amendment application.

The Port and Pacific Ethanol will develop a formal agreement to effectuate this should EFSC approve the concept and agree to reduce Pacific Ethanol’s retirement bonding requirement as proposed by Pacific Ethanol in its amendment application. The Port and Pacific Ethanol agree that any improvements left at the site would continue to provide value after termination of the facility operations and that the site can be restored to a useful and non-hazardous condition should the improvements be left in place.

The Port further agrees that it will waive any potential right to file a legal action or make any public statement against the State of Oregon or EFSC, asserting that the State of Oregon or EFSC have any ongoing legal obligation to remove any of the improvements once the Port takes over ownership of the improvements. Such waiver would be provided for in the effectuating agreement among the parties and can include the State of Oregon/EFSC as a party if that should be desired.

Sincerely,

Gary Neal,
General Manager
Thanks. Talk then. Also, attached is a rough first draft of possible agreement between Port and PEC that is consistent with the letter already submitted. It has not gone through legal review by either party so is just for conversation. Best,

Dave

On Tue, Aug 16, 2016 at 2:34 PM, ESTERSON Sarah * ODOE <Sarah.Esterson@oregon.gov> wrote:

Hi all,

I apologize if you have received multiple calendar updates for our call – the call is scheduled for 3:30 based on availability.

Thanks,
Sarah

Sarah T. Esterson
Energy Facility Siting Analyst
Oregon Department of Energy
625 Marion Street N.E.
Salem, OR 97301
P: (503) 373-7945
C: (503) 385-6128
Oregon.gov/energy

Leading Oregon to a safe, clean, and sustainable energy future.
RETIREMENT AGREEMENT

This RETIREMENT AGREEMENT (the "Agreement") is made and entered into effective as of this day, [Date] (the "Effective Date"), by Pacific Ethanol, Inc. ("PEI"), a California registered company, and the Port of Morrow ("Port"). PEI and Port are each referred to as a "Party" and collectively as the "Parties".

RECITALS

WHEREAS, PEI leases property from Port to operate an ethanol production facility in the industrial park at the Port of Morrow ("Site");

WHEREAS, PEI holds a Site Certificate from the Oregon Energy Facility Siting Council ("EFSC") that requires that PEI must post a bond to cover the cost of removing certain above ground improvements from the Site upon termination of facility operations and further a condition that PEI remove all specified improvements upon termination of facility operations (the reference provisions in the Site Certificate are attached as Exhibit A);

WHEREAS, PEI and Port agree that any above ground improvements ("Improvements") would continue to provide value after termination of the facility operations and that the Site can be restored to a useful and non-hazardous condition should the Improvements be left in place;

WHEREAS, PEI and Port further agree that they would prefer any Improvements not chosen to be removed by PEI to remain at the Site and that Port will take over legal ownership and liability for such Improvements upon termination of facility operations;

AGREEMENT

NOW, THEREFORE, for good and valuable consideration, the receipt, adequacy, and sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, agree as follows:

1. Transfer of Ownership Upon Termination of Facility Operations. The Parties agree that upon PEI providing 60 day notice to Port that PEI will terminate facility operations, PEI and Port will cooperate in transfer of ownership from PEI to Port, at no cost, of all Improvements at the Site that PEI does not intent to remove. A depiction of all Improvements at the Site are shown at Exhibit B.

2. Acceptance of Liability for Improvements. Port agrees to assume all legal liability for all remaining Improvements upon transfer of ownership from PEI to Port.

3. Waiver of Any Claim Against the State of Oregon or EFSC. The Parties agree that neither Party may file a legal action or make any public statement asserting that the State of Oregon or EFSC have any legal obligation to remove any of the Improvements.


   Governing Law. This Agreement and the rights and obligations of the Parties are governed by and interpreted in accordance with the laws of the State of Oregon (without regard to principles of conflicts of law).

   Arbitration. Any controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled by arbitration administered by the American Arbitration Association. The number of arbitrators shall be one. The place of arbitration shall be Portland, Oregon.
shall apply. Judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction thereof.

Authority. Each Party warrants that its signatory to this Agreement has any and all legal authority to bind the signatory’s Party to this Agreement.

Counterparts. This Agreement may be executed in two or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument. Delivery of an executed signature page to this Agreement by facsimile transmission shall be as effective as delivery of a manually signed counterpart hereof.

Parties in Interest. Each and every covenant, term, provision, and agreement is binding on and inures to the benefit of the Parties and their heirs, successors, assigns, and legal representatives.

Entire Agreement. This Agreement constitutes the entire understanding and agreement between the Parties with respect to the subject matter of this Agreement. There are no agreements, understandings, restrictions, representations, or warranties between the Parties other than those in this Agreement or referred to or provided for in this Agreement.

Further Effect. The Parties agree to execute other documents reasonably necessary to further effect and evidence the terms of this Agreement, as long as the terms and provisions of the other documents are fully consistent with the terms of this Agreement.

Severability. If any term or provision of this Agreement is held to be void or unenforceable, that term or provision will be severed from this Agreement, the balance of the Agreement will survive, and the balance of this Agreement will be reasonably construed to carry out the intent of the Parties as evidenced by the terms of this Agreement.

Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective permitted successors, legal representatives and assigns.

Notices. All notices required to be given by this Agreement will be in writing and will be effective when actually delivered or, if mailed, when deposited as certified mail, postage prepaid, directed to the address for the other Party.

(Signatures follow)
IN WITNESS WHEREOF the Undersigned have executed this Agreement as of the date and year first above written.

Pacific Ethanol, Inc.

By: 
Its: 

Port of Morrow

By: 
Its: 
Sarah, attached is the letter from the Port of Morrow confirming they support taking over the remaining infrastructure (and liability) once the facility is shut down. Thought it might be useful for you and Renee to see prior to our call tomorrow. Best,

Dave

Good morning David,

Attached is the letter that Gary asked me to send to you, have a great day.
PO Box 200
Boardman, OR 97818
Phone (541) 481-7678
FAX (541) 481-2679

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

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August 12, 2016

Dear Energy Facility Siting Council;

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The Port further agrees that it will waive any potential right to file a legal action or make any public statement against the State of Oregon or EFSC, asserting that the State of Oregon or EFSC have any ongoing legal obligation to remove any of the improvements once the Port takes over ownership of the improvements. Such waiver would be provided for in the effectuating agreement among the parties and can include the State of Oregon/EFSC as a party if that should be desired.

Sincerely,

Gary Neal,
General Manager
Good afternoon Dan,

Per our discussion on November 18, 2016, attached is a letter outlining the additional information requested to support the Department’s review of CEP’s site certificate amendment request, specifically related to the decommissioning cost estimate received on October 26, 2016.

We request for receipt of the information by December 16, 2016. However, please let me know by Dec 2 if additional time is needed.

Thanks,
Sarah

Sarah T. Esterson
Energy Facility Siting Analyst
Oregon Department of Energy
625 Marion Street N.E.
Salem, OR 97301
P:(503) 373-7945
C: (503) 385-6128
Oregon.gov/energy

Leading Oregon to a safe, clean, and sustainable energy future.

---

Hi Sarah,

I know when we had last talked you had stated that you were going to send a list of questions regarding the contractor’s background, assumptions, etc.

I just wanted to check in because I never saw it, I’m not sure if maybe it got send to spam, but I know you were worried about time, so I didn’t want you thinking I had received it if I haven’t.

Thank you,
Daniel Koch  
Office: 541.945.4954 | Mobile: 209.542.0617

**From:** ESTERSON Sarah * ODOE [mailto:Sarah.Esterson@oregon.gov]  
**Sent:** Tuesday, November 15, 2016 3:31 PM  
**To:** Daniel Koch <dkoch@pacificethanol.com>; vanthofd30@gmail.com; David Richards <drichards@pacificethanol.com>; Paul Koehler <paulk@pacificethanol.com>  
**Cc:** FRANCE Renee M <Renee.M.FRANCE@state.or.us>; WOODS Maxwell * ODOE <Maxwell.Woods@oregon.gov>; CORNETT Todd * ODOE <Todd.Cornett@oregon.gov>  
**Subject:** CEP AMD1 - ODOE Notification of Anticipated Date of Issuance for Proposed Order

Good afternoon Dan and Dave,

The Oregon Department of Energy received Pacific Ethanol, Inc’s additional information related to the retirement cost estimate for the facility, as amended. Based on receipt of this information in October 2016, the attached letter is provided as notice of the anticipated date of issuance for the proposed order on or before January 24, 2017.

Let me know if there are questions on process or schedule.

Thanks,
Sarah

---

**Sarah T. Esterson**  
Energy Facility Siting Analyst  
Oregon Department of Energy  
625 Marion Street N.E.  
Salem, OR 97301  
P:(503) 373-7945  
C: (503) 385-6128  
Oregon.gov/energy

*Leading Oregon to a safe, clean, and sustainable energy future.*
November 29, 2016

Mr. Daniel Koch, Plant Manager
Pacific Ethanol, Inc.
71335 Rail Loop Drive
PO Box 469
Boardman, Oregon 97818

Sent via email: dkoch@pacificethanol.com; vanthofd30@gmail.com; drichards@pacificethanol.com; paulk@pacificethanol.com

RE: Information Request related to the Columbia Ethanol Project Request for Amendment #1
Decommissioning Cost Estimate

Dear Mr. Koch,

The Oregon Department of Energy (Department) has reviewed the site decommissioning cost estimate for the facility modifications, proposed in Request for Amendment (RFA)-1, received on October 26, 2016. In order for the Department to make findings or recommend conditions in the proposed order related to the certificate holder’s ability to satisfy the requirements of the Energy Facility Siting Council’s Retirement and Financial Assurance Standard (OAR 345-022-0050), the following information is requested:

1. Describe the specific actions and tasks necessary to restore the site to a useful, non-hazardous condition. Please provide the requested description of actions and tasks for: 1) removal of the facility to slab-grade and 2) removal of hazardous materials from facility plant equipment. [OAR 345-021-0010(I)(w)(B)]

2. Describe and justify the methods and assumptions used to develop the site decommissioning cost estimate. [OAR 345-021-0010(I)(w)(D)]

3. Provide a description of the relevant experience and qualifications of the third-party (FCM Group) in preparing the decommissioning cost estimates for ethanol facilities and of other similar types of facilities. [OAR 345-021-0010(I)(w)(D)]

4. Provide a description of the relevant experience of the third-party (FCM Group) in decommissioning ethanol facilities or other similar types of facilities. [OAR 345-021-0010(I)(w)(D)]
5. Provide an evaluation of compliance with existing site certificate conditions (e.g. IV.C.1 through IV.C.12, as applicable) and explain how continued compliance could further ensure the certificate holder’s ability to restore the site to a useful, non-hazardous condition. [OAR 345-022-0050(2)]

The Department requests for the above information be provided in electronic version by December 16, 2016. Please notify the Department by December 2, 2016 if additional time is needed.

If you have any questions, please do not hesitate to contact me directly.

Sincerely,

Sarah Esterson, Siting Analyst
Oregon Department of Energy
sarah.esterson@oregon.gov
(503) 373-7945

cc via e-mail distribution:
Todd Cornett, Oregon Department of Energy
Maxwell Wood, Oregon Department of Energy
Hello Ms. Esterson,

Please see the attached information request response as requested.

If there are any questions or any items you do not feel were sufficiently addressed please let me know.

I apologize for not delivering this prior to end of business day on the 20th, we had several facility logistics issues that needed to be addressed due to the recent weather. I hope that this finds you with sufficient time to allow time for review.

Thank you again for your help on the amendment process.

Daniel Koch
Plant Manager
Pacific Ethanol Columbia, LLC | 71335 Rail Loop Dr., PO Box 469, Boardman, OR 97818
Office: 541.945.4954 | Mobile: 209.542.0617 | dkoch@pacificethanol.com
January 20th, 2017

Sarah T. Esterson  
Energy Facility Siting Analyst  
Oregon Department of Energy  
625 Marion Street N.E.  
Salem, OR 97301

Subject: Information Request Related to the Columbia Ethanol Project Request for Amendment #1 - Decommissioning Cost Estimate

Dear Ms. Esterson,

Pacific Ethanol Columbia, LLC known to the Oregon Department of Energy (DoE) as the Columbia Ethanol Project (CEP) is submitting this response in regards to an information request for decommissioning cost estimates for the facility. A cost estimate was previously submitted and is attached as Appendix B to this submittal for quick comparison to the responses contained. As part of an amendment package to update the facility’s information including some new processes that were installed, the DoE determined that the previous decommissioning cost estimate was dated and should be updated as part of the process.

Attached to this letter, as Appendix A is the response to the 5 questions posed by the DoE. Also attached in Appendix C, is a vendor quote received as part of the hazardous clean-up cost estimates, more information regarding the actions of this cleanup is contained in the response.

If there are any sections that do not fully satisfy the request of the DoE, or if further elaboration is needed on any item please do not hesitate to reach out to me so that it can be addressed quickly. My office number is 541-945-4954 and my e-mail is dkoch@pacificethanol.com. Otherwise, I look forward to finalizing this amendment request.

Sincerely,

Daniel Koch  
Plant Manager  
Pacific Ethanol Columbia, LLC, (Columbia Ethanol Project)

Appendices:  
A - Response to questions proposed in information request  
B - Original Prepared FCM Cost Estimate  
C – CCS Supplied T3 (Hazmat Cleanup) Estimate
Appendix A

Response to questions proposed in information request
As a start to this explanation, a brief history of the events leading up to this estimate is given. Columbia Ethanol Project (CEP) personnel originally reached out to Parsons Corp., since it was determined that they had been involved with the original cost estimate for decommissioning given that they oversaw the construction of the facility. Specifically, the Seattle office was contacted, being the closest to the facility and their being insufficient contact information to contact the exact person who had done the estimating in 2007. After several weeks of lack of response or being told that we had reached the wrong individual, Pacific Ethanol’s Engineering Dept. was consulted for assistance in finding a secondary group to perform the estimate. After discussion, it was determined that the FCM Group, specifically, Terry Freeman would be the next best alternative that they felt already had enough ethanol exposure to avoid a long process of learning the facility. As will be discussed in response to the questions, Terry Freeman, was the Construction Manager for the CEP sister facility in Stockton, CA.

Multiple discussions regarding exactly what the DoE was requiring for the decommissioning cost estimate were had to outline what should and should not be included in the estimate. Early on in the discussions, it was determined that the manpower and equipment for the physical cleaning would be a large part of the estimate. CCS, a subsidiary of the PNE Corp., based in Longview, WA specializes in industrial cleanup and hazardous waste removal. CCS also has a long standing relationship with CEP and is on-site multiple times a year for industrial cleaning. Because of this relationship and close proximity to the facility, CCS was included in the estimate discussions in order to determine accurate values. As such, in the outline following CCS is specifically called out for actions in the clean-up effort, but a similar equipped group could be inserted into the role if they were unable to satisfy the decommissioning timeline.

Each specific question included in the information request will now be specifically addressed:

1. Describe the specific actions and tasks necessary to restore the site to a useful, non-hazardous condition. Please provide the requested description of actions and tasks for:
   1) removal of the facility to slab-grade and 2) removal of hazardous materials from facility plant equipment. [OAR 345-021-0010(I)(w)(B)]

In the event of a facility shutdown and closure, the facility would be drained of process streams as a saleable product. From the beginning of the process, the corn silos would be run until empty, leaving empty silos, conveyors, surge bin and hammer mills. The front end mixing tanks would be drained, flushed, and emptied into fermentation to ensure all material is used in fermentation. All fermented material would be processed through distillation to produce alcohol and animal feed co-products, which are standard products of the facility. Any remaining below spec co-products would be able to be sold at a discount to existing customers. In the process of running through each vessel a flushing process would be taken so that the tankage/vessel is clean. The only remaining item would be flush water, which can be disposed of through the existing waste-water stream. Through this shutdown procedure all process equipment would be left in a non-hazardous environment. The facility goes through a planned maintenance shutdown every 2 to 3 months and the process outlined for shutdown of the facility would be similar to this, simply including some additional flushes to prepare for a longer duration out of service.
For any remaining ingredients and raw materials such as acids, enzymes, yeast, aqueous ammonia, all items should be able to be shipped back to the supplier, or if not possible, shipped to another facility for use. Worst case scenario there may be some disposal costs. For the hazardous material stored in bulk, aqueous ammonia, sulfuric acid, and sodium hydroxide (caustic), there would be some expected additional hazardous material cleanup costs which are covered in T3 of the decommissioning cost estimate. For what could not be recovered by the supplier, hazardous disposal would be required, including possibly a vacuum truck and then multiple crews able to wash the tanks to a non-hazardous state. CCS was contacted regarding this and have experience with this type of operation and are already familiar with the site.

For all remaining equipment, some minor additional non-hazardous cleanup may be needed prior to retrofit or scrap work. These costs are covered in T2, including supervision, crews, tools, and equipment. The quote includes the costs necessary to lock down electrical equipment for potential long-term turnover to the port. For the planned turnover to the port, the steps that would be needed would be to open all vessels and wash to clean. This would also include flushing piping and washing down the general areas of the equipment. As noted, the flush water would be non-hazardous and could be disposed of with the port waste water facility or other means. These steps would leave the site safe and stable for a transfer over to the port’s authority.

For the contingency of taking the facility to slab, which is covered under T1, both previous actions would take place as stated. The largest difference would be that as crews are cleaning tanks, equipment, and vessels, there would be additional crews starting the tear down process right behind them. The additional labor costs are included in T1. As has been previously noted, the equipment, piping, etc. including the buildings and frames would be torn down and sold for scrap, likely at a profit versus the cost of tear-down. The items that cannot be scrapped would be disposed of as general waste in a landfill. With the removal of equipment and buildings the facility would be left as a bare cement pad. A lot of the equipment, chiller, pumps, monitoring equipment could likely be sold at higher than scrap cost, or the entire facility would simply be sold to a scrap dealer and given a set amount of time to remove anything of value prior to the breakdown of the facility. Both steps have been taken by previous ethanol facilities that have shut down and the course of action would be dependent on the timeline of the turnover.

As an addition to this, to specify the new projects added as part of this amendment, the sugar tank has already been emptied and is no longer currently in use. If it is used again in the future, the material inside would be used as part of the process in the shutdown phase or could be disposed of in a landfill. For the CO2 capture equipment, the minor equipment that is owned by Pacific Ethanol is included with the cost of preparing the site for decommissioning. The piping that is part of the project would either be cleaned as part of the larger clean-up effort prior to turnover, or would be cleaned and then sold as scrap as part of the effort to return the site to slab. The corn oil equipment, has higher-than scrap value to be recommissioned at another facility, or possibly with the new tenant dependent on their business model. Any remaining corn oil would be sold to a local existing customer. The process only includes non-hazardous streams, so the equipment would be able to be flushed and cleaned as part of the larger effort. The footprint of the equipment is small in comparison to the larger facility footprint and as such would not be expected to greatly impact the
clean-up efforts. The equipment clean-up quotes include the clean-up of all three additional projects, but as stated, none of them have any unique or outstanding requirements that would greatly affect the larger effort.

2. **Describe and justify the methods and assumptions used to develop the site decommissioning cost estimate.** [OAR 345-021-0010(I)(w)(D)]

Assumptions:

- Most process streams would be able to be processed into saleable product.
  - Pacific Ethanol has experience in the long-term idle of facilities very similar to the CEP plant. Based on this experience it is known that the current configuration of the plant is sufficient to drain and clean all vessels, except for water and other minor residues, to the point where the equipment could be left abandoned safely for long periods of time. If the water and remaining residues are disposed of, than the facility could sit for years or longer without major deterioration of major process vessels or equipment. Some smaller items, such as pumps which may have seals and impellers that would deteriorate over time would be inconsequential in the scope of this project and are non-hazardous. Any turnover plan would primarily be dependent on the safe-turnover of large vessels and piping. The existing clean-up plan would get this equipment to a safe condition.

- Remaining raw materials and ingredients would be able to be safely disposed of.
  - The facility currently has 5 bulk material containers, two for high value enzymes, one for liquid urea, one for aqueous ammonia, and one for sulfuric acid. Due to the high-dollar value of the enzyme, any remaining material would either be returned to the supplier for a rebate or sent to another facility for use. The enzyme is non-hazardous so it could be disposed of with the facility flush-water worst case scenario. The low-dollar value of the liquid urea would lead the facility to either simply process it at the plant, or try and return it to the supplier. The flushing of the tank is not expected to cause any problems with the other flushing efforts. The aqueous ammonia and sulfuric acid tank, as mentioned are both hazardous chemicals, but the first step would be to have the supplier take any remaining chemical. The remaining residue would then be professionally disposed of and the vessels cleaned by CCS.

For any other ingredients left at the facility, the liquids are stored in totes, and any hazardous material that can’t simply be disposed of could easily be shipped back to the manufacturer. The solid materials are mostly non-hazardous and can be disposed of, there are a few hazardous solid materials on-site, and as captured in the proposal, CCS has the capability to bring them on the truck with other
hazardous material disposal. This is something that the plant has had done before and has experience with CCS.

- The contingency of tearing the buildings to slab is reasonable
  - The process equipment within the buildings can be cleaned to a non-hazardous state allowing safe tear down and removal. Once the internal equipment is removed, the buildings themselves are simply a steel superstructure with a metal siding skin. The design is not-complicated and not outside the general scope of work of what has been directed by the FCM Group in the past.

- The cost estimate is not dependent on the value of any scrap or sale equipment.
  - Although it is noted several times in the breakdown that a certain item or piece of equipment would likely be sold for scrap or greater value, the actual cost estimate, and the bond value that would be based on it, are not dependent on this. The cost estimate established by the FCM Group is not dependent and does not include any actual scrap value return in the estimate.

3. Provide a description of the relevant experience and qualifications of the third-party (FCM Group) in preparing the decommissioning cost estimates for ethanol facilities and of other similar types of facilities. [OAR 345-021-0010(I)(w)(D)]

Terry Freeman’s cost estimate experience focuses mainly on new development phases. As noted, he had the construction manager responsibilities for Pacific Ethanol’s facility in Stockton, CA, not unlike Parson Corp’s role for the CEP, qualifying them to determine the original decommissioning cost. The direct experience in ethanol plant estimating experience and qualifications can be directly related to FCM Group’s cost estimating service provided for the McPherson Oil Tank Removal Project, as shown below in a table reflecting other relevant experience to ethanol facilities. As shown in the table, the experience also includes renovation, re-builds, additions, and construction in existing plant conditions. It has been a typical aspect of most projects to including decommissioning estimates of unit operations within the general estimating services for new construction and modifications. In addition to the Stockton ethanol facility, there is also direct experience in two power plant projects and one oil industry project, all of which included decommissioning estimates. The estimates included items such as, handling contaminated soils, ash handling systems, oil and piping systems, tanks systems, sodium hydroxide, ammonia, and other various chemical systems. As noted, the estimates experience and qualifications can be associated with all the project in the following table.
<table>
<thead>
<tr>
<th>Industrial Projects</th>
<th>Value</th>
<th>FCM Group Responsibilities</th>
<th>Description of Relevant Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific Ethanol Inc. - Ethanol Production Facility, Stockton, CA. - New Construction</td>
<td>170M</td>
<td>CM Services</td>
<td>Construction of this Ethanol facility encompasses the Delta T design which mirrors that of the Boardman Project. The decommissioning process of this facility is well within its FCM's knowledge and experience as related to the various structures and systems in place and constraints that are to be encountered during the decommissioning scope of work.</td>
</tr>
<tr>
<td>Flint Hills Resources - Arthur, Iowa. - Ethanol Plant - Demolition and rebuild of dryer systems, dryer blog, and various systems after explosion event.</td>
<td>67M</td>
<td>CM Services</td>
<td>This project encompassed the decommission and demolition of an Ethanol Plant's mash dryer system including supporting systems and its housing structure. The structure and systems were rebuilt as well.</td>
</tr>
<tr>
<td>Macpherson Oil - Bakersfield, CA. - Decommission tank farm, soil remediation, new 10 mg solar project.</td>
<td>20M</td>
<td>CM Services</td>
<td>The Macpherson Oil Project included the decommissioning of oil tank farm. This tank farm was decommissioned prior to a rebuild project including decommission planning and execution as delineated within the oil industries' EPA standards.</td>
</tr>
<tr>
<td>DTE - Stockton Cogen - Stockton, CA. - Modifications to existing Cogen power plant - convert from coal to biofuel.</td>
<td>240M</td>
<td>CM Services</td>
<td>This Power conversion project included the decommission and demolition of an existing boiler ash system, cooling facilities and related conveying equipment and processing systems.</td>
</tr>
<tr>
<td>DTE - Mt. Poso Cogen - Bakersfield, CA. - Modifications to Cogen power plant - convert from coal to biofuel.</td>
<td>150M</td>
<td>CM Services</td>
<td>The Mt. Poso Cogen project mirrored the Stockton Cogen project with respect to decommissioning and demolition work structure.</td>
</tr>
<tr>
<td>City of Alderwood - Alderwood, WA. Wastewater treatment plant - New wastewater treatment plant and Modification of existing facility.</td>
<td>70M</td>
<td>CM Services</td>
<td></td>
</tr>
<tr>
<td>King County - Vashon Island Wastewater Treatment Facility - Wastewater treatment facility King Co., WA. - Demolition, modernization and new construction.</td>
<td>10M</td>
<td>CM Services</td>
<td>The listed Wastewater Treatment facilities have been included in the Project Listing of relevant experience as existing chemical and piping processes scheduled for decommissioning, demolition and modifications closely represent same type of conditions that are encountered and closely associated with the chemical and piping processes found in Ethanol production facilities.</td>
</tr>
<tr>
<td>City of Kalama - Wastewater Treatment Facility - Kalama, WA. - Addition and modernization to existing facility.</td>
<td>5M</td>
<td>CM Services</td>
<td></td>
</tr>
<tr>
<td>City of Portland - Wastewater Treatment Facility - New Chlorine Containment facility and injection system to outfall.</td>
<td>6M</td>
<td>CM Services</td>
<td></td>
</tr>
<tr>
<td>City of Battle Ground - Battleground, WA. New wastewater treatment plant.</td>
<td>4M</td>
<td>CM Services</td>
<td></td>
</tr>
</tbody>
</table>
4. Provide a description of the relevant experience of the third-party (FCM Group) in decommissioning ethanol facilities or other similar types of facilities. [OAR 345-021-0010(I)(w)(D)]

The relevant experience in the decommissioning of ethanol plants is directly associated with the experience performing the services of construction management at various power and ethanol plants in the past as outlined in the relevant experience table. The experience in construction management includes implementation and direct oversight of various work breakdown structures including decommissioning plants, monitoring procedures of specific environmental and hazardous conditions, and direct scheduling and logic sequencing of differing work scopes and sub-contractor/consultant responsibilities. The qualifications and experience can be fully measured by the construction management of industrial and wastewater project experience totaling over $900 million in construction costs. This experience includes plant facility demolition and remove scopes including coal, ash, oil and gas, chemical systems, and major structure components.

5. Provide an evaluation of compliance with existing site certificate conditions (e.g. IV.C.1 through IV.C.12, as applicable) and explain how continued compliance could further ensure the certificate holder’s ability to restore the site to a useful, non-hazardous condition. [OAR 345-022-0050(2)]

In order to ensure continuity of reporting, this section was lifted directly out of the annual report and modified to address the Section C.1 through C.12 only.
<table>
<thead>
<tr>
<th>Category</th>
<th>cond_ref_num</th>
<th>Source_R</th>
<th>Compliance_condition</th>
<th>Evaluation of Compliance by Pacific Ethanol Columbia</th>
<th>Explain how continued compliance could further ensure the certificate holder’s ability to restore the site to a useful, non-hazardous condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV. SPECIFIC FACILITY CONDITIO NS</td>
<td>8</td>
<td>5, 18, IV.C.1</td>
<td>The certificate holder shall retire the facility if the certificate holder permanently ceases construction or operation of the facility.</td>
<td>Pacific Ethanol is aware of this requirement, and through discussion has demonstrated its understanding of the requirement.</td>
<td>By being aware of the requirement to properly retire, no actions will be taken to make this process more difficult to achieve.</td>
</tr>
<tr>
<td>IV. SPECIFIC FACILITY CONDITIO NS</td>
<td>8</td>
<td>5, 19, IV.C.1</td>
<td>The certificate holder shall retire the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110, and prepared pursuant to the amendment</td>
<td>Pacific Ethanol (PEI) has demonstrated through discussion with the port and throughout the amendment process.</td>
<td>By being prepared for a final retirement plan, the company understands the demands of the retirement process.</td>
</tr>
</tbody>
</table>
### IV. SPECIFIC FACILITY CONDITIONS

<table>
<thead>
<tr>
<th></th>
<th>9</th>
<th>5, 23, IV.C.2</th>
<th>Two years before closure of the energy facility, the certificate holder shall submit to the Department a proposed final retirement plan for the facility and site, pursuant to OAR 345-027-0110, including:</th>
</tr>
</thead>
</table>
|   | 9 | 5, 26, IV.C.2 | a. A plan for retirement that provides for completion of retirement within two years after permanent cessation of operation of the energy facility and that protects the public health and safety and the environment;  
   |   |                | The facility is operating profitably and has no current plans towards retirement, no discussion at all to occur within two years.  
   |   |                | By providing a two year warning of retirement, there will be sufficient time for discussion between the DOE and PEI for proper restoration. |

The facility is operating profitably and has no current plans towards retirement, no discussion at all to occur within two years. By understanding our requirement to quickly, within two years, complete the retirement, PEI understands the needs for preparation of retirement.
| IV. SPECIFIC FACILITY CONDITIONS | 9 | 5, 29, IV.C.2 | b. A description of actions the certificate holder proposes to take to restore the site to a useful, non-hazardous condition suitable for agricultural use; and | Covered as part of the amendment process. | By having a description of actions prepared, PEI ensures that regardless of individual personnel, the company has an outline for retirement. |
| IV. SPECIFIC FACILITY CONDITIONS | 9 | 5, 32, IV.C.2 | c. A detailed cost estimate, a comparison of that estimate with the dollar amount secured by a bond or letter of credit and any amount contained in a retirement fund, and a plan for assuring the availability of adequate funds for completion of retirement. | Covered as part of the amendment process and ongoing requirement of bond. | Having the prepared cost estimate and bond in place helps ensure that PEI has adequate resources in place for the retirement process. |
| IV. SPECIFIC FACILITY CONDITIONS | 10 | 5, 37, IV.C.3 | The certificate holder shall prevent the development of any conditions on the site that would preclude restoration of the site to a useful, non-hazardous condition to the extent that prevention of such | PEI has not allowed any development that endangers the ability to restore to a non-hazardous condition, and is prevented from legally | By ensuring no further hazardous development occurs, the final restoration process will be more manageable. |
| IV. SPECIFIC FACILITY CONDITIONS | 11 | 5, 42, IV.C.4 | Within 30 days after the effective date of the site certificate, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit in the amount of $800,000 (in Second Quarter 2007 dollars) naming the State of Oregon, acting by and through the Council, as beneficiary or payee. | PEI has continually maintained this bond requirement, and demonstrated this in the annual reports. | The bond provides a minimum amount of resources held in a protected process to help ensure proper restoration and retirement. |
| IV. SPECIFIC FACILITY CONDITIONS | 11 | 6, 1, IV.C.4 | a. The certificate holder shall adjust the amount of the bond or letter of credit to present value annually, using the U.S. Gross Domestic Product Implicitly Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast," or by any successor agency ("Index"). If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust Second Quarter 2007 dollars to present value. | PEI has continually maintained this bond requirement, and demonstrated this in the annual reports. | The bond provides a minimum amount of resources held in a protected process to help ensure proper restoration and retirement. |

<p>| IV. SPECIFIC FACILITY CONDITIONS | 11 | 6, 8, IV.C.4 | b. The form of bond or letter of credit shall be subject to prior approval by the Council. | PEI has continually maintained this bond requirement, and demonstrated this in the annual reports. | The bond provides a minimum amount of resources held in a protected process to help ensure proper restoration and retirement. |
| IV. SPECIFIC FACILITY CONDITIONS | 11 | 6, 10, IV.C.4 | c. The issuer of the bond or letter of credit shall be subject to prior approval by the Council. | PEI has continually maintained this bond requirement, and demonstrated this in the annual reports. | The bond provides a minimum amount of resources held in a protected process to help ensure proper restoration and retirement. |
| IV. SPECIFIC FACILITY CONDITIONS | 11 | 6, 12, IV.C.4 | d. The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition (VI.B.6). | PEI has continually maintained this bond requirement, and demonstrated this in the annual reports. | The bond provides a minimum amount of resources held in a protected process to help ensure proper restoration and retirement. |
| IV. SPECIFIC FACILITY CONDITIONS | 11 | 6, 15, IV.C.4 | e. The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility. | PEI has continually maintained this bond requirement, and demonstrated this in the annual reports. | The bond provides a minimum amount of resources held in a protected process to help ensure proper restoration and retirement. |
| IV. SPECIFIC FACILITY CONDITIONS | 12 | 6, 18, IV.C.5 | If the certificate holder elects to use a bond to meet the requirement of Condition (IV.C.4), the certificate holder shall ensure that the surety is obligated to comply with the requirements of applicable statutes, Council rules and this site certificate when the surety exercises any legal or contractual right it may have to assume construction, operation or retirement of the energy facility. | PEI has continually maintained this bond requirement, and demonstrated this in the annual reports. The bond provides a minimum amount of resources held in a protected process to help ensure proper restoration and retirement. |
| IV. SPECIFIC FACILITY CONDITIONS | 12 | 6, 18, IV.C.5 | The certificate holder shall also ensure that the surety is obligated to notify the Council that it is exercising such rights and to obtain any Council approvals required by applicable statutes, Council rules and this site certificate before the surety | PEI has continually maintained this bond requirement, and demonstrated this in the annual reports. The bond provides a minimum amount of resources held in a protected process to help ensure proper restoration and retirement. |
| IV. SPECIFIC FACILITY CONDITIONS | 13 | 6, 28, IV.C.6 | Not later than ten years after the date of commercial operation of the energy facility, and each ten years thereafter during the life of the energy facility, the certificate holder shall complete an independent Phase I Environmental Site Assessment of the energy facility site. | PEI has not yet reached the ten year mark, it will occur later this year and the facility has already started discussion to ensure this is completed in 2017. | By completing a timely ESA, PEI creates ongoing documentation of any environmental issues that need to be addressed in restoration and retirement. |
| IV. SPECIFIC FACILITY CONDITIONS | 13 | 6, 31, IV.C.6 | Within 30 days after its completion, the certificate holder shall deliver the Phase I Environmental Site Assessment Report to the Department. | PEI has not yet reached the ten year mark, it will occur later this year and the facility has already started discussion to ensure this is completed in 2017. | By completing a timely ESA, PEI creates ongoing documentation of any environmental issues that need to be addressed in restoration and retirement. |</p>
<table>
<thead>
<tr>
<th>IV. SPECIFIC FACILITY CONDITIONS</th>
<th>14</th>
<th>6, 35, IV.C.7</th>
<th>In the event that any Phase I Environmental Site Assessment identifies improper handling or storage of hazardous substances or improper record keeping procedures, the certificate holder shall correct such deficiencies within six months after completion of the corresponding Phase I Environmental Site Assessment. It shall promptly report its corrective actions to the Department. The Council shall determine whether the corrective actions are sufficient.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>PEI has not yet reached the ten year mark, it will occur later this year and the facility has already started discussion to ensure this is completed in 2017. The facility understands its requirements to address any deficiencies in a timely manner.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>By completing a timely ESA, PEI creates ongoing documentation of any environmental issues that need to be addressed in restoration and retirement.</td>
</tr>
<tr>
<td>IV. SPECIFIC FACILITY CONDITIONS</td>
<td>15</td>
<td>6, 42, IV.C.8</td>
<td>The certificate holder shall report to the Department any release of hazardous substances, pursuant to DEQ regulations, within one working day after the discovery of such release. This obligation shall be in addition to any other reporting requirements applicable to such a release.</td>
</tr>
<tr>
<td>IV. SPECIFIC FACILITY CONDITIONS</td>
<td>16</td>
<td>7, 2, IV.C.9</td>
<td>If the certificate holder has not remedied a release consistent with the applicable DEQ standards or if the certificate holder fails to correct deficiencies identified in the course of a Phase I Environmental Site Assessment within six months after the date of the release or the date of completion of the Phase I Environmental Site Assessment, the certificate holder shall submit to the Council for its approval an</td>
</tr>
<tr>
<td>IV. SPECIFIC FACILITY CONDITIONS</td>
<td>16</td>
<td>7, 9, IV.C.9</td>
<td>independently prepared estimate of the additional cost of remediation or correction within such six-month period.</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----</td>
<td>-------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>IV. SPECIFIC FACILITY CONDITIONS</td>
<td>16</td>
<td>7, 12, IV.C.9</td>
<td>a. Upon approval of an estimate by the Council, the certificate holder shall increase the amount of its bond or letter of credit by the amount of the estimate. PEI has demonstrated its compliance with this in the annual reports and will continue to do so. PEI understands the ongoing increase of cost of basic services and that the bond must be increased to reflect this from time to time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>b. In no event, however, shall the certificate holder be relieved of its obligation to exercise all due diligence in remedying a release of hazardous substances or correcting Such an action would violate multiple compliance requirement s and as such, the facility would be legally By ensuring the PEI understands an issue must be addressed, it cannot simply leave an issue to be addressed at retirement,</td>
</tr>
<tr>
<td>IV. SPECIFIC FACILITY CONDITIONS</td>
<td>17</td>
<td>7, 17, IV.C.10</td>
<td>All funds received by the certificate holder from the salvage of equipment and buildings shall be committed to the restoration of the energy facility site to the extent necessary to fund the approved site restoration and remediation.</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----</td>
<td>----------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>IV. SPECIFIC FACILITY CONDITIONS</td>
<td>18</td>
<td>7, 21, IV.C.11</td>
<td>The certificate holder shall pay the actual cost to restore the site to a useful, non-hazardous condition at the time of retirement, notwithstanding the Council’s approval in the site certificate of an estimated amount required to restore the site.</td>
</tr>
<tr>
<td>IV. SPECIFIC FACILITY CONDITIONS</td>
<td>19</td>
<td>7, 25, IV.C.12</td>
<td>If the Council finds that the certificate holder has permanently ceased construction or operation of the facility without retiring the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110 and prepared pursuant to Condition (IV.C.2), the Council shall notify the certificate holder and request that the certificate holder submit a proposed final retirement plan to the Department within a reasonable time not to exceed 90 days.</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----</td>
<td>----------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>IV. SPECIFIC FACILITY CONDITIONS</td>
<td>19</td>
<td>7, 31, IV.C.12</td>
<td>a. If the certificate holder does not submit a proposed final retirement plan by the specified date, the Council may direct the Department to prepare a proposed final retirement plan for PEI understands this requirement and will follow it at said time when retirement occurs.</td>
</tr>
<tr>
<td>IV. SPECIFIC FACILITY CONDITIONS</td>
<td>19</td>
<td>7, 34, IV.C.12</td>
<td>the Council's approval.</td>
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<td>-----------------------------------</td>
<td>----</td>
<td>----------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>b. Upon the Council's approval of the final retirement plan, the Council may draw on the bond or letter of credit described in Condition (IV.C.4) to restore the site to a useful, non-hazardous condition according to the final retirement plan, in addition to any penalties the Council may impose under OAR Chapter 345, Division 29.</td>
<td>PEI understands this requirement and will follow it at said time when retirement occurs.</td>
<td>This requirement shows that the bond will be used for restoration regardless of who developed the retirement plan.</td>
<td></td>
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<tr>
<td>c. If the amount of the bond or letter of credit is insufficient to pay the actual cost of retirement, the certificate holder shall pay any additional cost necessary to restore the site to a useful, non-hazardous condition.</td>
<td>PEI understands this requirement and will follow it at said time when retirement occurs.</td>
<td>This requirement demonstrates that the company will pay for retirement of the facility regardless whether the cost is higher than the currently in effect bond.</td>
<td></td>
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<tr>
<td>IV. SPECIFIC FACILITY CONDITIONS</td>
<td>19</td>
<td>7, 42, IV.C.12</td>
<td>d. After completion of site restoration, the Council shall issue an order to terminate the site certificate if the Council finds that the facility has been retired according to the approved final retirement plan.</td>
</tr>
</tbody>
</table>
Appendix B

Original prepared FCM Cost Estimate
Danial Koch  
Pacific Ethanol Inc.  
Columbia Ethanol Plant / Boardman, Ore.

PROPOSAL

Project: Columbia Ethanol Project (CEP)  
Retirement Cost Proposal

Date: October 25, 2016

Dear Danial,

Per our conversations last week on engaging the FCM Group for services in retiring the Columbia Ethanol Plant, we would propose the following:

➢ We have provided a breakdown estimate in a Tier format as T1, T2 and T3.
➢ Our scope will include those items of work as indicated in the Tier breakdowns.
➢ Included additional scope in the Proposal Amount as listed below shall include:
  o Planning and CPM scheduling services.
  o Program Management.
  o Meetings as required with PEI and regulatory agencies.
  o Project Controls and Documentation.
  o Pre-Construction survey and final program assessments.
  o Post Construction reports and turnover requirements.

PROPOSAL AMOUNT:

T1 – Demolish Buildings and Plant Facility

Directs: Budget Estimate $ 464,175.00
Indirects: Fee/Contingency @ 20% $ 92,583.00

TOTAL T1 Budget $ 556,758.00

T2 – Decommission Facility

Directs: Budget Estimate $ 178,074.00
Indirects: Fee/Contingency @ 20% $ 35,618.00

TOTAL T2 Budget $ 213,692.00

T3 – Hazmat Stand Alone

Directs: Budget Estimate $ 67,900.00
Indirects: Fee/Contingency @ 20% $ 13,580.00

TOTAL T3 Budget $ 81,480.00

Thank You for the opportunity to provide a quote this Project. This quote remains in effect for 60 days.

Terry Freeman / FCM
<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Utility Disconnects</td>
<td>$3,500.00</td>
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<tr>
<td>Cut and Cap (all AG/UG Utility /Elect Feeders)</td>
<td>$15,000.00</td>
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<tr>
<td>Removal of Buildings</td>
<td>$140,659.00</td>
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<tr>
<td>Removal of Tanks and Equipment</td>
<td>$310,016.09</td>
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<tr>
<td>General Conditions - Included in Removal costs</td>
<td>-</td>
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<tr>
<td>Permits</td>
<td>$25,000.00</td>
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<tr>
<td><strong>Total Cost Facility Retirement as two separate Projects</strong></td>
<td><strong>$494,175.09</strong></td>
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<tr>
<td>Deductive if both Removal Projects performed Concurrent (Supervision, labor and equipment savings)</td>
<td>$(30,000.00)</td>
</tr>
<tr>
<td><strong>Total Cost Facility Retirement if Building and Tanks Projects run Concurrent</strong></td>
<td><strong>$464,175.09</strong></td>
</tr>
<tr>
<td><strong>TOTAL COST - Plant Decommissioning for turn-over</strong></td>
<td><strong>$178,073.57</strong></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$67,900.00</strong></td>
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## Labor and Equipment

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<th>No.</th>
<th>Description</th>
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<th>no.</th>
<th>Hrs.</th>
<th>Extension</th>
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<td></td>
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<td>114</td>
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<td></td>
<td>2.5-3 CY Excavator w/heavy shear</td>
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<td>114</td>
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<tr>
<td></td>
<td>1 CY Excavator - thumb bucket</td>
<td>175</td>
<td>1</td>
<td>114</td>
<td>$19,950.00</td>
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<tr>
<td></td>
<td>JLG</td>
<td>125</td>
<td>1</td>
<td>57</td>
<td>$7,125.00</td>
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<td></td>
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<td>30</td>
<td>2</td>
<td>228</td>
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<td></td>
<td>Yard Equip. - water truck</td>
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<td>1</td>
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<td>$3,705.00</td>
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<td><strong>Total Labor / Equip</strong></td>
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<td>684</td>
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## Trucking

RS Davis - Scrap yard / Hermiston Disposal - Waste/Recycle
380 tons @20 t/trip = 19 loads

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<thead>
<tr>
<th></th>
<th>Haul</th>
<th>loads</th>
<th>Mi/trip</th>
<th>Rd Miles</th>
<th>rate</th>
<th>Total</th>
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<tr>
<td>To RS Davis scrap</td>
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<td>2</td>
<td>35</td>
<td>70</td>
<td>2.50</td>
<td>175</td>
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<tr>
<td>To Hermiston Recycling-Disposal</td>
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<td>17</td>
<td>35</td>
<td>595</td>
<td>2.50</td>
<td>1,488</td>
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**Total Trucking**

$1,663

Subtotal Project Cost

Fee / General Conditions-Risk

Overhead and Profit (Local Contractor)

**Total Contract Amount**

$107,666

## Scrap Reimburse -

<table>
<thead>
<tr>
<th></th>
<th>Tons</th>
<th>Rate</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>Not Included</td>
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## Indirect

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<tr>
<td>Performance and Payment Bonds</td>
<td>1%</td>
<td>$1,076.66</td>
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<tr>
<td>Administration</td>
<td>10%</td>
<td>$10,766.59</td>
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<tr>
<td>Escalation Development Contingency (10 yr.)</td>
<td>15%</td>
<td>$16,149.88</td>
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<td>Hazardous Material testing and Cleanup Allowance</td>
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<td>$5,000</td>
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**Total Indirect**

$32,993

**TOTAL COST - BLDG's REMOVALS**

$140,659
**Labor and Equipment**

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<th>No.</th>
<th>Description</th>
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<th>Hrs.</th>
<th>Extension</th>
<th>Total</th>
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</thead>
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<tr>
<td></td>
<td>Superintendent/PU</td>
<td>75</td>
<td>1</td>
<td>150</td>
<td>$11,250.00</td>
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</tr>
<tr>
<td></td>
<td>2.5-3 CY Excavator w/heavy shear</td>
<td>220</td>
<td>1</td>
<td>150</td>
<td>$33,000.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 CY Excavator - thumb bucket</td>
<td>175</td>
<td>1</td>
<td>150</td>
<td>$26,250.00</td>
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</tr>
<tr>
<td></td>
<td>JLG</td>
<td>125</td>
<td>1</td>
<td>75</td>
<td>$9,375.00</td>
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<td>Laborers</td>
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<td>6</td>
<td>300</td>
<td>$54,000.00</td>
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<tr>
<td></td>
<td>Yard Equip. - water truck</td>
<td>65</td>
<td>1</td>
<td>75</td>
<td>$4,875.00</td>
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<td>$138,750.00</td>
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</table>

820 tons @20 t/trip = 41 loads

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<th>Haul</th>
<th>loads</th>
<th>Mi/trip</th>
<th>Rd Miles</th>
<th>rate</th>
<th>Total</th>
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<tbody>
<tr>
<td>To RS Davis scrap</td>
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<td>35</td>
<td>1225</td>
<td>$2.50</td>
<td>3,063</td>
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<tr>
<td>To Hermiston Recycling-Disposal</td>
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<td>35</td>
<td>210</td>
<td>$2.50</td>
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<tr>
<td>Total Trucking</td>
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<td>$3,588</td>
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<tr>
<td><strong>Subtotal Project Cost</strong></td>
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<td></td>
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<td>$142,338</td>
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<td>Fee / General Conditions-Risk</td>
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<td></td>
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Scrap Reimburse -

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<th>Rate</th>
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<tr>
<td>Performance and Payment Bonds</td>
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<td>1%</td>
</tr>
<tr>
<td>Administration</td>
<td></td>
<td>10%</td>
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<tr>
<td>Escalation Development Contingency (10 yr.)</td>
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<td>15%</td>
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<tr>
<td>Hazardous Material testing and Cleanup Allowance</td>
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</tr>
<tr>
<td><strong>Total Indirect</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL COST Tanks and Equipment REMOVALS</strong></td>
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</table>
## Decom - RECAP

<table>
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<td></td>
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<td>Directs</td>
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<td>1</td>
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## Decom - Labor Breakdown

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<th>Equip/Mat $</th>
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<td>8</td>
<td>480</td>
<td>150</td>
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<td>General Site/Area Wash-down</td>
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<td>4</td>
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<td>5</td>
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<td>30</td>
<td>4</td>
<td>8</td>
<td>960</td>
<td>200</td>
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<td>$1,160.00</td>
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<tr>
<td>7</td>
<td>DDE wash-down</td>
<td>Laborer</td>
<td>30</td>
<td>4</td>
<td>8</td>
<td>960</td>
<td>200</td>
<td></td>
<td>$1,160.00</td>
</tr>
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<td><strong>$9,230.00</strong></td>
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### Tanks

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<th>No.</th>
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<td>9</td>
<td>Sulfic Acid Tk - 10ft diam/ 18ft high</td>
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<td>10</td>
<td>Ammonia Tk - 12ft diam/ 30 ft high</td>
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<td>11</td>
<td>Sodium Tk - 8ft diam/ 10 ft high</td>
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## Decom - Breakdown

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<th>Equip/Mat $</th>
<th>Sub-Contractor</th>
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<td>2000</td>
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<td>2500</td>
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</table>
Appendix C

CCS Supplied T3 (Hazmat Cleanup) Estimate
Attn: Daniel Koch

RE: Decommissioning Estimate

Dear Dave,

CCS - A Division of PNE Corporation, appreciates the opportunity to submit a T&M estimate for vacuuming Services for the possible decommissioning. This estimate is based on CCS providing a crew using a vacuum truck working 8 hour M-F day shifts, to perform the cleaning services and includes personnel, equipment, an allotment for supervision, materials, and PPE.

T&M Estimated Service costs:

- On Site Tank cleaning: $12,400.00
- Vac Truck Misc Equip: $10,000.00
- Scaffolding: $6,000.00
- Travel/Per Diem: $4,500.00
- Allowance Vac truck/disposal: $10,000.00
- Contingency for unforeseen: $25,000.00
- Total Cost: $67,900.00

These proposals are T&M Estimates. Actual costs could be higher or lower than estimated costs.Billing will be T&M based on the actual conditions encountered during the project. Circumstances including, but not necessarily limited to, changes in the scope of work or schedule; amounts, degree, nature, or characteristics of the fouling or material to be removed; coordination with other contractors in the area; or delay or waiting time beyond the direct control of CCS could result in charges that could affect the estimated project costs. Estimated costs do not include any taxes, permits or fees unless specifically listed. This proposal is expressly subject to other terms and conditions set forth at http://pnecorp.com/ccs/terms-conditions/.

Remaining residue would then be professionally disposed of and the vessels cleaned for transport. The solid material can disposed of in the current site and or pled up to haul to local customers. We would find designated hazardous waste facilities that will receive the reminder of the hazardous wastes. Some of these waste streams already have existing profiles with acceptable hazardous waste facilities.

CCS’s intent is to conduct a safe, professional, productive project which meets or exceeds your project goals. CCS supervisors on site will consult with Pacific Ethanol’s designated Project Representatives regarding project issues such as safety, progress, scheduling, and co-ordination with other contractors in the area on a timely basis to support your project, facility, and corporate goals.
We appreciate this opportunity to work with the Pacific Ethanol in support of meeting their industrial cleaning needs and we look forward to working with you on this and other projects in the future. If you have any questions or need any additional information regarding this or other projects, or about any of our other services, please contact me so we can address them.

This quote is made subject to and conditioned on the customer’s acceptance of the CCS Terms and Conditions posted at [http://pnecorp.com/ccs/terms-conditions/](http://pnecorp.com/ccs/terms-conditions/). By accepting this quote or permitting CCS to commence the services under this quote, you certify that you have read and agree to these Terms and Conditions. Hard copies of the Terms and Conditions are available upon request.

Thank You,

Eric Stalford
Area Supervisor
Cell: 541-936-0766
Office: 509-545-0761
erics@pnecorp.com
Attachment C: Draft Agreement
RETIREMENT AGREEMENT

This RETIREMENT AGREEMENT (the "Agreement") is made and entered into effective as of this day, [Date] (the "Effective Date"), by Pacific Ethanol, Inc. ("PEI"), a California registered company, and the Port of Morrow ("Port"). PEI and Port are each referred to as a "Party" and collectively as the "Parties."

RECITALS

WHEREAS, PEI leases property from Port to operate an ethanol production facility in the industrial park at the Port of Morrow ("Site");

WHEREAS, PEI holds a Site Certificate from the Oregon Energy Facility Siting Council ("EFSC") that requires that PEI must post a bond to cover the cost of removing certain above ground improvements from the Site upon termination of facility operations and further a condition that PEI remove all specified improvements upon termination of facility operations (the reference provisions in the Site Certificate are attached as Exhibit A);

WHEREAS, PEI and Port agree that any above ground improvements ("Improvements") would continue to provide value after termination of the facility operations and that the Site can be restored to a useful and non-hazardous condition should the Improvements be left in place;

WHEREAS, PEI and Port further agree that they would prefer any Improvements not chosen to be removed by PEI to remain at the Site and that Port will take over legal ownership and liability for such Improvements upon termination of facility operations;

AGREEMENT

NOW, THEREFORE, for good and valuable consideration, the receipt, adequacy, and sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, agree as follows:

1. Conveyance of Improvements Upon Expiration or Termination of Site Certificate

Upon termination (as defined in OAR 345-027-0110) or expiration (as defined in OAR 345-027-0000) of the Site Certificate.

Third Party Beneficiary: The Energy Facility Siting Council ("EFSC") is an intended beneficiary of this Agreement. The parties acknowledge that EFSC may rely on this agreement in issuing a Final Order on PEI's Request for Amendment 1. The parties further agree that this Agreement may not be amended or terminated without prior approval by EFSC, or in the alternative, without submission to the Oregon Department of Energy of a bond or letter of credit in the amount of $852,000 (in 4th Quarter 2016 dollars) naming the State of Oregon, acting by and through the Council, as beneficiary or payee and consistent with the following terms:

(a) The certificate holder shall adjust the amount of the bond or letter of credit to present value annually, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast," or by any successor agency ("Index"). If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust Second Quarter 2007 dollars to present value.

(b) The form of bond or letter of credit shall be subject to prior approval by the Council.

(c) The issuer of the bond or letter of credit shall be subject to prior approval by the Council.

(d) The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition (VI.B.6).
The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility.

2. Transfer of Ownership Upon Termination of Facility Operations. The Parties agree that upon PEI providing 60 day notice to Port that PEI will terminate facility operations, PEI and Port will cooperate in transfer of ownership from PEI to Port, at no cost, of all Improvements at the Site that PEI does not intent to remove. A depiction of all Improvements at the Site are shown at Exhibit B.

3. Acceptance of Liability for Improvements. Port agrees to assume all legal liability for all remaining Improvements upon transfer of ownership from PEI to Port.

4. Waiver of Any Claim Against the State of Oregon or EFSC. The Parties agree that neither Party may file a legal action or make any public statement asserting that the State of Oregon or EFSC have any legal obligation to remove any of the Improvements.

5. General Provisions.

   Governing Law. This Agreement and the rights and obligations of the Parties are governed by and interpreted in accordance with the laws of the State of Oregon (without regard to principles of conflicts of law).

   Arbitration. Any controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled by arbitration administered by the American Arbitration Association. The number of arbitrators shall be one. The place of arbitration shall be Portland, Oregon. Oregon law shall apply. Judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction thereof.

   Authority. Each Party warrants that its signatory to this Agreement has any and all legal authority to bind the signatory’s Party to this Agreement.

   Counterparts. This Agreement may be executed in two or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument. Delivery of an executed signature page to this Agreement by facsimile transmission shall be as effective as delivery of a manually signed counterpart hereof.

   Parties in Interest. Each and every covenant, term, provision, and agreement is binding on and inures to the benefit of the Parties and their heirs, successors, assigns, and legal representatives.

   Entire Agreement. This Agreement constitutes the entire understanding and agreement between the Parties with respect to the subject matter of this Agreement. There are no agreements, understandings, restrictions, representations, or warranties between the Parties other than those in this Agreement or referred to or provided for in this Agreement.

   Further Effect. The Parties agree to execute other documents reasonably necessary to further effect and evidence the terms of this Agreement, as long as the terms and provisions of the other documents are fully consistent with the terms of this Agreement.

   Severability. If any term or provision of this Agreement is held to be void or unenforceable, that term or provision will be severed from this Agreement, the balance of the Agreement will survive, and the balance of this Agreement will be reasonably construed to carry out the intent of the Parties as evidenced by the terms of this Agreement.

   Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of
the Parties and their respective permitted successors, legal representatives and assigns.

**Notices.** All notices required to be given by this Agreement will be in writing and will be effective when actually delivered or, if mailed, when deposited as certified mail, postage prepaid, directed to the address for the other Party.

(Signatures follow)

IN WITNESS WHEREOF the Undersigned have executed this Agreement as of the date and year first above written.

Pacific Ethanol, Inc.

________________________
By:
Its:

Port of Morrow

________________________
By:
Its: