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**BEFORE THE
ENERGY FACILITY SITING COUNCIL
OF THE STATE OF OREGON**

In the Matter of Request for Amendment 1 of the)
Site Certificate for the Columbia Ethanol Project)
_____) **FINAL ORDER ON**
AMENDMENT 1 OF THE SITE
CERTIFICATE

September 2017

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1 **I. Introduction**

2
3 The Oregon Energy Facility Siting Council (Council or EFSC) issues this final order in accordance
4 with Oregon Revised Statute (ORS) 469.405 and Oregon Administrative Rule (OAR) 345-027-
5 0070 for the request by Pacific Ethanol Columbia, LLC (certificate holder or PEC) for
6 Amendment 1 of the Columbia Ethanol Project (CEP) Site Certificate.
7

8 **I.A Name and Address of Certificate Holder**

9
10 Pacific Ethanol Columbia, LLC
11 71335 Rail Loop Drive
12 PO Box 469
13 Boardman, OR 97818
14

15 Individual Responsible for Submitting this Amendment Request:

16
17 Daniel Koch, Plant Manager
18 Pacific Ethanol Columbia, LLC
19 71335 Rail Loop Drive
20 PO Box 469
21 Boardman, OR 97818
22

23 Parent Company of Certificate Holder

24
25 Pacific Ethanol Columbia, Inc.
26 5711 N. West Avenue
27 Fresno, CA 93711
28

29 **I.B Description of Approved Facility**

30
31 The energy facility is an ethanol plant capable of producing 35 million gallons per year (MMgy)
32 of ethanol located on a 25-acre parcel leased from the Port of Morrow in the Boardman
33 Industrial Park, Port of Morrow, Morrow County, Oregon. Major plant components consist of
34 buildings, storage tanks, bins, two-cell cooling tower system, and a flare system. By means of an
35 existing rail loop, corn is delivered to the site. In the processing building, ground corn is mixed
36 with water and enzymes to make a mash, and the mash is cooked in a series of retention tanks
37 to break the complex sugars down into fermentable sugars. The processing building houses
38 steel storage tanks for aqueous ammonia, enzymes, sulfuric acid, sodium hydroxide, and urea.
39

40 In the fermentation building, yeast and additional enzymes are added to the mash, producing a
41 liquid containing 10 to 15 percent ethanol, by weight. The liquid is piped to the distillation,
42 drying and evaporation (DD&E) building where the solids (a by-product called distiller’s wet

1 grain, or DWGS, suitable for animal feed) is separated and transported to a wet cake building
2 for storage and ultimate trucking to local dairy or cattle operations for use as feed. The liquid
3 ethanol is moved to ethanol storage tanks pending shipment to market by barge, rail or truck.
4

5 Additional plant components include grain storage bins, an administration building, a boiler
6 building, a maintenance building, ethanol storage tanks, a diesel fuel storage tank, a flare
7 system and a gasoline tank.
8

9 On May 30, 2017, PEC submitted a Change Request asking the Department to determine
10 whether a site certificate amendment was necessary to authorize construction and operation of
11 an additional cooling tower cell, expanding the existing two-cell cooling tower system.
12 Following review of the Change Request, the Department notified the certificate holder on
13 October 6, 2017 of the Department's determination that a site certificate amendment would
14 not be necessary because the project would not be would not cause a significant adverse
15 impact to a resource protected by EFSC standards, and would not substantially impair PEC's
16 ability to comply with site certificate conditions.
17

18 **I.C Facility and Site Boundary Location**

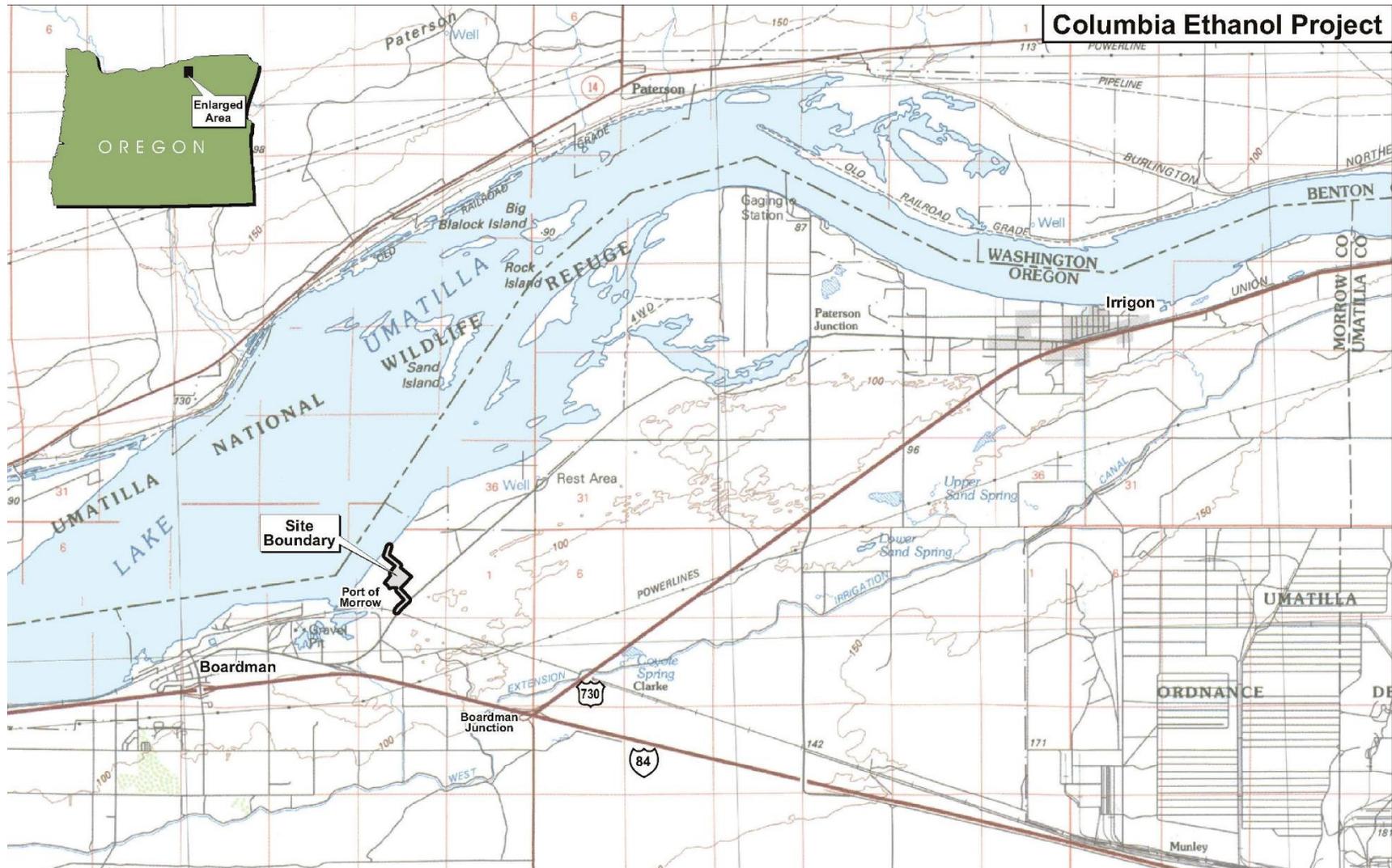
19

20 The facility is located on a 25-acre parcel of land in Section 2, Township 4 North, Range 25 East,
21 within Morrow County, Oregon. This parcel is zoned Port Industrial, and comprises a portion of
22 the Boardman Industrial Park owned and operated by the Port of Morrow.¹ The facility site
23 boundary and location are presented below on Figure 1; the facility site layout, including the
24 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."

1 **FIGURE 1: FACILITY LOCATION AND SITE BOUNDARY**

2

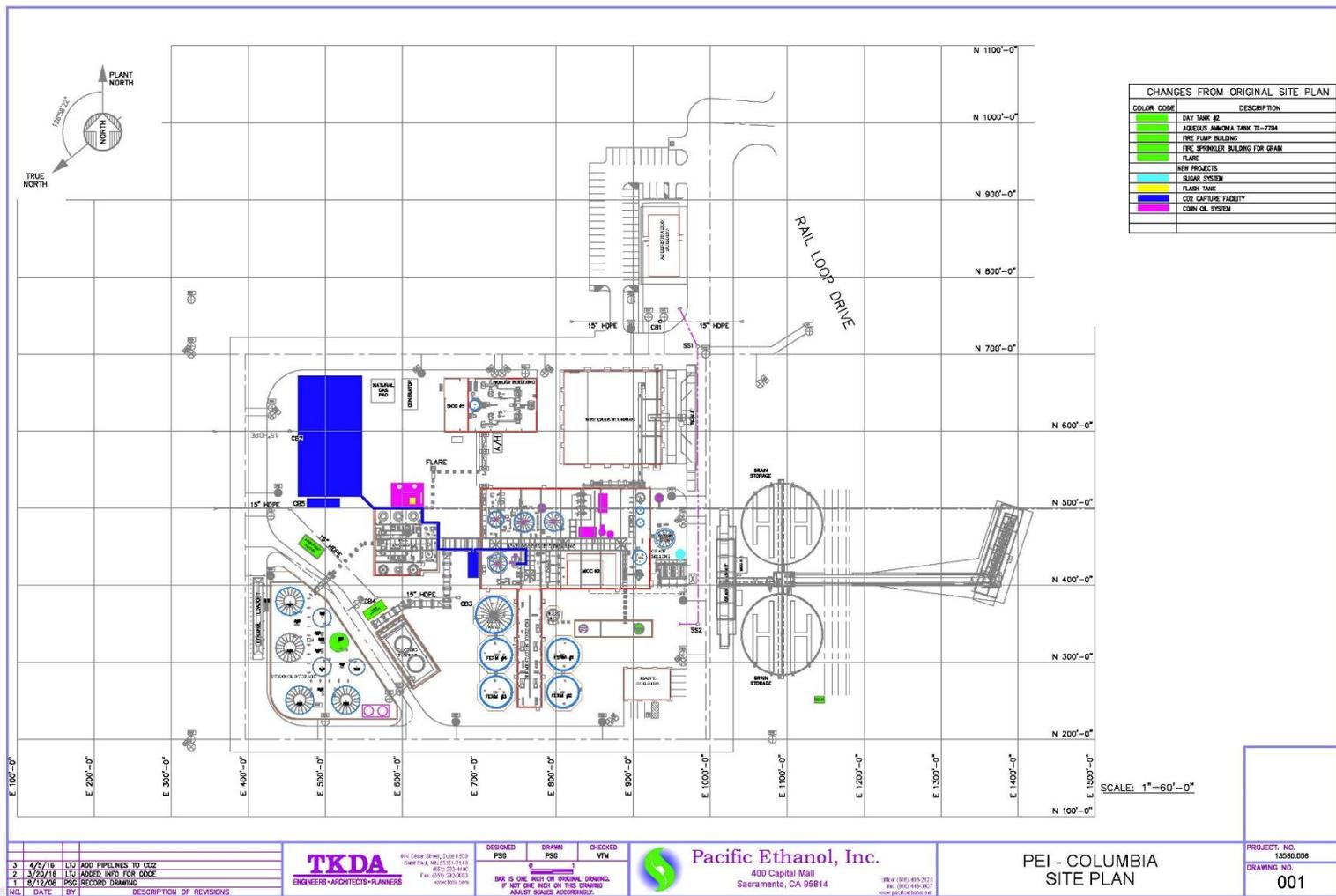


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4

5

1 **FIGURE 2: FACILITY SITE LAYOUT**
 2



3

1 **I.D Approved Facility Modifications**
2

3 In this final order, Council approves construction and operation of the following facility
4 modifications, as further described below:
5

- 6 • Corn oil extraction system (constructed and in operation)
- 7 • Sugar addition system (constructed, short-term operation complete but infrastructure
8 remains in place)
- 9 • Change in ethanol feedstock to include, in addition to the previously approved corn
10 feedstock, a blend of corn and granulated sugar (short-term use, complete)
- 11 • Carbon Dioxide (CO₂) Capture Infrastructure (constructed and in operation)
- 12 • Increase the annual ethanol production from 35 to 44 million gallons per year
- 13 • Amendment of conditions (Conditions IV.C.2 and IV.C.4), imposed to ensure compliance
14 with the Council’s Retirement and Financial Assurance standard
15

16 As explained in Section II.B Procedural History, of this order, the certificate holder expressed a
17 belief that, prior to submitting the request for amendment, that the facility modifications were
18 allowable within the terms and conditions of the site certificate and completed construction of
19 the facility modifications prior to Council approval. Following the Department’s review of the
20 requested facility modifications related to Council standards and site certificate conditions, the
21 Department determined that an amendment to the site certificate was required. The Council’s
22 evaluation of the certificate holder’s compliance with applicable Council standards, and new
23 and amended conditions are presented in Section III of this order.
24

25 *Corn Oil Extraction System*
26

27 The corn oil extraction system substantially modifies the ethanol production process by adding
28 a multi-phase process to the DWGS process. The multi-phase process includes new tanks
29 (reactors, heated, flash and evaporative), a trim heater, centrifuges, piping and a jib crane
30 which are used to separate and heat the by-product produced during ethanol production for oil
31 extraction. The extracted oil is then piped to two, new heated storage tanks located within the
32 ethanol storage area to age for a day before shipping while the remaining solids are processed
33 in the pre-existing evaporators.
34

35 *Sugar Addition System/Change in ethanol feedstock to include, in addition to the previously*
36 *approved corn feedstock, a blend of corn and granulated sugar*
37

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

1 PEC explained that construction and operation of the sugar addition system was a result of a
2 short-term Department of Agriculture initiative and that operation of the system concluded in
3 2013. However, the sugar addition system was added and operated without prior notification
4 to the Department or EFSC, and the fact that it may have been intended for short-term use
5 does not obviate the need for an amendment to the site certificate or alter the amendment
6 requirements. In addition, the sugar addition system remains in place at the energy facility, and
7 the certificate holder stated that it could be used during future operations.

8
9 *CO₂ Capture Infrastructure*

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

19
20 *Annual ethanol production of 44 million gallons per year*

21
22 The ethanol production capacity of CEP is described in Section III.A of the site certificate and
23 previously indicates that the energy facility was capable of producing 35 million gallons per year
24 (MMgy) of ethanol. Council authorizes an increase in the maximum annual ethanol production
25 from 35 to 44 MMgy, representing an annual increase of 25 percent. The certificate holder
26 explained that the increase in production would not require any new infrastructure, but would
27 result in an increase in water use and wastewater generation, but that the increase would be
28 allowable within the limits of existing third-party permits used by the facility but owned by Port
29 of Morrow.

30
31 *Amendment of conditions (Conditions IV.C.2 and IV.C.4) imposed to ensure compliance with*
32 *the Council's Retirement and Financial Assurance standard*

33
34 In the amendment request, PEC requested to amend Condition IV.C.2(b) to correctly reference
35 the land use zone and previous land use, "industrial," of the facility site, as follows:²

36
37 **Requested Amended Condition IV.C.2:** Two years before closure of the energy facility,
38 the certificate holder shall submit to the Department a proposed final retirement plan
39 for the facility and site, pursuant to OAR 345-027-0110, including:

² The certificate holder's requested amendment of Condition IV.C.2 is presented in underline/strikethrough.

- 1 (a) A plan for retirement that provides for completion of retirement within two years
2 after permanent cessation of operation of the energy facility and that protects the
3 public health and safety and the environment;
- 4 (b) A description of actions the certificate holder proposes to take to restore the site to
5 a useful, non-hazardous condition suitable for ~~agricultural~~ industrial use; and
- 6 (c) A detailed cost estimate, a comparison of that estimate with the dollar amount
7 secured by a bond or letter of credit and any amount contained in a retirement fund,
8 and a plan for assuring the availability of adequate funds for completion of
9 retirement.

10
11 PEC further requested to amend Condition IV.C.4, which requires the certificate holder to
12 submit and maintain a bond or letter of credit in an amount approved by Council and as
13 necessary to decommission the facility and restore the site to a useful, non-hazardous
14 condition. PEC specifically requested for the Council to evaluate facility decommissioning and
15 site restoration based on the land use and land use zone (Port Industrial), and requested for the
16 bond amount to be adjusted based on removal of all hazardous and non-hazardous materials,
17 cleaning of equipment and equipment lockout, and an executed agreement with the Port of
18 Morrow whereby the Port of Morrow assumes responsibility and liability of the site and agrees
19 that leaving the aboveground infrastructure in place, for the Port's potential future use,
20 satisfies the requirement to restore the site to its previous condition and restoration to a
21 useful, non-hazardous condition as required under the Council's Retirement and Financial
22 Assurance standard.

23 **II. The Amendment Process**

24 **II.A Division 27 Rules**

25
26 The Council has adopted administrative rules to determine when a site certificate amendment
27 is necessary (OAR 345-027-0030 and -0050) and rules establishing the procedure for amending
28 a site certificate (OAR 345-027-0060, -0070, and -0100). The Council's amendment rules, OAR
29 Chapter 345, Division 27, apply to this RFA.

30
31 Under OAR 345-027-0050(1), a certificate holder must submit a request to amend the site
32 certificate to design, construct, or operate a facility in a manner different from the description
33 in the site certificate if the proposed change could:

- 34
35 (a) Result in a significant adverse impact that the Council has not addressed in an earlier
36 order and the impact affects a resource protected by Council standards;
- 37 (b) Impair the certificate holder's ability to comply with a site certificate condition; or
- 38 (c) Require a new condition or a change to a condition in the site certificate.

39 ***

40 An amendment to the CEP site certificate was necessary under OAR 345-027-0050(1)(c)
41 because PEC proposed to "modify the Site Certificate to account for minor infrastructure

1 improvements to the Facility,” and the proposed amendment requires “a new condition or
2 change to a condition in the site certificate.” The certificate holder requested to change two
3 conditions as described above. In order to ensure the facility modifications comply with EFSC
4 standards and applicable requirements, the Council amends existing conditions IV.C.2 and
5 IV.C.4 and imposes several amended conditions as described below in this final order.
6 Therefore, the site certificate amendment requirements of OAR 345-027-0050(1)(c) are
7 necessarily applied to the certificate holder’s amendment request.
8

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

10
11 ***

12 *(10) In making a decision to grant or deny issuance of an amended site certificate, the*
13 *Council shall apply the applicable substantive criteria, as described in OAR 345-022-*
14 *0030, in effect on the date the certificate holder submitted the request for amendment*
15 *and all other state statutes, administrative rules, and local government ordinances in*
16 *effect on the date the Council makes its decision. The Council shall consider the*
17 *following:*

- 18
19 *(a) For an amendment that would change the site boundary or the legal description of*
20 *the site, the Council shall consider, for the area added to the site by the amendment,*
21 *whether the facility complies with all Council standards;*
22 *(b) For an amendment that extends the deadlines for beginning or completing*
23 *construction, the Council shall consider:*
24 *a. Whether the Council has previously granted an extension of the deadline;*
25 *b. Whether there has been any change of circumstances that affects a previous*
26 *Council finding that was required for issuance of a site certificate or amended*
27 *site certificate; and*
28 *c. Whether the facility complies with all Council standards, except that the*
29 *Council may choose not to apply a standard if the Council finds that:*
30 *i. The certificate holder has spent more than 50 percent of the budgeted*
31 *costs on construction of the facility;*
32 *ii. The inability of the certificate holder to complete the construction of*
33 *the facility by the deadline in effect before the amendment is the*
34 *result of unforeseen circumstances that are outside the control of the*
35 *certificate holder;*
36 *iii. The standard, if applied, would result in an unreasonable financial*
37 *burden on the certificate holder; and*
38 *iv. The Council does not need to apply the standard to avoid a significant*
39 *threat to the public health, safety or the environment;*
40 *(c) For any amendment not described above, the Council shall consider whether the*
41 *amendment would affect any finding made by the Council in an earlier order.*
42 *(d) For all amendments, the Council shall consider whether the amount of the bond or*
43 *letter of credit required under OAR 345-022-0050 is adequate.*

1
2 The amendment request would not modify the previously approved site boundary and does not
3 include an extension of construction deadlines, and as such subsections (a) and (b) are not
4 applicable. Subsection (c) and (d) however, apply, as the amendment request included changes
5 to the energy facility and related and supporting facilities, and included an amendment of two
6 previously approved conditions imposed to satisfy the requirements of the Council's
7 Retirement and Financial Assurance standard.

8
9 The applicable EFSC standards are established in OAR Chapter 345 divisions 22, 23 and 24, as
10 further described in the final order. The Council applied these standards to the amendment
11 request.

12 **II.B Procedural History**

13
14
15 In February 2016, after review of the certificate holder's change request evaluation prepared
16 pursuant to OAR 345-027-0050(5) and responses to the Department's information request, the
17 Department notified the certificate holder that a site certificate amendment was required for
18 the facility modifications described in Section I.D of this order. The certificate holder submitted
19 an evaluation of the facility modifications under the cover of a change request, versus a request
20 for amendment, and expressed a belief that the modifications were allowable within the terms
21 and conditions of the site certificate and therefore proceeded with the construction and
22 operation of those facility modifications without seeking prior Council approval through the
23 Council's site certificate amendment process.

24
25 Following the Department's review of the change request, the certificate holder complied with
26 the Department's request for submittal of an amendment request. The Council was notified
27 during its January 18, 2017 Council meeting, during a staff project update presentation, of the
28 certificate holder's request for amendment and explained that the facility modifications had
29 been completed without prior Council approval as the certificate holder's initial evaluation
30 concluded that the facility modifications were allowable within the terms and conditions of the
31 site certificate. At that meeting, there were no comments or concerns raised by members of
32 the Council.

33
34 PEC submitted RFA No. 1 on May 4, 2016. The Department then distributed a notice of receipt
35 of the RFA to reviewing agencies, Tribal Governments, the Special Advisory Group (Morrow
36 County Board of County Commissioners), the EFSC general mailing list, the special list
37 maintained for the facility, and the adjacent property owners as listed by Pacific Ethanol
38 Columbia, LLC in the amendment request.³ The amendment request was also posted to the
39 Department's website. The Department requested receipt of comments from all interested
40 parties by August 5, 2016.

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.

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

10
11 On August 8, 2017, the Department issued the proposed order, recommending approval of an
12 amended site certificate. The Department issued notice of the proposed order to the persons,
13 agencies, tribes and local governments who received notice of the amendment request; and, to
14 an updated property owner information obtained from Columbia County's current tax
15 assessment roll data. The notice included a September 7, 2017 deadline for submitting, to the
16 Department, written comments and requests for contested case on the proposed order. The
17 Department received two non-substantive comments from reviewing agencies; there were no
18 requests for contested case on the proposed order received.

19
20 The Council considered the proposed order at the September 22, 2017 Council meeting held in
21 Boardman, Oregon. At the September 22, 2017 Council meeting, the Council voted to approve
22 RFA 1 and issue a final order, authorizing amendment of the site certificate.

23
24 Pursuant to ORS 469.403, only parties to a contested case proceeding may appeal the Council's
25 decision on the site certificate amendment request to the Oregon Supreme Court. Because
26 there were no requests for contested case, there were subsequently no parties to a contested
27 case. Therefore, no party has standing to appeal this final order.

28 29 **II.C Comments Received on Amendment Request**

30
31 The Department received comments on RFA No. 1 from the following reviewing agencies and
32 Tribal Governments:⁴

- 33
- 34 • Confederated Tribes of the Umatilla Indian Reservation (CTUIR)
- 35 • Oregon PUC Safety, Reliability, and Security Division (OPUC)
- 36 • Oregon Department of Aviation (ODA)
- 37 • Oregon Department of Fish and Wildlife (ODFW)
- 38 • Morrow County Court (SAG Letter)
- 39

40 Comments related to a Council standard are addressed in Section III.A below.
41

⁴ There were no public comments received on PEC's amendment request.

1 **II.D Comments Received on Proposed Order**

2
3 The Department received non-substantive comments from two reviewing agencies, ODFW and
4 DSL, confirming that neither agency had concerns with the compliance evaluation of the facility
5 modifications included in RFA 1.⁵

6
7 The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) submitted comments
8 expressing concern regarding the sufficiency of Exhibit S, or the certificate holder’s evaluation
9 of compliance with the Council’s Historic, Cultural and Archeological Resources standard at OAR
10 345-022-0090. Specifically, CTUIR expressed concern that there are other burials in the project
11 area adjacent to site 35MW13, previously identified by the facility during the ASC phase. These
12 comments are addressed in Section III.A.11 of the final order.

13
14 **II.E Council Conclusion on Amendment Request**

15
16 Based upon review of this request for amendment and the comments and recommendations
17 received by state agencies and local government, the Council approves and grants an
18 amendment to the Columbia Ethanol Project Site Certificate (site certificate) subject to the
19 existing site certificate conditions and recommended new or modified conditions set forth in
20 this final order.

21
22 **III. Amendment Review and Applicable Standards**

23
24 **III.A Evaluation of Council Division 22 Standards**

25
26 **III.A.1 General Standard of Review, OAR 345-022-0000**

- 27
28 (1) *To issue a site certificate for a proposed facility or to amend a site*
29 *certificate, the Council shall determine that the preponderance of*
30 *evidence on the record supports the following conclusions:*
31 (a) *The facility complies with the requirements of the Oregon Energy*
32 *Facility Siting statutes, ORS 469.300 to ORS 469.570 and 469.590*
33 *to 469.619, and the standards adopted by the Council pursuant to*
34 *ORS 469.501 or the overall public benefits of the facility outweigh*
35 *the damage to the resources protected by the standards the*
36 *facility does not meet as described in section (2);*
37 (b) *Except as provided in OAR 345-022-0030 for land use compliance*
38 *and except for those statutes and rules for which the decision on*
39 *compliance has been delegated by the federal government to a*
40 *state agency other than the Council, the facility complies with all*

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.

1 *other Oregon statutes and administrative rules identified in the*
2 *project order, as amended, as applicable to the issuance of a site*
3 *certificate for the proposed facility. If the Council finds that*
4 *applicable Oregon statutes and rules, other than those involving*
5 *federally delegated programs, would impose conflicting*
6 *requirements, the Council shall resolve the conflict consistent with*
7 *the public interest. In resolving the conflict, the council cannot*
8 *waive any applicable state statute.*

9 ***

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

18
19 **Findings of Fact**

20
21 OAR 345-022-0000 provides the Council's General Standard of Review and requires the Council
22 to find that a preponderance of evidence on the record supports the conclusion that the
23 amended facility complies with the requirements of the Oregon Energy Facility Siting statutes
24 and the siting standards adopted by the Council and that the amended facility complies with all
25 other Oregon Statutes and administrative rules identified in the project order and as applicable
26 to the issuance of a site certificate for the amended facility.

27
28 The requirements of OAR 345-022-0000 are discussed in the sections that follow. The
29 Department consulted with other state agencies and Morrow County during review of RFA 1 to
30 aid in the evaluation of whether the facility, as amended, would maintain compliance with
31 statutes, rules and ordinances otherwise administered by other agencies. Additionally, in many
32 circumstances the Department relied upon these reviewing agencies' special expertise in
33 evaluating compliance with the requirements of Council standards.

34
35 Based on the following analysis, the Council amends several existing conditions and imposes a
36 new condition in the site certificate, as presented in Section III.A and in Attachment A
37 (Amended Site Certificate) of this final order. Based upon compliance with the existing,
38 amended, and new site certificate conditions, the Council finds that the facility, as amended,
39 satisfies the requirements of OAR 345-022-0000.

1 **Conclusions of Law**

2
3 Based on the findings of fact and conclusions of law provided in the following sections, and
4 subject to compliance with existing, amended, and new conditions, the Council finds that the
5 amended facility satisfies the requirements of OAR 345-022-0000.
6

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

8
9 *(1) To issue a site certificate, the Council must find that the applicant has the*
10 *organizational expertise to construct, operate and retire the proposed facility in*
11 *compliance with Council standards and conditions of the site certificate. To conclude that*
12 *the applicant has this expertise, the Council must find that the applicant has*
13 *demonstrated the ability to design, construct and operate the proposed facility in*
14 *compliance with site certificate conditions and in a manner that protects public health*
15 *and safety and has demonstrated the ability to restore the site to a useful, non-*
16 *hazardous condition. The Council may consider the applicant’s experience, the*
17 *applicant’s access to technical expertise and the applicant’s past performance in*
18 *constructing, operating and retiring other facilities, including, but not limited to, the*
19 *number and severity of regulatory citations issued to the applicant.*
20

21 *(2) The Council may base its findings under section (1) on a rebuttable presumption that*
22 *an applicant has organizational, managerial and technical expertise, if the applicant has*
23 *an ISO 9000 or ISO 14000 certified program and proposes to design, construct and*
24 *operate the facility according to that program.*
25

26 *(3) If the applicant does not itself obtain a state or local government permit or approval*
27 *for which the Council would ordinarily determine compliance but instead relies on a*
28 *permit or approval issued to a third party, the Council, to issue a site certificate, must*
29 *find that the third party has, or has a reasonable likelihood of obtaining, the necessary*
30 *permit or approval, and that the applicant has, or has a reasonable likelihood of entering*
31 *into, a contractual or other arrangement with the third party for access to the resource*
32 *or service secured by that permit or approval.*
33

34 *(4) If the applicant relies on a permit or approval issued to a third party and the third*
35 *party does not have the necessary permit or approval at the time the Council issues the*
36 *site certificate, the Council may issue the site certificate subject to the condition that the*
37 *certificate holder shall not commence construction or operation as appropriate until the*
38 *third party has obtained the necessary permit or approval and the applicant has a*
39 *contract or other arrangement for access to the resource or service secured by that*
40 *permit or approval.*
41

1 **Findings of Fact**

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

10
11 The Council addressed the Organizational Expertise standard in in the 2007 *Final Order on the*
12 *ASC*. The Council found that, based upon compliance with Condition IV.B.1 through IV.B.5, the
13 certificate holder had the expertise to construct, operate and retire the facility in compliance
14 with Council standards and that it had a reasonable likelihood of obtaining all third party
15 permits necessary.⁶

16
17 PEC is a subsidiary of Pacific Ethanol, Inc. (“PEI”). The Council previously evaluated and relied
18 upon the organizational experience and expertise of PEI to determine that the certificate
19 holder, with the experience and expertise of its parent company, had the ability to construct
20 and operate the energy facility.

21
22 The amendment request did not identify any changes to the organizational expertise of the
23 certificate holder, or its parent company. Therefore, because there have been no changes in
24 the organizational structure or expertise of the certificate holder or its parent company, the
25 Council finds that the facility modifications included in the amendment request would not
26 impact the Council’s prior findings and would not cause a change to the certificate holder’s
27 ability to construct, operate and retire the facility, as amended, in compliance with Council
28 standards and conditions of the site certificate.

29
30 **Conclusions of Law**

31
32 Based on the evidence in the record, and subject to compliance with the existing site certificate
33 conditions, the Council finds that the certificate holder continues to satisfy the requirements of
34 the Council’s Organizational Expertise standard.

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

36
37 *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the*
38 *Council must find that:*

39 *(a) The applicant, through appropriate site-specific study, has adequately*
40 *characterized the site as to the Maximum Considered Earthquake Ground Motion as*

⁶ CEPAPPDoc56 CEP Final Order 2007-08-09 (p.10-11)

1 *shown for the site in the 2009 International Building Code and maximum probable*
2 *ground motion, taking into account ground failure and amplification for the site*
3 *specific soil profile under the maximum credible and maximum probable seismic*
4 *events; and*

5
6 *(b) The applicant can design, engineer, and construct the facility to avoid dangers to*
7 *human safety presented by seismic hazards affecting the site that are expected to*
8 *result from maximum probable ground motion events. As used in this rule “seismic*
9 *hazard” includes ground shaking, ground failure, landslide, liquefaction, lateral*
10 *spreading, tsunami inundation, fault displacement, and subsidence;*

11
12 *(c) The applicant, through appropriate site-specific study, has adequately*
13 *characterized the potential geological and soils hazards of the site and its vicinity*
14 *that could, in the absence of a seismic event, adversely affect, or be aggravated by,*
15 *the construction and operation of the proposed facility; and*

16
17 *(d) The applicant can design, engineer and construct the facility to avoid dangers to*
18 *human safety presented by the hazards identified in subsection (c).*

19 ***

20 **Findings of Fact**

21
22 As provided in section (1) above, the Structural Standard generally requires the Council to
23 evaluate whether the applicant (i.e. certificate holder) has adequately characterized the
24 potential seismic, geological and soil hazards of the site, and that the applicant (i.e. certificate
25 holder) can design, engineer and construct the facility to avoid dangers to human safety from
26 these hazards.⁷

27
28 The Council addressed the Structural Standard in the 2007 *Final Order on the ASC*. The Council
29 imposed Conditions IV.E.1 through IV.E.4, which are mandatory conditions regarding
30 geotechnical investigation and protection of the public from potential seismic, geological and
31 soils hazards. The Council previously found that PEC, through appropriate site-specific study,
32 adequately characterized the site as to seismic zone and expected ground motion and ground
33 failure, taking into account amplification, during the maximum credible and maximum probable
34 seismic events. The Council also found that the certificate holder had the ability to design,
35 engineer, and construct the facility to avoid dangers to human safety presented by seismic
36 hazards affecting the site that were expected to result from all maximum probable seismic
37 events.

38
39 As explained in Section I.C of the final order, the facility site is located within a permanently
40 disturbed industrial area, leased from the Port of Morrow. All facility modifications included in

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

1 RFA 1 are located within the previously approved site boundary, in previously disturbed areas,
2 as presented on Figures 1 and 2. The certificate holder asserted that the facility modifications
3 included in RFA 1 would not impact or result in greater potential geological and soils hazards
4 than was previously evaluated in the ASC. The Council’s Structural Standard has been updated
5 since the original site certificate was issued to reference the 2009 version of the International
6 Building Code. While the code reference has changed since the original site certificate and
7 assessment in the final order, the risk to the site from seismic and non-seismic hazards,
8 including the facility modifications approved in RFA 1, remains low.

9
10 For the reasons described above, the Council finds that the facility, as amended, does not affect
11 the certificate holder’s characterization of the site or seismic hazards, or its ability to design,
12 engineer, and construct the facility to avoid dangers to human safety presented by seismic,
13 geologic or soils hazards.

14
15 **Conclusions of Law**

16
17 Based on the foregoing analysis and conclusions, and subject to compliance with the mandatory
18 site certificate conditions, the Council finds that the facility, as amended, continues to comply
19 with the Council’s Structural Standard.

20 **III.A.4 Soil Protection, OAR 345-022-0022**

21
22 *To issue a site certificate, the Council must find that the design, construction and*
23 *operation of the facility, taking into account mitigation, are not likely to result in a*
24 *significant adverse impact to soils including, but not limited to, erosion and*
25 *chemical factors such as salt deposition from cooling towers, land application of*
26 *liquid effluent, and chemical spills.*

27
28 **Findings of Fact**

29
30 The Soil Protection standard requires the Council to find that, taking into account mitigation,
31 the design, construction and operation of a facility are not likely to result in a significant
32 adverse impact to soils. The Council addressed the Soil Protection standard in the 2007 *Final*
33 *Order on the ASC* and found that the design, construction, and operation of the facility, when
34 taking into account mitigation, would not result in a significant adverse impact to soils. In the
35 original site certificate the Council adopted six conditions (Conditions IV.F.1 through IV.F.6) to
36 control and mitigate potential adverse impact to soils and to mitigate the risk of soil
37 contamination during construction and operation.⁸

38
39 Facility modifications requested in RFA 1 including increases in cooling tower flow rate resulting
40 from a 25 percent increase in annual ethanol production and operation of the corn oil

⁸ CEPAPDoc56 2007-07-02 (p. 25-26)

1 extraction system could result in soil impacts. Operation of the corn oil extraction system could
2 result in soil impacts from sediment run off during transfer of corn oil from storage tanks to
3 tanker trunks. The increase in cooling tower flow rate could result in an increase in cooling
4 tower drift (i.e. deposition of solids), which could increase chemical factors impacting soils,
5 vegetation and other adjacent land uses.
6

7 The certificate holder confirmed that a bioswale system was installed at the site and is designed
8 to capture any stormwater runoff from the site for up to a 100-year 24-hour rain event. Based
9 on this system, the 1200-Z permit previously issued by DEQ for construction-related
10 stormwater impacts (in December 2014) was cancelled as no actual run-off was occurring on-
11 site. The certificate holder also explained that ground surfaces within the site boundary are
12 predominately non-permeable, paved surfaces.⁹ Based on the installation and operation of the
13 bioswale system, and predominately non-permeable surfaces throughout the site boundary,
14 the Council finds that operation of the corn oil extraction system, and subsequent stormwater
15 runoff potential during corn oil transfer is relatively low and would not be likely to result in
16 significant adverse impacts to offsite soils.
17

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

26 As explained in Section I.C of the final order, the facility site is located within a permanently
27 disturbed industrial area, leased from the Port of Morrow. All facility modifications included in
28 RFA 1 would be located in the previously approved site boundary. Based on the scope and
29 location of the facility modifications, the Council finds that the facility, as amended, would not
30 result in any soil impacts that have not been addressed by the Council or otherwise affect the
31 certificate holder's ability to design, construct, and operate the facility without significant
32 adverse impact to soils, and that new or amended conditions would not be necessary for the
33 facility, as amended, to satisfy the standard.
34

⁹ CEPAMD1Doc27 2017-08-18

1 **Conclusions of Law**

2
3 Based on the reasoning discussed above, and subject to continued compliance with the existing
4 conditions in the site certificate, the Council finds that the facility, as amended, continues to
5 comply with the Council’s Soil Protection standard.

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

7
8 *(1) To issue a site certificate, the Council must find that the proposed facility complies*
9 *with the statewide planning goals adopted by the Land Conservation and*
10 *Development Commission.*

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

12
13 *(a) The applicant elects to obtain local land use approvals under ORS 469.504(1)(a)*
14 *and the Council finds that the facility has received local land use approval under*
15 *the acknowledged comprehensive plan and land use regulations of the affected*
16 *local government; or*

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

19
20 *(A) The proposed facility complies with applicable substantive criteria as*
21 *described in section (3) and the facility complies with any Land Conservation and*
22 *Development Commission administrative rules and goals and any land use*
23 *statutes directly applicable to the facility under ORS 197.646(3);*

24
25 *(B) For a proposed facility that does not comply with one or more of the*
26 *applicable substantive criteria as described in section (3), the facility otherwise*
27 *complies with the statewide planning goals or an exception to any applicable*
28 *statewide planning goal is justified under section (4); or*

29
30 *(C) For a proposed facility that the Council decides, under sections (3) or (6), to*
31 *evaluate against the statewide planning goals, the proposed facility complies*
32 *with the applicable statewide planning goals or that an exception to any*
33 *applicable statewide planning goal is justified under section (4).*

34 ***

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

37
38 *(A) The facility complies with applicable substantive criteria from the affected local*
39 *government’s acknowledged comprehensive plan and land use regulations that are*
40 *required by the statewide planning goals and in effect on the date the application is*
41 *submitted, and with any Land Conservation and Development Commission*

1 administrative rules and goals and any land use statutes that apply directly to the facility
2 under ORS 197.646.

3
4 *(B) For an energy facility or a related or supporting facility that must be evaluated
5 against the applicable substantive criteria pursuant to subsection (5) of this section, that
6 the proposed facility does not comply with one or more of the applicable substantive
7 criteria but does otherwise comply with the applicable statewide planning goals, or that
8 an exception to any applicable statewide planning goal is justified under subsection (2)
9 of this section.*

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

15
16 ORS 469.504(5) provides, in relevant part that:

17
18 *Upon request by the State Department of Energy, the special advisory group established
19 under ORS 469.480 shall recommend to the council, within the time stated in the
20 request, the applicable substantive criteria under subsection (1)(B)(A) of this section. If
21 the special advisory group does not recommend applicable substantive criteria within
22 the time established in the department's request, the council may either determine and
23 apply the applicable substantive criteria under subsection (1)(b) of this section or
24 determine compliance with the statewide planning goals under subsection (1)(b)(B) or
25 (C) of this section.*

26
27 **Findings of Fact**

28
29 The Land Use standard requires the Council to find that the amended facility complies with the
30 statewide planning goals adopted by the Land Conservation and Development Commission
31 (LCDC). As described above, the Council may find compliance with the statewide planning goals
32 by applying the applicable substantive criteria from the local governing body under ORS
33 469.504(1)(b)(A) or ORS 469.504(1)(b)(B).

34
35 As described in Section I.C, the facility is located within the Port Industrial (PI) Zoning District, as
36 identified in the Morrow County Comprehensive Plan (1986) and Morrow County Zoning and
37 Subdivision Code (2001). Both the Comprehensive Plan and the Zoning and Subdivision Code
38 identify the facility site as PI. The PI District (Development Code Section 3.073) lists specific uses
39 that are permitted outright. Such uses include: chemical and primary metal industrial uses that

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.

1 are port-related [3.073(A)(3)] and manufacturing, refining, processing or assembling of any
2 agricultural, mining or industrial products [3.073(A)(7)]. During the initial ASC phase, PEC
3 included a copy of a letter from the Morrow County Planning Department stating that “[t]he
4 proposed use, processing of ethanol, is an outright use in the Port Industrial Zone.” That
5 determination addressed the facility, together with the related or supporting natural gas
6 pipeline, electric supply line and ethanol pipeline.¹¹

7
8 In the original application, the Council made a determination of compliance under ORS
9 469.504(1)(b)(B) and found that the proposed facility complied with the provisions of MCZO
10 Article 3, Section 3.073(A)(3) and (7), or the applicable substantive criteria.¹² Because the
11 facility modifications included in RFA 1 would be located in the previously approved site
12 boundary, of which is permanently disturbed from previous use, and does not change the
13 primary use of the facility, the Council finds that the certificate holder and facility, as amended,
14 continue to satisfy the requirements of the Land Use standard.

15 **Conclusions of Law**

16
17
18 Based on reasons identified and discussed above, and subject to compliance with existing site
19 certificate conditions, the Council finds that the facility, as amended, continues to satisfy the
20 requirements of the Council’s Land Use standard.

21 **III.A.6 Protected Areas, OAR 345-022-0040**

22
23
24 *(1) Except as provided in sections (2) and (3), the Council shall not issue a site*
25 *certificate for a proposed facility located in the areas listed below. To issue a site*
26 *certificate for a proposed facility located outside the areas listed below, the*
27 *Council must find that, taking into account mitigation, the design, construction*
28 *and operation of the facility are not likely to result in significant adverse impact*
29 *to the areas listed below. Cross-references in this rule to federal or state statutes*
30 *or regulations are to the version of the statutes or regulations in effect as of May*
31 *11, 2007:*

- 32 *(a) National parks, including but not limited to Crater Lake National Park*
33 *and Fort Clatsop National Memorial;*
34 *(b) National monuments, including but not limited to John Day Fossil Bed*
35 *National Monument, Newberry National Volcanic Monument and*
36 *Oregon Caves National Monument;*
37 *(c) Wilderness areas established pursuant to The Wilderness Act, 16*
38 *U.S.C. 1131 et seq. and areas recommended for designation as*
39 *wilderness areas pursuant to 43 U.S.C. 1782;*

¹¹ CEPAPPDoc56 2007-07-02. (p.18-19)

¹² *Id.*

- 1 (d) National and state wildlife refuges, including but not limited to
2 Ankeny, Bandon Marsh, Baskett Slough, Bear Valley, Cape Meares,
3 Cold Springs, Deer Flat, Hart Mountain, Julia Butler Hansen, Klamath
4 Forest, Lewis and Clark, Lower Klamath, Malheur, McKay Creek,
5 Oregon Islands, Sheldon, Three Arch Rocks, Umatilla, Upper Klamath,
6 and William L. Finley;
- 7 (e) National coordination areas, including but not limited to Government
8 Island, Ochoco and Summer Lake;
- 9 (f) National and state fish hatcheries, including but not limited to Eagle
10 Creek and Warm Springs;
- 11 (g) National recreation and scenic areas, including but not limited to
12 Oregon Dunes National Recreation Area, Hell's Canyon National
13 Recreation Area, and the Oregon Cascades Recreation Area, and
14 Columbia River Gorge National Scenic Area;
- 15 (h) State parks and waysides as listed by the Oregon Department of Parks
16 and Recreation and the Willamette River Greenway;
- 17 (i) State natural heritage areas listed in the Oregon Register of Natural
18 Heritage Areas pursuant to ORS 273.581;
- 19 (j) State estuarine sanctuaries, including but not limited to South Slough
20 Estuarine Sanctuary, OAR Chapter 142;
- 21 (k) Scenic waterways designated pursuant to ORS 390.826, wild or scenic
22 rivers designated pursuant to 16 U.S.C. 1271 et seq., and those
23 waterways and rivers listed as potentials for designation;
- 24 (l) Experimental areas established by the Rangeland Resources Program,
25 College of Agriculture, Oregon State University: the Prineville site, the
26 Burns (Squaw Butte) site, the Starkey site and the Union site;
- 27 (m) Agricultural experimental stations established by the College of
28 Agriculture, Oregon State University, including but not limited to:
29 Coastal Oregon Marine Experiment Station, Astoria
30 ***
- 31 (n) Research forests established by the College of Forestry, Oregon State
32 University, including but not limited to McDonald Forest, Paul M.
33 Dunn Forest, the Blodgett Tract in Columbia County, the Spaulding
34 Tract in the Mary's Peak area and the Marchel Tract;
- 35 (o) Bureau of Land Management areas of critical environmental concern,
36 outstanding natural areas and research natural areas;
- 37 (p) State wildlife areas and management areas identified in OAR chapter
38 635, Division 8.
- 39 (2) Notwithstanding section (1), the Council may issue a site certificate for a
40 transmission line or a natural gas pipeline or for a facility located outside a
41 protected area that includes a transmission line or natural gas or water
42 pipeline as a related or supporting facility located in a protected area
43 identified in section (1), if other alternative routes or sites have been studied

1 *and determined by the Council to have greater impacts. Notwithstanding*
2 *section (1), the Council may issue a site certificate for surface facilities related*
3 *to an underground gas storage reservoir that have pipelines and injection,*
4 *withdrawal or monitoring wells and individual wellhead equipment and*
5 *pumps located in a protected area, if other alternative routes or sites have*
6 *been studied and determined by the Council to be unsuitable.*

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

12 **Findings of Fact**

13
14
15 The Protected Areas standard requires the Council to find that, taking into account mitigation,
16 the design, construction and operation of a facility are not likely to result in significant adverse
17 impacts to any protected area as defined by OAR 345-022-0040.¹³ As required under OAR 345-
18 021-0010(L), during the ASC phase the certificate holder identified the protected areas within
19 the analysis area and confirmed that there were eleven protected areas: Umatilla National
20 Wildlife Refuge, Irrigon Hatchery, Umatilla Hatchery, Crow Butte State Park (WA), Hermiston
21 Agricultural Research and Extension Center, National Historic Oregon Trail ACEC, Horn Butte
22 ACEC, Coyote Springs Wildlife Area, Irrigon Wildlife Area, Power City Wildlife Area, and Willow
23 Creek Wildlife Area. Potential impacts on these protected areas were evaluated in the 2007
24 *Final Order on the ASC* based on noise, traffic, water use and wastewater disposal, and visual
25 impacts.

26 *Evaluation of Potential Impacts to Protected Areas*

27 *Noise Impacts*

28
29
30
31 To evaluate potential noise impacts at protected areas during facility operation, the Council
32 previously relied upon the certificate holder's evaluation of distance and noise attenuation,
33 which asserted that the nearest protected area was located 1.3 miles southeast of the facility
34 and that operational noise would not be audible due to noise attenuation at a distance of 1.3
35 miles. The Council previously concluded that the facility would not result in significant adverse
36 noise impacts at protected areas.

37

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."

1 Facility modifications included in RFA 1 that could result in increased operational noise include
2 operation of the corn oil extraction system, sugar addition system, and CO₂ capture
3 infrastructure. Infrastructure associated with the corn oil extraction system is located within
4 the processing building, minimizing outdoor audible noise by being located within an enclosure.
5 The sugar addition system is electrically-powered and comprised of a stainless steel bin, rotary
6 feeder, and screw conveyer. Further, the sugar addition system does not include any significant
7 sources of noise generation such as an engine or motorized equipment. Similarly, the CO₂
8 capture infrastructure does not include any significant sources of noise generation, such as an
9 engine or motorized equipment. Therefore, the certificate holder asserts and the Council
10 agrees that noise impacts at protected areas within the analysis area from the facility, as
11 amended, would not be likely to result in significant adverse noise impacts at protected areas.
12

13 *Traffic Impacts*

14

15 The Council addressed the Public Services standard in the 2007 *Final Order on the ASC*. The
16 analysis area for public services was previously identified as the area within and extending 30-
17 miles from the site boundary.
18

19 The amendment request included facility modifications that could result in changes to daily
20 vehicle trips, specifically the construction and operation of a corn oil extraction system, a sugar
21 addition system, and a 25 percent increase in annual ethanol production.
22 The certificate holder asserted that operation of the corn oil extraction system, while it would
23 result in daily truck trips to ship out produced corn oil, would not result in an increase in the
24 number of daily truck trips at the site because the corn oil extraction process would result in a
25 proportionate reduction in the number of daily truck trips for transporting previously generated
26 feedstock out of the site.
27

28 In the amendment request, the certificate holder explained that the maximum number of truck
29 trips generated by the facility, as amended, would not exceed 284 trips per day, as originally
30 forecasted in the ASC as a worst-case scenario, and determined by the Council not to result in a
31 significant adverse impact to the ability of transportation providers to provide a public service.
32 Moreover, the certificate holder argued that the peak number of truck trips, 284 trips per day,
33 that could occur at the facility, as amended, remains below the number of trips per day
34 recommended by Morrow County as the number that would trigger a requirement for a Traffic
35 Impact Assessment, or 400 vehicle trips per day. The certificate holder also stated that most of
36 the corn shipments to the facility are by rail, and most of the ethanol shipments out of the
37 facility are by barge, and that truck traffic has been much less than 284 trips per day in recent
38 years. Finally, the certificate holder stated that truck material shipped into and out of the
39 facility only occurs during weekdays, not weekends, when most users of local protected areas
40 are likely to occur.¹⁴
41

¹⁴ RFA, Section IV. CEPAMD1Doc1 2016-5-4

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

5
6 *Water Use and Wastewater Disposal*
7

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

12
13 The certificate holder explained that the requested 25 percent increase in ethanol production
14 would not require new or modified infrastructure, but that it would result in a 25 increase in
15 water use and wastewater generation. The certificate holder further asserted that operation of
16 the sugar addition system would result in a slight reduction (5 percent) in water use during the
17 mash process, and confirmed that there would be no impact on wastewater quantities
18 generated onsite. As expressed in the amendment request, the anticipated water use and
19 wastewater generation from the facility, as amended, are allowable within the limitations of
20 the existing third-party wastewater discharge permits held by the Port of Morrow, as used by
21 the facility.

22
23 Therefore, the Council finds that water use and disposal during construction and operation of
24 the facility, as amended, would not affect water quantity or water quality within any protected
25 area.

26
27 *Visual Impacts*
28

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

39
40 The Council concludes that the facility modifications included in the amendment request would
41 not result in any impacts to protected areas that have not been addressed by the Council in a
42 previous order, or otherwise affect the certificate holder's ability to design, construct and
43 operate the facility without significant adverse impact to protected areas.

1 **Conclusions of Law**

2
3 Based on the analysis above, the Council finds that the facility, as amended, satisfies the
4 requirements of the Protected Areas standard.

5
6 **III.A.7 Retirement and Financial Assurance, OAR 345-022-0050**

7
8 *To issue a site certificate, the Council must find that:*

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

12
13 (2) *The applicant has a reasonable likelihood of obtaining a bond or letter of*
14 *credit in a form and amount satisfactory to the Council to restore the site*
15 *to a useful, non-hazardous condition.*

16
17 **Findings of Fact**

18
19 The Retirement and Financial Assurance standard requires a finding that the facility site can be
20 restored to a useful, non-hazardous condition at the end of the facility’s useful life, should
21 either the certificate holder stop construction or should the facility cease to operate.¹⁵ In
22 addition, it requires a demonstration that the applicant (i.e. certificate holder) can obtain a
23 bond or letter of credit to restore the site to a useful, non-hazardous condition.

24
25 For this standard, the certificate holder requested Council interpretation of the phrase “useful,
26 non-hazardous condition” as referenced in OAR 345-022-0050(1). The Council’s historic
27 interpretation of the phrase is that it refers to a condition that is, “consistent with the local
28 comprehensive land use plan and land use regulations.”¹⁶ The certificate holder noted that
29 while this interpretation was applied in the 2007 *Final Order on the ASC*, an evaluation of the
30 specific level of restoration necessary to achieve conditions that are consistent with the local
31 comprehensive land use plan and land use regulations was not provided. The certificate holder
32 further explained that the phrase, “useful, non-hazardous” is not defined in rule or statute and
33 expressed a belief that based upon the ambiguity of the Council’s previous findings and the lack
34 of statutorily defined terms, that the Council has the discretion to interpret the phrase with
35 more flexibility than solely based upon complete removal of all facility components.

36
37 The certificate holder requested that the Council interpret the phrase, “useful, non-hazardous”
38 as a condition allowing for aboveground infrastructure to remain in place, once appropriately

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

1 cleaned. The certificate holder clarified that the request for a differing Council interpretation
2 was specific to the land use designation for the facility, Port Industrial.
3 The Council notes while there are several energy facilities located in industrial zones, the
4 Columbia Ethanol Project is the only energy facility under EFSC-jurisdiction located in a Port
5 Industrial zone. Based upon the Council’s review of historic Council decisions, restoration of a
6 site to a “useful, non-hazardous condition” includes removal of all above-ground, and in some
7 cases below-ground, facility components, and revegetation of the site. This interpretation has
8 uniformly been applied across Council decisions on energy facilities, regardless of the
9 underlying land use designation. The Council’s evaluation of the certificate holder’s requested
10 interpretation and its consistency with Morrow County’s land use zoning requirements for a
11 Port Industrial zone is provided in the following section.

12
13 *Restoration of the Site Following Cessation of Construction or Operation*

14
15 OAR 345-022-0050(1) requires the Council to find that the site of the facility, as amended, can
16 be restored to a useful non-hazardous condition at the end of the facility’s useful life. While the
17 certificate holder originally estimated that the facility’s useful life would extend for 30-years, or
18 through 2037 based on the date of the original final order, the site certificate does not establish
19 an operational limit. The facility may continue to operate into perpetuity, assuming that the
20 facility continues to operate as an energy facility under EFSC jurisdiction and in substantial
21 compliance with the terms and conditions of the site certificate.

22
23 As explained in the 2007 *Final Order on the ASC*, the following conditions were imposed to
24 ensure compliance with OAR 345-022-0050(1):

25
26 **Existing Condition IV.C.1:** The certificate holder shall retire the facility if the certificate
27 holder permanently ceases construction or operation of the facility. The certificate
28 holder shall retire the facility according to a final retirement plan approved by the
29 Council, as described in OAR 345-027-0110, and prepared pursuant to Condition
30 (IV.C.2).

31
32 **Existing Condition IV.C.2:** Two years before closure of the energy facility, the certificate
33 holder shall submit to the Department a proposed final retirement plan for the facility
34 and site, pursuant to OAR 345-027-0110, including:

- 35 (d) A plan for retirement that provides for completion of retirement within two years
36 after permanent cessation of operation of the energy facility and that protects the
37 public health and safety and the environment;
- 38 (e) A description of actions the certificate holder proposes to take to restore the site to
39 a useful, non-hazardous condition suitable for agricultural use; and
- 40 (f) A detailed cost estimate, a comparison of that estimate with the dollar amount
41 secured by a bond or letter of credit and any amount contained in a retirement fund,
42 and a plan for assuring the availability of adequate funds for completion of
43 retirement.

1
2 **Existing Condition IV.C.3:** The certificate holder shall prevent the development of any
3 conditions on the site that would preclude restoration of the site to a useful, non-
4 hazardous condition to the extent that prevention of such site conditions is within the
5 control of the certificate holder.
6

7 The certificate holder requested that the Council amend Condition IV.C.2(b) and IV.C.4 as
8 further described below. Condition IV.C.2 previously indicated that the site be restored to a
9 condition suitable for agricultural use, which the Council concludes was a scrivener's error and
10 was incorrect based on the actual land use zoning designation, Port Industrial, as applied by the
11 County. Therefore, the Council amends Condition IV.C.2(b) to reference restoration of the site
12 suitable for industrial use, not agricultural use, based upon the zoned land use of the facility
13 site, consistent with the certificate holder's request:
14

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

- 18 (a) A plan for retirement that provides for completion of retirement within two years
19 after permanent cessation of operation of the energy facility and that protects the
20 public health and safety and the environment;
21 (b) A description of actions the certificate holder proposes to take to restore the site to
22 a useful, non-hazardous condition suitable for ~~agricultural~~ industrial use; and
23 (c) A detailed cost estimate, a comparison of that estimate with the dollar amount
24 secured by a bond or letter of credit and any amount contained in a retirement fund,
25 and a plan for assuring the availability of adequate funds for completion of
26 retirement.
27

28 The facility modifications in RFA 1, as approved in this final order, including the corn oil
29 extraction system, sugar addition system, CO₂ capture infrastructure, and a change in ethanol
30 feedstock to include both corn and a blend of corn and granulated sugar could result in actions
31 or tasks necessary to restore the site to a useful, non-hazardous condition that were not
32 previously evaluated in the ASC or original final order. Therefore, the certificate holder
33 provided an evaluation of the specific actions and tasks necessary for restoration of the site of
34 the facility, as amended, to a useful, non-hazardous condition.
35

36 The certificate holder requested that the Council consider two scenarios for determining
37 compliance with the Retirement and Financial Assurance standard. In the first scenario,
38 Scenario 1, the certificate holder evaluated the tasks necessary for the removal of all above-
39 ground infrastructure to slab-grade, including new facility components included in the
40 amendment request. Scenario 1 represents the traditional evaluation for decommissioning and
41 site restoration as historically reviewed and approved by Council. The certificate holder
42 provided an updated retirement cost estimate, as developed by a qualified, third-party
43 contractor, based on the currently operating facility and accounting for all facility modifications

1 included in the amendment request. As explained below, the certificate holder's retirement
2 cost estimate represents a lesser value than the current bond requirement. The Council's
3 assessment of the adequacy of the retirement cost estimate is further evaluated below.
4

5 In the second scenario, Scenario 2, the certificate holder evaluated the tasks necessary for
6 removal and disposal of all hazardous and non-hazardous materials, and equipment cleaning
7 and lock-out, with the above-ground infrastructure including buildings remaining in place.
8 Scenario 2 represents a unique evaluation for decommissioning and site restoration, utilizing an
9 interpretation of the language of the standard not previously considered by Council. The
10 certificate holder provided a retirement cost estimate, as developed by a qualified, third-party
11 contractor, based on the currently operating facility and accounting for all facility modifications
12 included in the amendment request. The Council's assessment of the adequacy of the
13 retirement cost estimate is further evaluated below. For this scenario, the certificate holder
14 proposed to maintain a bond or letter of credit in the amount necessary for the removal and
15 disposal of all hazardous and non-hazardous materials, and equipment cleaning and lock-out.
16 The bond or letter of credit does not include costs associated with removal of the above-ground
17 infrastructure, which are proposed in Scenario 2 to remain in place. The certificate holder
18 submitted an executed agreement between PEC and the Port of Morrow, where the Port of
19 Morrow accepts all future liability of the facility. The Council's compliance evaluation and new
20 site certificate conditions are presented below. The certificate holder requests Council approval
21 of Scenario 2 but provided Scenario 1 in the alternative.
22

23 The certificate holder's evaluation of tasks and actions necessary to restore the site to a useful,
24 non-hazardous condition is based on three categories: demolition of buildings and plant facility;
25 facility decommissioning; and, removal of hazardous materials. The certificate holder
26 represented that all three categories apply to the assessment based on removal of all
27 aboveground infrastructure to slab-grade; and the removal of hazardous materials category
28 applies to the scenario where aboveground infrastructure would be appropriately cleaned of all
29 contamination but would remain in place. As described below, the Council concludes that
30 several of the actions described for facility decommissioning shall be applied to the certificate
31 holder's second assessment for Scenario 2.
32

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

34

35 The tasks and actions represented by the certificate holder as necessary to restore the site to a
36 useful, non-hazardous condition, assuming the removal of aboveground infrastructure to slab-
37 grade, include the following:
38

- 39 • Survey and testing for hazardous materials
- 40 • Process streams including corn silos, conveyors, surge bin, hammer mills, front end
41 mixing tanks and vessels would be drained, flushed and emptied
- 42 • Vacuum trucks would be used to drain and transport hazardous materials for proper
43 disposal

- 1 • Minor additional non-hazardous cleanup and proper transport and disposal
- 2 • Lock-down of electrical equipment
- 3 • Utility disconnect; cut and cap all above- and belowground utilities
- 4 • Removal and disposal of buildings, tanks and equipment
- 5 • Mechanical systems lockout
- 6 • General site/area wash down
- 7 • Pumping of cooling tower water to city wastewater
- 8 • Removal of boiler blowdown water
- 9 • Wash-down of Fermentation and Distillation, Drying and Evaporation Building

10
11 The certificate holder's consultant, Terry Freeman of the FCM Group, prepared the
12 decommissioning task list and decommissioning/site restoration cost estimate for the
13 amendment request. The certificate holder provided evidence of Mr. Freeman's qualifications
14 in preparing this type of evaluation and described that he was the construction manager for
15 Pacific Ethanol's facility in Stockton, California and therefore understands the actions necessary
16 for decommissioning ethanol facilities. The Council concludes that Mr. Freeman and the FCM
17 Group have the experience necessary to adequately and accurately prepare a list of actions and
18 tasks necessary for the decommissioning of an ethanol facility.

19
20 *Aboveground Infrastructure Remains In-Place (Scenario 2)*

21
22 The tasks and actions represented by the certificate holder as necessary to restore the site to a
23 useful, non-hazardous condition, assuming the aboveground infrastructure is cleaned of all
24 contamination but remains in place, include the following:

- 25
- 26 • Survey and testing for hazardous materials
- 27 • Process streams including corn silos, conveyors, surge bin, hammer mills, front end
- 28 mixing tanks and vessels would be drained, flushed and emptied
- 29 • Vacuum trucks would be used to drain and transport hazardous materials for proper
- 30 disposal
- 31 • Minor additional non-hazardous cleanup and proper transport and disposal
- 32 • Lock-down of electrical equipment

33
34 As described above, the Council concludes that the additional steps listed below, identified by
35 the certificate holder as necessary for facility decommissioning, also apply to this assessment:

- 36
- 37 • General site/area wash down
- 38 • Pumping of cooling tower water to city wastewater
- 39 • Removal of boiler blowdown water
- 40 • Wash-down of Fermentation and Distillation, Drying and Evaporation Building
- 41

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

12
13 In the 2007 *Final Order on the ASC*, the Council determined that restoring the site to a "useful
14 and non-hazardous" condition refers to a condition that is "...consistent with the applicable
15 local comprehensive land use plan and land use regulations." The certificate holder asserted
16 that there is nothing in the underlying comprehensive plan and land use regulations that
17 requires an industrial zoned facility, upon retirement, to have all above ground structures
18 dismantled and removed. The certificate holder further stated that while EFSC may have the
19 statutory authority to create the requirement that a certificate holder return a site to a useful
20 and non-hazardous condition, EFSC rules do not define what is considered a "useful, non-
21 hazardous condition."¹⁷

22
23 The certificate holder requested that because clean, empty tanks, infrastructure and buildings
24 associated with the facility would be compatible with PI industrial zoning and use, the Council
25 consider that a useful, non-hazardous condition would be achieved by leaving the infrastructure
26 in place for future use by the Port of Morrow, who through an executed legally-binding
27 agreement has confirmed an arrangement to leaving above slab-grade infrastructure in place
28 and accepted responsibility of future site restoration and remediation responsibility.

29
30 To support an evaluation of the certificate holder’s request, the Council considers the county’s
31 purpose of the PI zone which is to regulate development and provide for port-related industrial
32 uses. Specifically, MCZO Section 3.073 states that, “The PI zone is *intended to regulate*
33 *development* at portions of the Port of Morrow Industrial Park and other appropriate locations.
34 The zone is *intended to provide for port-related industrial uses and be an industrial sanctuary*,
35 limiting commercial uses to those appropriate and necessary to serve the needs of the workers
36 employed within the zone.” [Emphasis added]. This purpose differs from the purpose of other
37 industrial zones within the county, such as Rural Light Industrial (MCZO Section 3.075) and
38 General Industrial (MCZO Section 3.070), which establish purposes for providing and protecting
39 *area* for industrial *development*. [Emphasis added].

40

¹⁷ RFA, Section V, CEPAMD1Doc1 2016-5-4

1 Therefore, the Council considers that the county’s PI zone purpose is to provide for industrial
2 use, and that for other industrial zones, the purpose is to provide area for industrial
3 development. The Council thereby interprets the phrase, “useful, non-hazardous” as a
4 condition within a PI zone where above-ground infrastructure may remain in place, once
5 cleaned, and does not include industrial areas where the zoning purpose is intended, for
6 example, to both provide and protect area for industrial development. The Council considers
7 the certificate holder’s request to leave the remaining above-ground infrastructure in place,
8 once cleaned, to be consistent with the PI zone purpose to provide for industrial use, but that it
9 would not be consistent with a zone purpose that included protection for industrial
10 development as the area would not be available for development if above-ground
11 infrastructure remained.

12
13 In addition, the Council considers the following: (1) the land within the site boundary is owned
14 by the Port of Morrow, (2) the Port is subject to the legal requirements and authorizations of
15 ORS Chapter 777, which authorizes the Port to use land within its boundaries for industrial
16 purposes, (3) the Port has provided a letter of support indicating that the land improvements
17 made by the certificate holder as part of the construction and operation of the facility would
18 continue to provide value to the Port following termination of the site certificate, following
19 removal of hazardous materials, and (4) the Port and PEC have executed an agreement that
20 provides for transfer of the improvements from PEC to the Port.

21
22 Based on the above considerations, the Council concludes that a bond or letter of credit
23 sufficient to cover the tasks and actions listed in this section under Scenario 2 would be
24 sufficient to restore the site to a useful, non-hazardous condition. In addition, Council adopts
25 Condition IV.C.13 and confirms receipt of a copy of a fully executed agreement between the
26 certificate holder and the Port of Morrow that is materially consistent with the draft agreement
27 included as Attachment C to the proposed order. The fully executed agreement, as reviewed
28 and approved by Council, is provided as Attachment C to the final order.

29
30 The Council hereby finds that applying a differing interpretation of the phrase, “useful, non-
31 hazardous,” is appropriate within the context of the purpose of Morrow County’s PI zone,
32 receipt of a copy of the executed legally binding agreement with the Port of Morrow, and the
33 certificate holder’s obligation to maintain a present-value bond or letter of credit in an amount
34 necessary to restore the site to a “useful, non-hazardous condition,” covering the tasks and
35 actions presented above under Scenario 2.

36
37 *Estimated Cost of Site Restoration*

38
39 In the 2007 *Final Order on the ASC*, the Council concluded that, based upon the evaluation of a
40 third-party contractor hired by the Department, the cost of site restoration was estimated at
41 \$800,000 (2nd Quarter 2007 dollars), excluding any deduction for scrap or salvage value. In the
42 proposed order, the Department noted, and the Council understands, that the \$800,000 site

1 restoration estimate was based on a 2007 evaluation and that the bond amount currently
2 required based upon inflation is \$916,800.

3
4 *Removal of Aboveground Infrastructure to Slab-Grade (Scenario 1)*
5

6 During its review of the proposed order on September 22, 2017, the Council concluded that the
7 certificate holder's evaluation under Scenario 2 was sufficient to satisfy the requirements of the
8 standard. However, because there are provisions of new condition IV.C.13, as presented below,
9 that, if triggered, would require the certificate holder to submit to the Department a bond or
10 letter of credit in the full amount necessary to remove all above-ground facility components to
11 slab-grade, it is necessary for the Council to determine the amount of such bond or letter of
12 credit. As part of Scenario 1, the certificate holder provided a more current and representative
13 retirement and restoration cost estimate for removal to slab-grade for Council's review. The
14 updated cost estimate, based upon the Department's review, was necessarily \$852,000 based
15 on fourth quarter 2016 dollars. The Council concludes that the updated retirement cost
16 estimate under Scenario 1 is sufficient to remove all above-ground facility infrastructure to
17 slab-grade.

18
19 *Aboveground Infrastructure Remains In-Place (Scenario 2)*
20

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

34 As described above, the Council considers the tasks identified by the certificate holder for
35 material removal and cleanup and facility decommissioning as necessary for Scenario 2 and that
36 the retirement cost estimate for this scenario is, more accurately, \$295,172, which includes the
37 certificate holder's cost estimates for removal of hazardous materials, material removal and
38 cleanup, and facility decommissioning. Council therefore amends Condition IV.C.4 and adopts
39 Condition IV.C.13.

1 **Amended Condition IV.C.4:** Within 30 days after ~~the effective date of the site certificate~~
2 execution of the first amended site certificate, the certificate holder shall submit to the
3 State of Oregon, through the Council, a bond or letter of credit in the amount of
4 ~~\$800,000~~295,172 (in ~~Second~~ Fourth Quarter 2007~~16~~ dollars) naming the State of Oregon,
5 acting by and through the Council, as beneficiary or payee.

- 6 (a) The certificate holder shall adjust the amount of the bond or letter of credit to
7 present value annually, using the U.S. Gross Domestic Product Implicit Price
8 Deflator, Chain-Weight, as published in the Oregon Department of Administrative
9 Services' "Oregon Economic and Revenue Forecast," or by any successor agency
10 ("Index"). If at any time the Index is no longer published, the Council shall select a
11 comparable calculation to adjust ~~Second~~ Fourth Quarter 2007~~16~~ dollars to present
12 value.
13 (b) The form of bond or letter of credit shall be subject to prior approval by the Council.
14 (c) The issuer of the bond or letter of credit shall be subject to prior approval by the
15 Council.
16 (d) The certificate holder shall describe the status of the bond or letter of credit in the
17 annual report submitted to the Council under Condition (VI.B.6).
18 (e) The bond or letter of credit shall not be subject to revocation or reduction before
19 retirement of the facility.
20

21 *Ability of the Applicant (Certificate Holder) to Obtain a Bond or Letter of Credit*
22

23 OAR 345-022-0050(2) requires the Council to find that the certificate has a reasonable
24 likelihood of obtaining a bond or letter of credit in a form and amount necessary to restore the
25 facility site to a useful non-hazardous condition. A bond or letter of credit provides a site
26 restoration remedy to protect the state of Oregon and its citizens if the certificate holder fails
27 to perform its obligation to restore the site. The bond or letter of credit must remain in force
28 until the certificate holder has restored the site.
29

30 As explained in the 2007 *Final Order on the ASC*, the following conditions were imposed to
31 ensure compliance with OAR 345-022-0050(2):
32

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

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

- 1 (c) The issuer of the bond or letter of credit shall be subject to prior approval by the
2 Council.
3 (d) The certificate holder shall describe the status of the bond or letter of credit in the
4 annual report submitted to the Council under Condition (VI.B.6).
5 (e) The bond or letter of credit shall not be subject to revocation or reduction before
6 retirement of the facility.
7

8 **Existing Condition IV.C.5:** If the certificate holder elects to use a bond to meet the
9 requirements of Condition (IV.C.4), the certificate holder shall ensure that the surety is
10 obligated to comply with the requirements of applicable statutes, Council rules and this
11 site certificate when the surety exercises any legal or contractual right it may have to
12 assume construction, operation or retirement of the energy facility. The certificate
13 holder shall also ensure that the surety is obligated to notify the Council that it is
14 exercising such rights and to obtain any Council approvals required by applicable
15 statutes, Council rules and this site certificate before the surety commences any activity
16 to complete construction or to operate or retire the energy facility.
17

18 **Existing Condition IV.C.6:** Not later than ten years after the date of commercial
19 operation of the energy facility, and each ten years thereafter during the life of the
20 energy facility, the certificate holder shall complete an independent Phase I
21 Environmental Site Assessment of the energy facility site. Within 30 days after its
22 completion, the certificate holder shall deliver the Phase I Environmental Site
23 Assessment report to the Department.
24

25 **Existing Condition IV.C.7:** In the event that any Phase I Environmental Site Assessment
26 identifies improper handling or storage of hazardous substances or improper record
27 keeping procedures, the certificate holder shall correct such deficiencies within six
28 months after completion of the corresponding Phase I Environmental Site Assessment.
29 It shall promptly report its corrective actions to the Department. The Council shall
30 determine whether the corrective actions are sufficient.
31

32 **Existing Condition IV.C.8:** The certificate holder shall report to the Department any
33 release of hazardous substances, pursuant to DEQ regulations, within one working day
34 after the discovery of such release. This obligation shall be in addition to any other
35 reporting requirements applicable to such a release.
36

37 **Existing Condition IV.C.9:** If the certificate holder has not remedied a release consistent
38 with applicable Oregon Department of Environmental Quality standards or if the
39 certificate holder fails to correct deficiencies identified in the course of a Phase I
40 Environmental Site Assessment within six months after the date of the release or the
41 date of completion of the Phase I Environmental Site Assessment, the certificate holder
42 shall submit to the Council for its approval an independently prepared estimate of the
43 additional cost of remediation or correction within such six-month period.

- 1 (a) Upon approval of an estimate by the Council, the certificate holder shall increase the
2 amount of its bond or letter of credit by the amount of the estimate.
3 (b) In no event, however, shall the certificate holder be relieved of its obligation to
4 exercise all due diligence in remedying a release of hazardous substances or
5 correcting deficiencies identified in the course of a Phase I Environmental Site
6 Assessment.
7

8 **Existing Condition IV.C.10:** All funds received by the certificate holder from the salvage
9 of equipment and buildings shall be committed to the restoration of the energy facility
10 site to the extent necessary to fund the approved site restoration and remediation.
11

12 **Existing Condition IV.C.11:** The certificate holder shall pay the actual cost to restore the
13 site to a useful, non-hazardous condition at the time of retirement, notwithstanding the
14 Council's approval in the site certificate of an estimated amount required to restore the
15 site.
16

17 **Existing Condition IV.C.12:** If the Council finds that the certificate holder has
18 permanently ceased construction or operation of the facility without retiring the facility
19 according to a final retirement plan approved by the Council, as described in OAR 345-
20 027-0110 and prepared pursuant to Condition (IV.C.2), the Council shall notify the
21 certificate holder and request that the certificate holder submit a proposed final
22 retirement plan to the Department within a reasonable time not to exceed 90 days.

- 23 (a) If the certificate holder does not submit a proposed final retirement plan by the
24 specified date, the Council may direct the Department to prepare a proposed a final
25 retirement plan for the Council's approval.
26 (b) Upon the Council's approval of the final retirement plan, the Council may draw on
27 the bond or letter of credit described in Condition (IV.C.4) to restore the site to a
28 useful, non-hazardous condition according to the final retirement plan, in addition to
29 any penalties the Council may impose under OAR Chapter 345, Division 29.
30 (c) If the amount of the bond or letter of credit is insufficient to pay the actual cost of
31 retirement, the certificate holder shall pay any additional cost necessary to restore
32 the site to a useful, non-hazardous condition.
33 (d) After completion of site restoration, the Council shall issue an order to terminate the
34 site certificate if the Council finds that the facility has been retired according to the
35 approved final retirement plan.
36

37 The Council acknowledges that the existing site certificate conditions, as referenced above,
38 provide a reasonable level of assurance that the facility site is being maintained and evaluated
39 for release of hazardous and non-hazardous materials. Specifically, the facility is required to
40 complete independent Phase I Environmental Site Assessments every 10-years, and address any
41 issues identified during the site assessment within 6-months of the evaluation or provide an
42 estimate to the Council of the cost for remediation, which would then be added to the amount
43 required for the retirement bond or letter of credit. These conditions, (except Condition IV.C.4,

1 which is amended by this final order), would continue to apply as currently imposed in the site
2 certificate to the facility, regardless of the Council’s decision on the interpretation of the
3 language of the standard.

4
5 The certificate holder is currently in compliance with the requirements of existing Condition
6 IV.C.4, and maintains a bond in an amount and form satisfactory to the Council for facility
7 retirement. Therefore, the Council concludes that the certificate holder has a reasonable
8 likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the
9 Council to restore the site to a useful, non-hazardous condition. Moreover, the certificate
10 holder submitted an executed agreement between the facility and Port of Morrow.

11
12 *Retirement and Financial Assurance standard, Scenario 2 Interpretation – New Condition*

13
14 In the amendment request, the certificate holder supported the Council’s review of Scenario 2
15 by explaining that the Port of Morrow prefers for any and all above-ground infrastructure to
16 remain in place upon retirement of the facility and has provided an executed legally binding
17 agreement with the Port of Morrow that: (1) states that leaving the above ground
18 infrastructure after cleaning and removing any chemicals, fuels or other hazardous materials,
19 would return the site to a “useful, non hazardous condition; and: (2) shifts any legal liability for
20 removing above ground infrastructure to the Port and away from EFSC on behalf of the State of
21 Oregon and PEC.¹⁸

22
23 The Council finds that the certificate holder’s proposal under Scenario 2 would satisfy the
24 requirements of the standard based upon compliance with existing conditions, the amended
25 Condition IV.C.4, and a new condition, Condition IV.C.13. Condition IV.C.13 requires the
26 certificate holder to maintain a bond or letter of credit in the amount necessary to remove all
27 hazardous and non-hazardous materials from the site, and to clean and shut-down all
28 equipment. The condition also requires that the certificate holder obtain Council approval prior
29 to any amendment or termination of the agreement between PEC and the Port of Morrow,
30 through a site certificate amendment request. If prior Council approval is not obtained, the
31 certificate holder would be required to submit to the Department a bond or letter of credit in
32 the full amount necessary to remove all aboveground infrastructure (i.e. \$852,000 in 4th
33 Quarter 2016 dollars). The new condition also requires the certificate holder to provide
34 evidence to the Department, on an annual basis, of active property coverage under its
35 commercial business insurance policy from high loss catastrophic events including but not
36 limited to an onsite explosion or fire.

37
38 New Condition IV.C.13 further requires the certificate holder to submit a bond or letter of
39 credit in the full amount, \$852,000 in 4th Quarter 2016 dollars, in the event that a term or
40 condition of the site certificate is violated. Council finds that the provisions of this condition
41 further reduce future liability of the Council in the event of a change in agreement terms

¹⁸ RFA, Section v, CEPAMD1Doc1 2016-5-4.

1 between the certificate holder and the Port of Morrow, future site certificate condition
2 violation, or unanticipated catastrophic event that could impact the condition of the site or the
3 certificate holder's ability to restore the site to a useful, non-hazardous condition.

4
5 Council imposes new Condition IV.C.13 as follows:

6
7 **New Retirement and Financial Assurance Condition IV.C.13:**

8 (1): The certificate holder shall maintain a bond or letter of credit in an amount of
9 \$295,000 (in 4th Quarter 2016 dollars) naming the State of Oregon, acting by and
10 through the Council, as beneficiary or payee.

11 (a) The certificate holder shall adjust the amount of the bond or letter of credit
12 to present value annually, using the U.S. Gross Domestic Product Implicit
13 Price Deflator, Chain-Weight, as published in the Oregon Department of
14 Administrative Services' "Oregon Economic and Revenue Forecast," or by any
15 successor agency ("Index"). If at any time the Index is no longer published,
16 the Council shall select a comparable calculation to adjust Fourth Quarter
17 2016 dollars to present value.

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

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

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

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

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

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

35 (4) If there has been a violation of the terms or conditions of the site certificate for
36 which sanctions may be imposed, as described in OAR 345-029-0000, the
37 certificate holder shall, within 90-days following the Department's issuance of a
38 notice of violation, submit to the Department a bond or letter of credit in the
39 amount of \$852,000 (in 4th Quarter 2016 dollars) naming the State of Oregon,

1 acting by and through the Council, as beneficiary or payee and consistent with
2 the above-terms presented in (1)(a-e).¹⁹
3

4 Subject to compliance with the existing, amended and new conditions, the Council finds that
5 under the certificate holder's Scenario 2, the certificate holder has the ability to restore the site
6 to a useful, non-hazardous condition and has a reasonable likelihood of obtaining a bond or
7 letter of credit in a form and amount satisfactory to the Council to restore the site to a useful,
8 non-hazardous condition. The Council further finds that the amount necessary to restore the
9 site to a useful, non-hazardous condition is based upon Scenario 2, which covers the costs to
10 remove and properly dispose of all hazardous and non-hazardous materials from the site; and,
11 clean and lock-out all equipment for transfer to the Port of Morrow for future useful, industrial
12 use within a PI zone.

13
14 **Conclusions of Law**
15

16 Based on the evidence in the record, and subject to compliance with the existing, amended,
17 and new site certificate conditions, the Council finds that the certificate holder would, under
18 Scenario 2, continue to satisfy the requirements of the Council's Retirement and Financial
19 Assurance standard.
20

21 **III.A.8 Fish and Wildlife Habitat, OAR 345-022-0060**
22

23 *To issue a site certificate, the Council must find that the design, construction and*
24 *operation of the facility, taking into account mitigation, are consistent with the fish and*
25 *wildlife habitat mitigation goals and standards of OAR 635-415-0025 in effect as of*
26 *September 1, 2000.*
27

28 **Findings of Fact**
29

30 The Fish and Wildlife Habitat standard requires the Council to find that the design,
31 construction, and operation of a facility are consistent with fish and wildlife habitat mitigation
32 goals as set forth in OAR 635-415-0025.
33

34 The Council addressed the Fish and Wildlife Habitat standard in the 2007 *Final Order on the ASC*
35 and imposed Conditions IV.H.1 through IV.H.3, which required the certificate holder to restore
36 temporarily disturbed areas using a pre-approved seed mix; implement a Habitat Mitigation
37 Plan; and, minimize permanent facility impacts, implement best management practices to
38 prevent loss of topsoil during construction, and control noxious weeds. The Council previously
39 found that the facility had the ability to satisfy the requirements of the Fish and Wildlife Habitat

¹⁹ During review of the proposed order at the September 22, 2017 Council meeting, the Council requested that Condition IV.C.13 be amended to include the language presented in Condition IV.C.13(4), to be consistent with the terms of the Section 4 of the executed agreement (see Attachment C of the final order).

1 standard, subject to compliance with the site certificate conditions, because the facility would
2 not impact habitat Categories 1, 2, 3 or 4; and, the facility would meet the mitigation goal for its
3 permanent impacts to Category 5 habitat by implementing a Habitat Mitigation Plan.
4

5 As explained in Section I.C of the final order, the facility site is located within a permanently
6 disturbed industrial area, leased from the Port of Morrow. All facility modifications included in
7 RFA 1 would be located in the previously approved site boundary. The certificate holder asserts
8 that the facility modifications included in RFA 1 would not impact or result in greater impacts to
9 fish and wildlife habitat than was previously evaluated in the ASC. ODFW submitted a letter on
10 the RFA, stating that it had no comments as the requested amended facility components will
11 not include any ground disturbing activities outside of the originally permitted facility
12 footprint.²⁰
13

14 For the reasons described above, the Council finds that the facility, as amended, would not
15 affect the certificate holder's ability to satisfy the requirements of the Fish and Wildlife Habitat
16 standard.
17

18 **Conclusions of Law**

19
20 Based on the foregoing analysis and conclusions, and subject to compliance with the existing
21 site certificate conditions, the Council finds that the facility, as amended, continues to comply
22 with the Council's Fish and Wildlife Habitat standard.

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

24
25 *To issue a site certificate, the Council, after consultation with appropriate state agencies,*
26 *must find that:*

27 *(1) For plant species that the Oregon Department of Agriculture has listed as threatened*
28 *or endangered under ORS 564.105(2), the design, construction and operation of the*
29 *proposed facility, taking into account mitigation:*

30 *(a) Are consistent with the protection and conservation program, if any, that the*
31 *Oregon Department of Agriculture has adopted under ORS 564.105(3); or*

32 *(b) If the Oregon Department of Agriculture has not adopted a protection and*
33 *conservation program, are not likely to cause a significant reduction in the*
34 *likelihood of survival or recovery of the species; and*

35 *(2) For wildlife species that the Oregon Fish and Wildlife Commission has listed as*
36 *threatened or endangered under ORS 496.172(2), the design, construction and*
37 *operation of the proposed facility, taking into account mitigation, are not likely to*
38 *cause a significant reduction in the likelihood of survival or recovery of the species.*
39
40

²⁰ CEPAMD1Doc23 2016-7-7

1 **Findings of Fact**

2
3 The Threatened and Endangered Species standard requires the Council to find that the design,
4 construction, and operation of the facility is not likely to cause a significant reduction in the
5 likelihood of survival or recovery of a fish, wildlife, or plant species listed as threatened or
6 endangered by Oregon Department of Fish and Wildlife (ODFW) or Oregon Department of
7 Agriculture (ODA). For threatened and endangered plant species, the Council must also find
8 that the facility is consistent with an adopted protection and conservation program from ODA.
9

10 Threatened and endangered species are those listed under ORS 564.105(2) for plant species
11 and ORS 496.172(2) for fish and wildlife species. For the purposes of this standard, threatened
12 and endangered species are those identified as such by either the Oregon Department of
13 Agriculture or the Oregon Fish and Wildlife Commission.²¹
14

15 The analysis area for threatened or endangered plant and wildlife species is the area within and
16 extending five-miles from the site boundary. The Council addressed the Threatened and
17 Endangered Species standard in the 2007 *Final Order on the ASC*.
18

19 In the *Final Order on the ASC*, Council described that no state-or federal-listed threatened or
20 endangered wildlife species were known to occur in the analysis area, though it was noted that
21 several species were identified as having the potential to occur in the analysis area.
22

23 The Council previously found that the design, construction and operation of the facility were
24 not likely to result in direct or indirect impacts to direct impacts to threatened, endangered or
25 candidate fish or wildlife species or their habitat on the energy facility site. ODFW submitted a
26 letter on the RFA, stating that it had no comments as the requested amended facility
27 components will not include any ground disturbing activities outside of the originally permitted
28 facility footprint.²² Oregon Department of Agriculture, Native Plant Conservation Program, did
29 not comment on the amendment request.
30

31 Because the facility modifications included in RFA 1 would be located in the previously
32 approved site boundary, of which is permanently disturbed from previous use, the Council finds
33 that the design, construction, and operation of the facility, as amended, are not likely to cause a
34 significant reduction in the likelihood of survival or recovery of any Threatened or Endangered
35 Species.
36
37
38
39

²¹ 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.

²² CEPAMD1Doc23_2016-7-7

1 **Conclusions of Law**

2
3 Based on the foregoing findings of fact and conclusions, and subject to compliance with the
4 existing site certificate conditions, the Council finds that the facility, as amended, continues to
5 satisfy the requirements of the Council’s Threatened and Endangered Species standard.
6

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

8
9 *(1) Except for facilities described in sections (2), to issue a site certificate, the*
10 *Council must find that the design, construction and operation of the facility,*
11 *taking into account mitigation, are not likely to result in significant adverse*
12 *impact to scenic resources and values identified as significant or important in*
13 *local land use plans tribal land management plans and federal land*
14 *management plans located within the analysis area described in the project*
15 *order. ****
16

17 **Findings of Fact**

18
19 OAR 345-022-0080 requires the Council to determine that the design, construction and
20 operation of a facility would not have a “significant adverse impact” to any significant or
21 important scenic resources and values in the analysis area. In applying the standard set forth in
22 OAR 345-022-0080(1), the Council assesses the visual impacts of facility structures on significant
23 or important scenic resources described in “local land use plans, tribal land management plans
24 and federal land management plans for any lands located within the analysis area described in
25 the project order.” For purposes of this rule, “local land use plans” includes applicable state
26 management plans.
27

28 The Council previously addressed the Scenic Resources standard in the 2007 *Final Order on the*
29 *ASC* and evaluated potential impacts to “significant” scenic resources within a 30-mile analysis
30 area. The Council made findings regarding the potential visibility of facility structures and
31 vegetation impacts and associated visual impacts at the five “significant” sites and segments
32 identified along the Oregon National Historic Trail High Potential Sites. The Council found that
33 because the five sites and segments would be located between 14.1 (nearest site) and 25.8
34 miles (farthest site) from the facility, that facility structures and steam plume during operation
35 would not likely be visible at these scenic resources due to distance, haze, humidity,
36 background landscape, light conditions or weather. No other scenic resources were identified
37 as significant or important.
38

39 Because the facility modifications included in RFA 1 would be located in the previously
40 approved site boundary, of which is permanently disturbed from previous use, the Council finds
41 that the facility modifications would not be likely to result in new impacts to important scenic
42 resources that have not been addressed by the Council or otherwise affect the certificate

1 holder's ability to design, construct and operate the facility, as amended, without significant
2 adverse impact to important scenic resources.

3
4 The Council finds that the design, construction, and operation of the facility, as amended,
5 would not be likely to result in significant adverse impact to any identified scenic resources and
6 values.

7
8 **Conclusion of Law**

9
10 Based on the foregoing findings of fact and conclusions of law, the Council finds that the facility,
11 as amended, continues to satisfy the requirements of the Council's Scenic Resources standard.

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

13
14 *(1) Except for facilities described in sections (2) and (3), to issue a site certificate,*
15 *the Council must find that the construction and operation of the facility,*
16 *taking into account mitigation, are not likely to result in significant adverse*
17 *impacts to:*

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

20 *(b) For a facility on private land, archaeological objects, as defined in ORS*
21 *358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c);*
22 *and*

23 *(c) For a facility on public land, archaeological sites, as defined in ORS*
24 *358.905(1)(c). ****

25
26 **Findings of Fact**

27
28 Section (1) of the Historic, Cultural and Archaeological Resources standard generally requires
29 the Council to find that a facility is not likely to result in significant adverse impacts to identified
30 historic, cultural, or archaeological resources.

31
32 The Council previously addressed the Historic, Cultural and Archaeological Resources standard
33 in the 2007 *Final Order on the ASC* and made findings to support imposing six conditions (IV.K.1
34 through IV.K.6). The conditions included requirements such as an additional pre-construction
35 investigation, in consultation with the Oregon Historic Preservation Office and the
36 Confederated Tribes of the Umatilla Indian Reservation, to define the vertical and horizontal
37 extent of archeological resources in the vicinity of the ethanol pipeline; onsite archeological
38 monitors during construction; and, a stop-work requirement in the event of an advertent
39 discovery of any archeological or cultural resource. The certificate holder would remain subject
40 to the requirements of these conditions.

1 As explained in Section I.D of the final order, while some of the facility modifications included in
2 RFA 1 (corn oil extraction system, sugar addition system) resulted in ground disturbance, all
3 ground disturbing activities were located within the previously disturbed and approved site
4 boundary.
5

6 In a comment on the amendment request, the Confederated Tribes of Umatilla Reservation
7 (CTUIR) expressed concern that the existing facility and facility modifications included in RFA 1
8 were located within a historic property of religious and cultural significance to the CTUIR, which
9 in 2014 was determined eligible for the National Register by the Keeper of the National
10 Register. CTUIR further stated that construction of the facility and recent improvements have
11 had an adverse effect to the historic property. Additionally, CTUIR states that the barge load
12 out area and barge traffic could affect CTUIR tribal members' ability to exercise their reserved
13 treaty rights, such as fishing.
14

15 In the proposed order, the Department recommended that the Council not consider these
16 comments further for the following reasons. The Council approved the facility and its site in
17 2007, and did not at that time consider the referenced property of religious and cultural
18 significance. Moreover, the barge load-out area is not part of the energy facility or considered a
19 related and supporting facility. Finally, the facility modifications would be located entirely
20 within a previously approved site boundary, and would not result in new ground-disturbing
21 activities outside of the previously approved site boundary.²³
22

23 In a comment letter on the proposed order, CTUIR expressed concern of potential impacts to
24 possible burials near or adjacent to a previously identified and recorded archeological site
25 located within the alignment of the pipeline, previously approved by the Council as a related
26 and supporting facility to the energy facility. CTUIR also expressed concern regarding the Exhibit
27 S evaluation included in the 2007 ASC. Because these comments do not appear to be specific to
28 the components included in the amendment request or the Department's analysis included in
29 the proposed order, and because the facility modifications would be located entirely within a
30 previously approved site boundary and existing concrete footprint, and would not result in new
31 ground-disturbing activities outside of the previously approved site boundary, the Council does
32 not consider additional findings or conditions necessary to respond to these comments.
33

34 Therefore, based upon compliance with the existing site certificate conditions, the Council finds
35 that the construction and operation of the facility, as amended, would not be likely to result in
36 significant adverse impacts to historic, cultural, or archaeological resources.
37
38
39
40

²³ In a comment on the proposed order, CTUIR similarly expressed concern that the facility site is within a CTUIR traditional cultural property. For the reasons described above, this comment is not considered further.

1 **Conclusions of Law**

2
3 Based on the foregoing findings and the evidence in the record, and subject to compliance with
4 the existing site certificate conditions, the Council finds that the facility, as amended, continues
5 to comply with the Council’s Historic, Cultural, and Archaeological Resources standard.

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

7
8 *(1) Except for facilities described in section (2), to issue a site certificate, the*
9 *Council must find that the design, construction and operation of a facility, taking*
10 *into account mitigation, are not likely to result in a significant adverse impact to*
11 *important recreational opportunities in the analysis area as described in the*
12 *project order. The Council shall consider the following factors in judging the*
13 *importance of a recreational opportunity:*

- 14 *(a) Any special designation or management of the location;*
 - 15 *(b) The degree of demand;*
 - 16 *(c) Outstanding or unusual qualities;*
 - 17 *(d) Availability or rareness;*
 - 18 *(e) Irreplaceability or irretrievability of the opportunity. ****
- 19

20 **Findings of Fact**

21
22 The Recreation standard requires the Council to find that the design, construction and
23 operation of a facility are not likely to result in significant adverse impacts to “important”
24 recreational opportunities. Therefore, the Council’s Recreation standard applies to only those
25 recreation areas that the Council finds “important” using the factors listed in the sub-
26 paragraphs of section (1) of the standard. The project order identified the analysis area for the
27 Recreation standard as the area within and extending five miles from the site boundary.

28
29 The Council addressed the Recreation standard in the 2007 *Final Order on the ASC* and
30 previously identified five recreational opportunities within the analysis area including the
31 Umatilla National Wildlife Refuge, Columbia River, Coyote Springs Wildlife Area, Columbia River
32 Heritage Trail, and The Marina Park at Boardman.

33
34 The amendment request included facility modifications, specifically the construction and
35 operation of a corn oil extraction system, a sugar addition system, and a 25 percent increase in
36 annual ethanol production, that could result in changes to onsite water use and wastewater
37 generation, and daily vehicle trips.

38
39 The certificate holder asserted that operation of the corn oil extraction system, while it would
40 result in daily truck trips to ship out produced corn oil, would not result in an increase in the
41 number of daily truck trips at the site because the corn oil extraction process would result in a
42 proportionate reduction in the number of daily truck trips for transporting previously generated

1 feedstock out of the site. In the amendment request, the certificate holder explained that the
2 maximum number of truck trips generated by the facility, as amended, would not exceed 284
3 trips per day, as originally forecasted in the ASC as a worst-case scenario, and determined by
4 the Council not to result in a significant adverse traffic impact at any recreational opportunity
5 within the analysis area.

6
7 Moreover, the certificate holder argued that the peak number of truck trips, 284 trips per day,
8 that could occur at the facility, as amended, remains below the number of trips per day
9 recommended by Morrow County as the number that would trigger a requirement for a Traffic
10 Impact Assessment, or 400 vehicle trips per day. The certificate holder also stated that most of
11 the corn shipments to the facility are by rail, and most of the ethanol shipments out of the
12 facility are by barge, and that truck traffic has been much less than 284 trips per day in recent
13 years. Finally, the certificate holder stated that what truck material is shipped into and out of
14 the facility only occurs during weekdays, not weekends, when most users of local recreational
15 facilities are likely to occur.²⁴

16
17 The certificate holder explained that the requested 25 percent increase in ethanol production
18 would not require new or modified infrastructure, but that it would result in a 25 increase in
19 water use and wastewater generation. The certificate holder further asserted that operation of
20 the sugar addition system would result in a slight reduction (5 percent) in water use during the
21 mash process, and confirmed that there would be no impact on wastewater quantities
22 generated onsite. As expressed in the amendment request, the anticipated water use and
23 wastewater generation from the facility, as amended, would be allowable within the limitations
24 of the third-party wastewater discharge permits held by the Port of Morrow, as used by the
25 facility and would not result in significant adverse water or wastewater impacts at any
26 recreational opportunity within the analysis area.

27
28 Based upon the foregoing, the Council finds that the facility, as amended, would not be likely to
29 result in significant adverse impacts to any recreational opportunity within the analysis area.

30 **Conclusions of Law**

31
32
33 Based on the foregoing, the Council finds that the design, construction and operation of the
34 facility, as amended, would not be likely to result in a significant adverse impact to any
35 important recreational opportunities in the analysis area and therefore the facility, as
36 amended, complies with the Council's Recreation standard.

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

38
39
40 *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council*
41 *must find that the construction and operation of the facility, taking into account*

²⁴ RFA, Section iv.

1 *mitigation, are not likely to result in significant adverse impact to the ability of public*
2 *and private providers within the analysis area described in the project order to provide:*
3 *sewers and sewage treatment, water, storm water drainage, solid waste management,*
4 *housing, traffic safety, police and fire protection, health care and schools. ****
5

6 **Findings of Fact**
7

8 The Council’s Public Services standard requires the Council to identify likely significant adverse
9 impacts on the ability of public and private service providers to supply sewer and sewage
10 treatment, water, stormwater drainage, solid waste management, housing, traffic safety, police
11 and fire protection, health care, and schools.
12

13 The Council addressed the Public Services standard in the 2007 *Final Order on the ASC*. The
14 analysis area for public services was previously identified as the area within and extending 30-
15 miles from the site boundary.
16

17 The amendment request included facility modifications, specifically the corn oil extraction
18 system, a sugar addition system, and a 25 percent increase in annual ethanol production that
19 could result in changes to onsite water use and wastewater generation, and daily vehicle trips.
20

21 The certificate holder asserted that operation of the corn oil extraction system, while it would
22 result in daily truck trips to ship out produced corn oil, would not result in an increase in the
23 number of daily truck trips at the site because the corn oil extraction process would result in a
24 proportionate reduction in the number of daily truck trips for transporting previously generated
25 feedstock out of the site. In the amendment request, the certificate holder explained that the
26 maximum number of truck trips generated by the facility, as amended, would not exceed 284
27 trips per day, as originally forecasted in the ASC as a worst-case scenario, and determined by
28 the Council not to result in a significant adverse impact to the ability of transportation providers
29 to provide a public service. Moreover, the certificate holder argued that the peak number of
30 truck trips, 284 trips per day, that could occur at the facility, as amended, remains below the
31 number of trips per day recommended by Morrow County as the number that would trigger a
32 requirement for a Traffic Impact Assessment, or 400 vehicle trips per day. The certificate holder
33 also stated that most of the corn shipments to the facility are by rail, and most of the ethanol
34 shipments out of the facility are by barge, and that truck traffic has been much less than 284
35 trips per day in recent years.²⁵ As such, this represents a level of daily vehicle traffic that would
36 not likely result in significant adverse impacts to transportation routes or public and private
37 providers of transportation services. Morrow County did not comment on the amendment
38 request or proposed order related to potential impacts to traffic and transportation services.
39

40 The certificate holder explained that the requested 25 percent increase in ethanol production
41 would not require new or modified infrastructure, but that it would result in a 25 percent

²⁵ RFA, Section iv.

1 increase in water use and wastewater generation. As expressed in the amendment request, the
2 anticipated water use and wastewater generation from the facility, as amended, would be
3 allowable within the limitations of the third-party wastewater discharge permits held by the
4 Port of Morrow, as used by the facility.
5

6 The facility amendments occur within the previously approved site boundary. As such, it is not
7 expected to alter stormwater runoff. The facility amendment components are located entirely
8 within the previously approved site boundary and is not expected to have a significant increase
9 in fire risk. The certificate holder also stated in its amendment request (page 13) that the
10 facility, as amended, would not require additional employees. The amended facility is unlikely
11 to cause an increased impact to housing, health care, schools, or police.
12

13 **Conclusions of Law**

14
15 Based on the foregoing analysis, the Council finds that the facility, as amended, continues to
16 satisfy the requirements of the Council's Public Services standard.

17 **III.A.14 Waste Minimization, OAR 345-022-0120**

18
19 (1) *Except for facilities described in sections (2) and (3), to issue a site*
20 *certificate, the Council must find that, to the extent reasonably*
21 *practicable:*

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

27 (b) *The applicant's plans to manage the accumulation, storage,*
28 *disposal and transportation of waste generated by the*
29 *construction and operation of the facility are likely to result in*
30 *minimal adverse impact on surrounding and adjacent areas. ****
31

32 **Findings of Fact**

33
34 The Waste Minimization standard requires the Council to find that the certificate holder will
35 minimize the generation of solid waste and wastewater, and that the waste generated will be
36 managed to result in minimal adverse impacts on surrounding and adjacent areas.
37

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

1 minimize waste through minimization and recycling measures implemented during
2 construction, operation and retirement of the facility.

3
4 In the amendment request, the certificate holder asserted that the facility modifications would
5 not increase the amount of waste, but that the amendments would increase the quantity of
6 wastewater generated at the site by 25%. The certificate holder stated that it would continue to
7 implement minimization and recycling measures to reduce waste and wastewater generation.
8 However, the increase in wastewater is within the permitted discharge quantity in the Port of
9 Morrow's wastewater permit. Therefore, based upon compliance with existing reduction
10 measures, the Council finds that the certificate holder would minimize and manage solid waste
11 and wastewater, resulting in minimal adverse impacts on surrounding and adjacent areas.

12 **Conclusions of Law**

13
14
15 The Council finds that the facility, as amended, continues to satisfy the requirements of the
16 Waste Minimization standard.

17 **III.C Other Applicable Regulatory Requirements Under Council Jurisdiction**

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

19 *(1) Standards and Regulations:*

20 ***

21 *(a) New Noise Sources:*

22
23 *(A) New Sources Located on Previously Used Sites. No person owning or controlling a*
24 *new industrial or commercial noise source located on a previously used industrial or*
25 *commercial site shall cause or permit the operation of that noise source if the*
26 *statistical noise levels generated by that new source and measured at an appropriate*
27 *measurement point, specified in subsection (3)(b) of this rule, exceed the levels*
28 *specified in Table 8, except as otherwise provided in these rules. For noise levels*
29 *generated by a wind energy facility including wind turbines of any size and any*
30 *associated equipment or machinery, subparagraph (1)(b)(B)(iii) applies.*

31 ***

32 **Findings of Fact**

33
34
35 The Council addressed the noise control regulations in the 2007 *Final Order on the ASC* and,
36 because the site itself had not been previously used by an industrial or commercial noise source
37 during the 20 years prior to the proposed date of operation, applied DEQ's noise standards for

1 “new industrial or commercial noise sources on previously unused industrial or commercial
2 sites.”²⁶

3
4 In the final order on site certificate application, the Council found that based on the certificate
5 holder’s analysis and predicted noise levels, using the Cadna-A noise modeling program and the
6 near-field data obtained at a similar facility owned by the same company (the Front Range
7 Energy facility in Colorado), that the noise predicted to radiate from the facility would be in
8 compliance with the DEQ noise regulations including the maximum hourly statistical noise
9 levels and the limitation of a 10 dBA maximum increase in the ambient hourly L₁₀ or L₅₀
10 statistical noise levels at any noise sensitive receiver.²⁷

11
12 Facility modifications included in RFA 1 that could result in increased operational noise include
13 operation of the corn oil extraction system, sugar addition system, and CO₂ capture
14 infrastructure. Infrastructure associated with the corn oil extraction system is located within
15 the processing building, which minimizes outdoor audible noise by being located within an
16 enclosure. The sugar addition system is electrically-powered and comprised of a stainless steel
17 bin, rotary feeder, and screw conveyer. Further, the sugar addition system does not include any
18 significant sources of noise generation such as an engine or motorized equipment. Similarly, the
19 CO₂ capture infrastructure does not include any significant sources of noise generation, such as
20 an engine or motorized equipment. Therefore, the certificate holder asserted and the Council
21 agrees that noise impacts from the facility modifications included in the amendment request
22 would not be likely to result in greater noise impacts at the nearest sensitive receptor than was
23 previously evaluated.

24
25 Because the facility, as amended, would be located entirely within the existing site boundary
26 and would not result in any significant new sources of noise generating equipment not
27 previously evaluated, the Council concludes that the facility, as amended, continues to comply
28 with the applicable provisions of DEQ’s Noise Control Regulation.

29
30 **Conclusions of Law**

31
32 Based on the foregoing findings, the Council finds that the facility, as amended, continues to
33 comply with the Noise Control Regulations in OAR 340-035-0035(1)(b)(B).

34
35 **III.C.2 Removal-Fill Law**

36
37 The Oregon Removal-Fill Law (ORS 196.795 through 196.990) and Department of State Lands
38 (DSL) regulations (OAR 141-085- 0500 through 141-085-0785) require a removal-fill permit if 50

²⁶ While the facility components included in RFA #1 have already been constructed, the DEQ noise regulations exempt construction noise.

²⁷ 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.

1 cubic yards or more of material is removed, filled, or altered within any “waters of the state.”²⁸
2 The Council, in consultation with DSL, must determine whether a removal-fill permit is needed
3 and if so, whether a removal-fill permit should be issued. The analysis area for wetlands and other
4 waters of the state is the area within the site boundary.

5
6 **Findings of Fact**

7
8 The Council addressed the Removal Fill Law in the 2007 *Final Order on the ASC* and found that
9 because there were no wetlands identified within the analysis area, no impacts to wetlands or
10 other waters of the state would occur as a result of the facility and that a DSL removal-fill
11 permit would not be required for facility construction or operation.

12
13 RFA 1 requested approval for facility modifications that could result in new ground disturbance,
14 including construction and operation of the corn oil extraction system and the sugar addition
15 system. However, these facility modifications would be located within the existing facility site
16 and site boundary, which was previously permanently disturbed and paved or graveled, impacts
17 to new wetlands not previously identified could not occur. Therefore, the Council finds that the
18 amendments would not alter the conclusion that the facility, as amended, would not require a
19 removal-fill permit.

20
21 **Conclusions of Law**

22
23 The Council concludes that the facility, as amended, continues not to require a state removal-
24 fill permit.

25
26 **III.C.3 Water Rights**

27
28 Under ORS Chapters 537 and 540 and OAR Chapter 690, the Oregon Water Resources
29 Department (OWRD) administers water rights for appropriation and use of the water resources
30 of the state. Under OAR 345-022-0000(1), the Council must determine whether the facility
31 would comply with these statutes and administrative rules.

32
33 **Findings of Fact**

34
35 The certificate holder relies upon the Port of Morrow for water and wastewater discharge
36 service needed during facility construction and operation. Specifically, the certificate holder
37 relies upon the Port of Morrow’s water right held by the City of Boardman assumed to be third-
38 party permits.

39
40 RFA 1 requested approval for facility modifications that could result in an increase in water use,
41 including operation of the corn oil extraction system, sugar addition system, and an increase in

²⁸ ORS 196.800(15) defines “Waters of this state.” The term includes wetlands and certain other waterbodies.

1 annual throughput. The certificate holder confirmed that the existing water right issued to the
2 Port of Morrow did not need to be amended as a result of the facility modifications and would
3 continue to be used for water use for the facility, as amended.²⁹

4
5 Based on the scope of facility modifications included in RFA 1, the Council finds that water use
6 at the facility, as amended, continues not to require an individual water right, transfer, or
7 limited license.

8
9 **Conclusions of Law**

10
11 For the reasons discussed above, the Council concludes that the facility, as amended, continues
12 to comply with the applicable water rights statutes and regulations and does not need a water
13 right, transfer, or limited license.

14

²⁹ CEPAMD1Doc5 2016-01-15

1 **IV. General Conclusions and Final Order**

2
3 Amendment 1 of Columbia Ethanol Project’s site certificate allows:

- 4
- 5 • Construction and operation of a corn oil extraction system
 - 6 • Construction and operation of a sugar addition system
 - 7 • Change in ethanol feedstock to include, in addition to the previously approved corn
 - 8 feedstock, a blend of corn and granulated sugar
 - 9 • Increase in the annual ethanol production from 35 to 44 million gallons per year
 - 10 • Amendment of conditions (Conditions IV.C.2 and IV.C.4) imposed to ensure compliance
 - 11 with the Council’s Retirement and Financial Assurance standard
- 12

13 Based on the findings and conclusions included in this order, the Council makes the following

14 findings:

- 15
- 16 1. Amendment 1 of Columbia Ethanol Project’s site certificate complies with the requirements
 - 17 of the Oregon Energy Facility Siting statutes, ORS 469.300 to ORS 469.570 and ORS 469.590
 - 18 to ORS 469.619.
 - 19 2. Amendment 1 of Columbia Ethanol Project’s site certificate complies with the applicable
 - 20 standards adopted by the Council pursuant to ORS 469.501.
 - 21 3. Amendment 1 of Columbia Ethanol Project’s site certificate complies with the statewide
 - 22 planning goals adopted by the Land Conservation and Development Commission.
 - 23 4. Amendment 1 of Columbia Ethanol Project’s site certificate complies with all other Oregon
 - 24 statutes and administrative rules that were included in and governed by the original site
 - 25 certificate and are applicable to the amendment of the site certificate.
- 26

27 Accordingly, the Council finds that the facility, as amended, complies with the General

28 Standard of Review (OAR 345-022-0000). The Council finds, based on a preponderance of the

29 evidence on the record, that the site certificate may be amended as requested.

30

31

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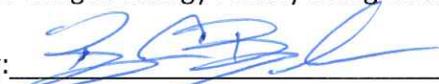
40

1 **Final Order**

2
3 The Council approves Request for Amendment 1 and issues an amended site certificate for
4 Columbia Ethanol Project, subject to the terms and conditions set forth above.

5
6 Issued October 16, 2017

7 The Oregon Energy Facility Siting Council

8
9 By:  _____

10 Barry Beyeler, Chair

11 Energy Facility Siting Council

12
13
14
15
16
17
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19
20
21
22
23 **Attachments**

24 Attachment A: Amended Site Certificate

25 Attachment B: Department's Request for Additional Information and Certificate Holder
26 Responses

27 Attachment C: Final Executed Agreement (September 2017)

Attachment A: Amended Site Certificate (September 2017)

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**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

SEPTEMBER 2017

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36

1 **AMENDED SITE CERTIFICATE**
2 **FOR THE**
3 **COLUMBIA ETHANOL PROJECT**
4

5 **I. INTRODUCTION**

6 This Amended Site Certificate for the Columbia Ethanol Project (“CEP”) is issued and
7 executed in the manner provided by ORS chapter 469, by and between the State of Oregon
8 (“State”), acting by and through its Energy Facility Siting Council (“Council”), and Pacific
9 Ethanol Columbia, LLC (“PEC” or “certificate holder”). This site certificate is a binding
10 agreement between the State, acting by and through the Council, and the certificate holder.
11

12 The findings of fact, reasoning and conclusions of law underlying the terms and
13 conditions of this Amended Site Certificate are set forth in the: (1) Council's Final Order in the
14 Matter of the Request for Amendment 1 of the Site Certificate for the Columbia Ethanol Project
15 (“Final Order on Amendment 1”), which the Council granted on DATE; and (2) Council’s Final
16 Order in the Matter of the Application for a Site Certificate for the Columbia Ethanol Project
17 (“Final Order on the ASC”), which the Council granted on July 2, 2007, and which by this
18 reference are incorporated herein.
19

20 In interpreting this site certificate, any ambiguity shall be clarified by reference to the
21 following, in order of priority: (1) this amended Site Certificate; (2) the Final Order on
22 Amendment 1; (3), the Final Order on the ASC; and (4) the record of the proceedings that led to
23 all Final Orders.
24

25 The terms used in this amended site certificate shall have the same meaning set forth in
26 ORS 469.300 and OAR 345-001-0010, except where otherwise stated or where the context
27 clearly indicates otherwise.
28

29 **II. SITE CERTIFICATION**

- 30 A. To the extent authorized by State law and subject to the conditions set forth herein, the
31 State authorizes the certificate holder to construct, operate and retire an ethanol plant,
32 together with certain related or supporting facilities, at the site in Morrow County,
33 Oregon, as described in Section III of this Site Certificate. ORS 469.401(1).
34
- 35 B. This site certificate shall be effective until it is terminated pursuant to OAR
36 345-027-0110 or the rules in effect on the date that termination is sought or until the site
37 certificate is revoked pursuant to ORS 469.440 and OAR 345-029-0100 or the statutes
38 and rules in effect on the date that revocation is ordered. ORS 469.401(1).
39
- 40 C. This Site Certificate does not address, and is not binding with respect to, matters that
41 were not addressed in the Council's Final Order on the Application for a Site Certificate.
42 These matters include, but are not limited to: building code compliance; wage, hour and
43 other labor regulations; local government fees and charges; other design or operational
44 issues that do not relate to siting the facility (ORS 469.401(4); and permits issued under

1 statutes and rules for which the decision on compliance has been delegated by the federal
2 government to a state agency other than the Council. ORS 469.503(3).
3

4 D. Both the State and the certificate holder shall abide by local ordinances and state law and
5 the rules of the Council in effect on the date this site certificate is executed. In addition,
6 upon a clear showing of a significant threat to the public health, safety or the environment
7 that requires application of later-adopted laws or rules, the Council may require
8 compliance with such later-adopted laws or rules. ORS 469.401(2).
9

10 E For a permit, license or other approval addressed in and governed by this site certificate,
11 the certificate holder shall comply with applicable state and federal laws adopted in the
12 future to the extent that such compliance is required under the respective state agency
13 statutes and rules. ORS 469.401(2).
14

15 F. Subject to the conditions herein, this site certificate binds the State and all counties, cities
16 and political subdivisions in this state as to the approval of the site and the construction,
17 operation and retirement of the facility as to matters that are addressed in and governed
18 by this site certificate. ORS 469.401(3).
19

20 G. Each affected state agency, county, city and political subdivision in Oregon with
21 authority to issue a permit, license or other approval addressed in or governed by this site
22 certificate shall, upon submission of the proper application and payment of the proper
23 fees, but without hearings or other proceedings, issue such permit, license or other
24 approval subject only to conditions set forth in this site certificate. ORS 469.401(3).
25

26 H. After issuance of this site certificate, each state agency or local government agency that
27 issues a permit, license or other approval for the facility shall continue to exercise
28 enforcement authority over such permit, license or other approval. ORS 469.401(3).
29

30 I. After issuance of this amended site certificate, the Council shall have continuing
31 authority over the site and may inspect, or direct the Department to inspect, or request
32 another state agency or local government to inspect, the site at any time in order to assure
33 that the facility is being operated consistently with the terms and conditions of this site
34 certificate. ORS 469.430.
35

36 **III. DESCRIPTIONS**

37

38 **A. THE FACILITY**

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

1 processing building will house steel storage tanks for aqueous ammonia, enzymes, sulfuric acid,
2 sodium hydroxide, and urea.

3
4 In the fermentation building, yeast and additional enzymes will be added to the mash,
5 producing a liquid containing 10 to 20% ethanol, by weight. The liquid will be piped to the
6 distillation, drying and evaporation (DD&E) building where the solids (a by-product called
7 distiller's wet grain that would be suitable for animal feed) will be separated and transported to a
8 wet cake building for storage and ultimate trucking to local dairy or cattle operations for use as
9 feed. The liquid ethanol will be moved to ethanol storage tanks pending shipment to market by
10 barge, rail or truck.

11
12 Additional plant components include grain storage bins, an administration building, a
13 boiler building, a maintenance building, ethanol storage tanks, a diesel fuel storage tank, a
14 gasoline tank, and a three-cell cooling tower system.

15
16 **B. RELATED OR SUPPORTING FACILITIES**

17 The facility includes the following related or supporting facilities:

- 18
19 **1. NATURAL GAS PIPELINE.** Natural gas for operation of the plant boilers will be
20 provided by means of a 1,700-foot, 4-inch diameter carbon steel pipeline
21 interconnecting with the existing Cascade Natural Gas system. The pipeline is
22 installed underground along Columbia Lane on property owned by the Port of
23 Morrow.
24
25 **2. ELECTRIC POWER SUPPLY LINE.** Electricity for operation of the energy facility
26 will be provided by means of a 13.5-kV, 1,700-foot power supply line
27 interconnecting with the existing Umatilla Electric Cooperative system. The
28 power supply line is mounted on 40-foot wood poles spaced at about 300 feet and
29 located along Columbia Lane on property owned by the Port of Morrow.
30
31 **3. ETHANOL PIPELINE.** PEC proposes to transport some of the ethanol produced at
32 the energy facility by barge from an existing barge-loading facility operated by
33 Tidewater, Inc. In order to move the ethanol to the barge-loading facility, PEC
34 proposes to install a 2,500-foot, 8-inch diameter welded steel pipeline from the
35 energy facility to the barge-loading facility. After leaving the production plant,
36 the pipeline would be installed underground at a depth of at least 3½ feet until it
37 crosses the right of way for the existing Union Pacific rail line. It will cross the
38 rail line by underground bore. North of the rail line, the pipeline will be placed
39 above ground on footings in order to avoid a potential archeological site. Its entire
40 corridor is located on property owned by the Port of Morrow, and would require
41 no new right-of-way. PEC would be responsible for construction of about 2,200
42 feet of the pipeline (up to the high water line of the Columbia River). Tidewater,
43 Inc., would be responsible for obtaining necessary permits and constructing the
44 remaining 300 feet of the pipeline for connection with the barge-loading facility.
45

1 **4. Corn Oil Extraction System.** The corn oil extraction system utilizes a multi-
2 phase process to the DWGS process. The multi-phase process includes tanks
3 (reactors, heated, flash and evaporative), a trim heater, centrifuges, piping and a
4 jib crane which would be used to separate and heat the by-product produced
5 during ethanol production for oil extraction. The extracted oil is piped to two
6 heated storage tanks located within the ethanol storage area to age for a day
7 before shipping while the remaining solids are processed in the pre-existing
8 evaporators.
9

10 **5. Sugar Addition System and Change in ethanol feedstock to include, in**
11 **addition to the previously approved corn feedstock, a blend of corn and**
12 **granulated sugar.** The sugar addition system replaces 15 percent of the corn
13 feedstock with granulated sugar. The sugar addition system includes a 100-ton
14 stainless steel tank/bin, rotary feeder, screw conveyor, and dust collector which
15 required an Air Contaminant Discharge Permit from the Oregon Department of
16 Environmental Quality (DEQ). This permit was issued by DEQ in 2013.
17

18 Construction and operation of the sugar addition system was a result of a short-
19 term Department of Agriculture initiative and that operation of the system
20 concluded in 2013. The sugar addition system remains in place at the energy
21 facility and could be used during future operations.
22

23 **6. CO₂ Capture Infrastructure.** A third-party (Kodiak Carbonics) installed, owns
24 and operates a carbon dioxide (CO₂) processing plant within the existing energy
25 facility site boundary, under sub-lease agreement with CEP. The new processing
26 plant is currently operating, and includes new interconnecting components
27 installed to transfer the CO₂ rich gas stream from CEP's existing CO₂ scrubber to
28 the CO₂ processing plant. The interconnecting components deliver up to 250 tons
29 per day of raw gas to the processing facility and are estimated to require up to
30 \$100,000 to disassemble and retire.
31

32 **C. LOCATION OF THE FACILITY**

33 The facility is located on a 25-acre parcel of land in Section 2, Township 4 North, Range
34 25 East, Morrow County, Oregon. This parcel comprises a portion of the Boardman Industrial
35 Park owned and operated by the Port of Morrow.
36

37 **IV. SPECIFIC FACILITY CONDITIONS**

38 The conditions listed in this section include conditions based on representations in the
39 application for a site certificate and supporting record. The Council deems these representations
40 to be binding commitments made by the certificate holder. These conditions are required under
41 OAR 345-027-0020(10).
42

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

1
2 **A. GENERAL STANDARD OF REVIEW, OAR 345-022-0000**

3 [No conditions]
4

5 **B. ORGANIZATIONAL EXPERTISE, OAR 345-022-0010**

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

10
11 (IV.B.2) If the certificate holder chooses a third-party contractor to operate the facility, the
12 certificate holder shall submit to the Council the identity of the contractor so the
13 Council may review the qualifications and capability of the contractor to meet the
14 standards of OAR 345-0022-0010. If the Council finds that a new contractor
15 meets these standards, the Council shall not require an amendment to the site
16 certificate for the certificate holder to hire the contractor.

17
18 (IV.B.3) Any matter of non-compliance under the site certificate shall be the responsibility
19 of the certificate holder. Any notice of violation issued under the site certificate
20 shall be issued to the certificate holder. Any civil penalties assessed under the site
21 certificate shall be levied on the certificate holder.

22
23 (IV.B.4) The certificate holder shall contractually require the EPC contractor and all
24 independent contractors and subcontractors involved in the construction and
25 operation of the facility to comply with all applicable laws and regulations and
26 with the terms and conditions of the site certificate. Such contractual provision
27 shall not operate to relieve the certificate holder of responsibility under the site
28 certificate.

29
30 (IV.B.5) The certificate holder shall obtain, or shall ensure that its contractors obtain,
31 necessary state and local permits or approvals required for the construction,
32 operation and retirement of the facility.

33
34 (IV.B.6) Prior to construction of the PEC portion of the ethanol pipeline that will connect
35 CEP to the Tidewater ethanol pipeline, the certificate holder shall demonstrate to
36 the Energy Facility Siting Council (“Council”) that Tidewater, Inc., has obtained
37 all necessary permits and approvals for construction of the ethanol pipeline from
38 the Ordinary High Water (“OHW”) line of the Columbia River to its point of
39 attachment with the barge-loading facility.

40
41 (IV.B.7) Prior to commercial operation, the certificate holder shall provide the Council
42 with documentation showing that DEQ has modified the Port of Morrow’s WPCF
43 permit to include the wastewater discharge from the CEP.
44

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

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

7
8 (IV.C.2) Two years before closure of the energy facility, the certificate holder shall submit
9 to the Department a proposed final retirement plan for the facility and site,
10 pursuant to OAR 345-027-0110, including:

- 11 (a) A plan for retirement that provides for completion of retirement within
12 two years after permanent cessation of operation of the energy facility and
13 that protects the public health and safety and the environment;
14 (b) A description of actions the certificate holder proposes to take to restore
15 the site to a useful, non-hazardous condition suitable for industrial use;
16 and
17 (c) A detailed cost estimate, a comparison of that estimate with the dollar
18 amount secured by a bond or letter of credit and any amount contained in a
19 retirement fund, and a plan for assuring the availability of adequate funds
20 for completion of retirement.

21
22 (IV.C.3) The certificate holder shall prevent the development of any conditions on the site
23 that would preclude restoration of the site to a useful, non-hazardous condition to
24 the extent that prevention of such site conditions is within the control of the
25 certificate holder.

26
27 (IV.C.4) Within 30 days after execution of the first amended site certificate, the certificate
28 holder shall submit to the State of Oregon, through the Council, a bond or letter of
29 credit in the amount of \$295,172 (in Fourth Quarter 2016 dollars) naming the
30 State of Oregon, acting by and through the Council, as beneficiary or payee.

- 31 (a) The certificate holder shall adjust the amount of the bond or letter of credit
32 to present value annually, using the U.S. Gross Domestic Product Implicit
33 Price Deflator, Chain-Weight, as published in the Oregon Department of
34 Administrative Services' "Oregon Economic and Revenue Forecast," or
35 by any successor agency ("Index"). If at any time the Index is no longer
36 published, the Council shall select a comparable calculation to adjust
37 Fourth Quarter 2016 dollars to present value.
38 (b) The form of bond or letter of credit shall be subject to prior approval by
39 the Council.
40 (c) The issuer of the bond or letter of credit shall be subject to prior approval
41 by the Council.
42 (d) The certificate holder shall describe the status of the bond or letter of
43 credit in the annual report submitted to the Council under Condition
44 (VI.B.6).

1 (e) The bond or letter of credit shall not be subject to revocation or reduction
2 before retirement of the facility. (Amendment 1, Scenario 2)
3

4 (IV.C.5) If the certificate holder elects to use a bond to meet the requirements of Condition
5 (IV.C.4), the certificate holder shall ensure that the surety is obligated to comply
6 with the requirements of applicable statutes, Council rules and this site certificate
7 when the surety exercises any legal or contractual right it may have to assume
8 construction, operation or retirement of the energy facility. The certificate holder
9 shall also ensure that the surety is obligated to notify the Council that it is
10 exercising such rights and to obtain any Council approvals required by applicable
11 statutes, Council rules and this site certificate before the surety commences any
12 activity to complete construction or to operate or retire the energy facility.
13

14 (IV.C.6) Not later than ten years after the date of commercial operation of the energy
15 facility, and each ten years thereafter during the life of the energy facility, the
16 certificate holder shall complete an independent Phase I Environmental Site
17 Assessment of the energy facility site. Within 30 days after its completion, the
18 certificate holder shall deliver the Phase I Environmental Site Assessment report
19 to the Department.
20

21 (IV.C.7) In the event that any Phase I Environmental Site Assessment identifies improper
22 handling or storage of hazardous substances or improper record keeping
23 procedures, the certificate holder shall correct such deficiencies within six months
24 after completion of the corresponding Phase I Environmental Site Assessment. It
25 shall promptly report its corrective actions to the Department. The Council shall
26 determine whether the corrective actions are sufficient.
27

28 (IV.C.8) The certificate holder shall report to the Department any release of hazardous
29 substances, pursuant to DEQ regulations, within one working day after the
30 discovery of such release. This obligation shall be in addition to any other
31 reporting requirements applicable to such a release.
32

33 (IV.C.9) If the certificate holder has not remedied a release consistent with applicable
34 Oregon Department of Environmental Quality standards or if the certificate holder
35 fails to correct deficiencies identified in the course of a Phase I Environmental
36 Site Assessment within six months after the date of the release or the date of
37 completion of the Phase I Environmental Site Assessment, the certificate holder
38 shall submit to the Council for its approval an independently prepared estimate of
39 the additional cost of remediation or correction within such six-month period.

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

43 (b) In no event, however, shall the certificate holder be relieved of its
44 obligation to exercise all due diligence in remedying a release of

1 hazardous substances or correcting deficiencies identified in the course of
2 a Phase I Environmental Site Assessment.

3
4 (IV.C.10) All funds received by the certificate holder from the salvage of equipment and
5 buildings shall be committed to the restoration of the energy facility site to the
6 extent necessary to fund the approved site restoration and remediation.
7

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

12 (IV.C.12) If the Council finds that the certificate holder has permanently ceased
13 construction or operation of the facility without retiring the facility according to a
14 final retirement plan approved by the Council, as described in OAR 345-027-0110
15 and prepared pursuant to Condition (IV.C.2), the Council shall notify the
16 certificate holder and request that the certificate holder submit a proposed final
17 retirement plan to the Department within a reasonable time not to exceed 90 days.
18 (a) If the certificate holder does not submit a proposed final retirement plan
19 by the specified date, the Council may direct the Department to prepare a
20 proposed a final retirement plan for the Council's approval.
21 (b) Upon the Council's approval of the final retirement plan, the Council may
22 draw on the bond or letter of credit described in Condition (IV.C.4) to
23 restore the site to a useful, non-hazardous condition according to the final
24 retirement plan, in addition to any penalties the Council may impose under
25 OAR Chapter 345, Division 29.
26 (c) If the amount of the bond or letter of credit is insufficient to pay the actual
27 cost of retirement, the certificate holder shall pay any additional cost
28 necessary to restore the site to a useful, non-hazardous condition.
29 (d) After completion of site restoration, the Council shall issue an order to
30 terminate the site certificate if the Council finds that the facility has been
31 retired according to the approved final retirement plan.
32

33 (IV.C.13) (1) The certificate holder shall maintain a bond or letter of credit in an amount
34 of \$295,000 (in 4th Quarter 2016 dollars) naming the State of Oregon, acting by
35 and through the Council, as beneficiary or payee.
36 (a) The certificate holder shall adjust the amount of the bond or letter of credit
37 to present value annually, using the U.S. Gross Domestic Product Implicit
38 Price Deflator, Chain-Weight, as published in the Oregon Department of
39 Administrative Services' "Oregon Economic and Revenue Forecast," or
40 by any successor agency ("Index"). If at any time the Index is no longer
41 published, the Council shall select a comparable calculation to adjust
42 Fourth Quarter 2016 dollars to present value.
43 (b) The form of bond or letter of credit shall be subject to prior approval by
44 the Council.

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

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

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

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

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

17 (Amendment 1, Scenario 2)

18
19 **D. LAND USE, OAR 345-022-0030**

20 [No conditions]

21
22 **E. STRUCTURAL STANDARD, OAR 345-022-0020**

23 (IV.E.1) The certificate holder shall design, engineer and construct the facility to avoid
24 dangers to human safety presented by seismic hazards affecting the site that are
25 expected to result from all maximum probable seismic events. As used in this
26 condition, “seismic hazard” includes ground shaking, landslide, liquefaction,
27 lateral spreading, tsunami inundation, near field effects, hanging wall effects, fault
28 rupture, fault displacement, and subsidence.

29
30 (IV.E.2) The certificate holder shall notify the Department, the State Building Codes
31 Division and DOGAMI promptly if site investigations or trenching reveal that
32 conditions in the foundation rocks differ significantly from those described in the
33 application for a site certificate. After the Department receives the notice, the
34 Council may require the certificate holder to consult with the Department of
35 Geology and Mineral Industries and the Building Codes Division and to propose
36 mitigation actions.

37
38 (IV.E.3) The certificate holder shall notify the Department, the State Building Codes
39 Division and the Department of Geology and Mineral Industries promptly if shear
40 zones, artesian aquifers, deformations, or clastic dikes are found or suspected at or
41 in the vicinity of the site.

42
43 (IV.E.4) The certificate holder shall design, engineer and construct the facility to avoid
44 dangers to human safety presented by non-seismic or aseismic hazards affecting

1 the site. As used in this condition, “non-seismic or aseismic hazards” includes
2 settlement, landslides, groundwater, flooding, and erosion.
3

4 **F. SOIL PROTECTION, OAR 345-022-0022**

5 (IV.F.1) Throughout construction of the facility and post-construction restoration, the
6 certificate holder shall use temporary erosion and sediment control measures,
7 such as a bioswale system, sediment barrier fence, ditch checks, catch basin inlet
8 protection, and construction site entrance and exit treatments.
9

10 (IV.F.2) Throughout construction of the facility and post-construction restoration, the
11 certificate holder shall install permanent erosion control measures, as necessary.
12

13 (IV.F.3) Upon completion of construction of in an area, the certificate holder shall vegetate
14 temporarily disturbed areas to limit soil exposure to wind and water erosion.
15

16 (IV.F.4) Before beginning operation of the facility, the certificate holder shall obtain a
17 NPDES Storm Water Discharge General Permit #1200-Z (for industrial activities)
18 from the Oregon Department of Environmental Quality.
19

20 (IV.F.5) Upon completion of retirement of the facility, the certificate holder shall vegetate
21 temporarily disturbed areas to limit soil exposure to wind and water erosion.
22

23 (IV.F.6) During construction, operation and retirement of the facility, the certificate holder
24 shall implement a Spill Prevention Control and Countermeasure Plan (“SPCC”),
25 an Emergency Action Plan, a Hazardous Waste Emergency
26 Response/Contingency Plan, and a Hazardous Materials Management Plan.
27

28 **G. PROTECTED AREAS, OAR 345-022-0040**

29 [No conditions]
30

31 **H. FISH AND WILDLIFE HABITAT, OAR 345-022-0060**

32 (IV.H.1) After completion of construction of the facility, the certificate holder shall restore
33 areas subject to temporary disturbance to pre-construction conditions using a seed
34 mix approved by ODFW and the Morrow County Soil and Water Conservation
35 District.
36

37 (IV.H.2) The certificate holder shall implement the habitat mitigation plan submitted on
38 March 30, 2007 and shown as Attachment A to this Order.
39

40 (IV.H.3) During construction of the facility, the certificate holder shall implement the
41 following measures:

- 42 (a) Design the facility components to be the minimum size needed for operations;
43 (b) Use best management practices to prevent loss of topsoil during construction;
44 and
45 (c) Control noxious weeds in areas disturbed by construction activities.

1
2 **I. THREATENED AND ENDANGERED SPECIES, OAR 345-022-0070**

3 [No conditions]
4

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

6 [No conditions]
7

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

9 (IV.K.1) Before beginning construction of the proposed related or supporting ethanol
10 pipeline, the certificate holder shall conduct additional investigation to better
11 define the vertical and horizontal extent of the archaeological resources in the
12 vicinity of the proposed ethanol pipeline in consultation with the Oregon Historic
13 Preservation Office (“SHPO”) and the Confederated Tribes of the Umatilla Indian
14 Reservation. The investigation shall include protocols and procedures for
15 protection of known cultural sites, including the identification of sites in the field
16 and on project construction maps, and for accidental discovery of additional sites.
17

18 (IV.K.2) During construction of the facility, the certificate holder shall ensure that a
19 qualified person instructs construction personnel in the identification of
20 archaeological and cultural resources, and ensure that archaeological construction
21 monitors are present to prevent accidental impacts to known cultural resources or
22 to any newly discovered resources.
23

24 (IV.K.3) During construction of the facility, in the event any archaeological or cultural
25 resources are discovered, the certificate holder shall cease all ground-disturbing
26 activities in the immediate area until a qualified archaeologist can evaluate the
27 significance of the find. If the archaeologist determines that the resources are
28 significant, the certificate holder shall make recommendations to the Council for
29 mitigation in consultation with the State Historic Preservation Office (“SHPO”),
30 the Department, the Confederated Tribes of the Umatilla Indian Reservation, and
31 other appropriate parties. Mitigation measures shall include avoidance or data
32 recovery. The certificate holder shall not restart work in the affected area until it
33 has demonstrated to the Department that it has complied with the archaeological
34 permit requirements administered by SHPO.
35

36 (IV.K.4) The location of the ethanol pipeline will be moved as shown on Figure C-2 rev. 2,
37 dated 2/15/07. The boundary between the certificate holder’s portion and
38 Tidewater’s portion is as shown on this figure.
39

40 (IV.K.5) The pipeline may be constructed underground between the ethanol production
41 plant and the existing loop track. The pipeline will cross the loop track by
42 horizontal bore. On the north side of the existing loop track, the pipeline will be
43 placed above ground on footings designed substantially as shown in the Norwest
44 Engineering Drawing provided to the Oregon Department of Energy and dated
45 2/21/07.

1
2 (IV.K.6) The certificate holder shall ensure that a qualified archeological monitor is on site
3 during excavation of the trench and subsequent boring of the pipeline.
4

5 **L. RECREATION, OAR 345-022-0100**
6 [No conditions]
7

8 **M. PUBLIC SERVICES, OAR 345-022-0110**
9 [No conditions]
10

11 **N. WASTE MINIMIZATION, OAR 345-022-0120**
12 [No conditions]
13

14 **V. OTHER APPLICABLE REGULATORY REQUIREMENTS**
15

16 **A. REQUIREMENTS UNDER COUNCIL JURISDICTION**
17

18 **1. NOISE CONTROL REGULATIONS, OAR 340-035-0035**
19 [No conditions]
20

21 **2. REMOVAL-FILL LAW**
22 [No conditions]
23

24 **3. PUBLIC HEALTH AND SAFETY**

25 (V.A.1) The certificate holder shall consult with the Oregon Public Utility Commission
26 staff to ensure that its designs and specifications for the electrical transmission
27 line and natural gas pipeline are consistent with applicable codes and standards.
28

29 (V.A.2) With respect to the related or supporting natural gas pipeline, the certificate
30 holder shall design, construct and operate the pipeline in accordance with the
31 requirements of the U.S. Department of Transportation as set forth in Title 49,
32 Code of Federal Regulations, Part 192 and the certificate holder shall develop and
33 implement a program using the best available practical technology to monitor the
34 proposed pipeline to ensure protection of public health and safety.
35

36 **VI. CONDITIONS REQUIRED OR RECOMMENDED BY COUNCIL RULES**

37 This section lists conditions specifically required by OAR 345-027-0020 (Mandatory
38 Conditions in Site Certificates), OAR 345-027-0028 (Monitoring Conditions), and OAR Chapter
39 345, Division 26 (Construction and Operation Rules for Facilities). These conditions should be
40 read together with the specific facility conditions included in Sections IV and V to ensure
41 compliance with the siting standards of OAR Chapter 345, Divisions 22 and 24, and to protect
42 the public health and safety. The certificate holder shall comply with all site certificate
43 conditions.
44

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

5
6 **A. MANDATORY CONDITIONS IN SITE CERTIFICATES**

7
8 (VI.A.1) The Council shall not change the conditions of the site certificate except as
9 provided for in OAR 345, Division 27.

10
11 (VI.A.2) The certificate holder shall submit a legal description of the site to the Department
12 of Energy within 90 days after beginning operation of the facility. The legal
13 description required by this rule means a description of metes and bounds or a
14 description of the site by reference to a map and geographic data that clearly and
15 specifically identifies the outer boundaries that contain all parts of the facility.

16
17 (VI.A.3) The certificate holder shall design, construct, operate, and retire the facility:
18 (a) Substantially as described in the site certificate;
19 (b) In compliance with the requirements of ORS Chapter 469, applicable
20 Council rules, and applicable state and local laws, rules and ordinances in
21 effect at the time the site certificate is issued; and
22 (c) In compliance with all applicable permit requirements of other state
23 agencies.

24
25 **B. OTHER CONDITIONS BY RULE**

26
27 (VI.B.1) With respect to the related or supporting natural gas pipeline, the certificate
28 holder shall submit to the Department copies of all incident reports involving the
29 pipeline required under 49 CFR §191.15.

30
31 (VI.B.2) Before beginning operation of the facility, the certificate holder shall submit to
32 the Department a legal description of the permanent right-of-way where the
33 applicant has built a pipeline or transmission line within an approved corridor.
34 The site of the pipeline or transmission line subject to the site certificate is the
35 area within the permanent right-of-way.

36
37 (VI.B.3) If the certificate holder becomes aware of a significant environmental change or
38 impact attributable to the facility, the certificate holder shall, as soon as possible,
39 submit a written report to the Department describing the impact on the facility and
40 any affected site certificate conditions.

41
42 (VI.B.4) Within 30 days after the effective date of the site certificate, the certificate holder
43 shall implement a plan that verifies compliance with all site certificate terms and
44 conditions and applicable statutes and rules and shall submit a copy of the plan to

1 the Department. The certificate holder shall document the compliance plan and
2 maintain it for inspection by the Department or the Council.

3
4 (VI.B.5) Within 30 days after the effective date of the site certificate, and every six months
5 thereafter during construction of the facility and related or supporting facilities,
6 the certificate holder shall submit a semi-annual construction progress report to
7 the Department. In each construction progress report, the certificate holder shall
8 describe any significant changes to major milestones for construction. When the
9 reporting date coincides, the certificate holder may include the construction
10 progress report within the annual report described in Condition (VI.B.6) below.

11
12 (VI.B.6) By April 30 of each year after beginning construction, the certificate holder shall
13 submit an annual report to the Department addressing the subjects listed in OAR
14 345-026-0080(2). The Council Secretary and the certificate holder may, by
15 mutual agreement, change the reporting date.

16
17 (VI.B.7) To the extent that information required by OAR 345-026-0080(2) is contained in
18 reports the certificate holder submits to other state, federal or local agencies, the
19 certificate holder may submit excerpts from such other reports to satisfy this
20 condition. The Council reserves the right to request full copies of such excerpted
21 reports.

22
23 (VI.B.8) The certificate holder and the Department shall exchange copies of all
24 correspondence or summaries of correspondence related to compliance with
25 statutes, rules and local ordinances on which the Council determined compliance,
26 except for material withheld from public disclosure under state or federal law or
27 under Council rules. The certificate holder may submit abstracts of reports in
28 place of full reports; however, the certificate holder shall provide full copies of
29 abstracted reports and any summarized correspondence at the request of the
30 Department.

31
32 (VI.B.9) The certificate holder shall notify the Department within 72 hours of any
33 occurrence involving the facility if:
34 (a) There is an attempt by anyone to interfere with its safe operation;
35 (b) A natural event such as an earthquake, flood, tsunami or tornado, or a
36 human-caused event such as a fire or explosion, affects or threatens to
37 affect the public health and safety or the environment; or,
38 (c) There is any fatal injury at the facility.

39
40 **VII. GENERAL CONDITIONS**

41
42 (VII.1) The general arrangement of the Columbia Ethanol Project shall be substantially as
43 shown in the ASC and as described in Request for Amendment 1.
44

- 1 (VII.2) The certificate holder shall ensure that related or supporting facilities are
- 2 constructed in the corridors described in the ASC and in the manner described in
- 3 the ASC.
- 4
- 5 (VII.3) Before any transfer of ownership of the facility or ownership of the site certificate
- 6 holder, the certificate holder shall inform the Department of the proposed new
- 7 owners. The requirements of OAR 345-027-0100 shall apply to any transfer of
- 8 ownership that requires a transfer of the site certificate.
- 9
- 10 (VII.4) If any provision of this site certificate is declared by a court to be illegal or in
- 11 conflict with any law, the validity of the remaining terms and conditions shall not
- 12 be affected, and the rights and obligations of the parties shall be construed and
- 13 enforced as if the site certificate did not contain the particular provision held to be
- 14 invalid. In the event of a conflict between the conditions contained in the site
- 15 certificate and the Council's order, the conditions contained in this site certificate
- 16 shall control.
- 17
- 18 (VII.5) The laws of the State of Oregon shall govern this site certificate.
- 19
- 20 (VII.6) Any litigation or arbitration arising out of this agreement shall be conducted in an
- 21 appropriate forum in Oregon.
- 22
- 23

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

30 ENERGY FACILITY SITING COUNCIL

31

32

33 By: 
 34 Barry Beyeler, Chair
 35 Oregon Energy Facility Siting Council

36

37 Date: OCTOBER 16, 2017

PACIFIC ETHANOL COLUMBIA, LLC

31

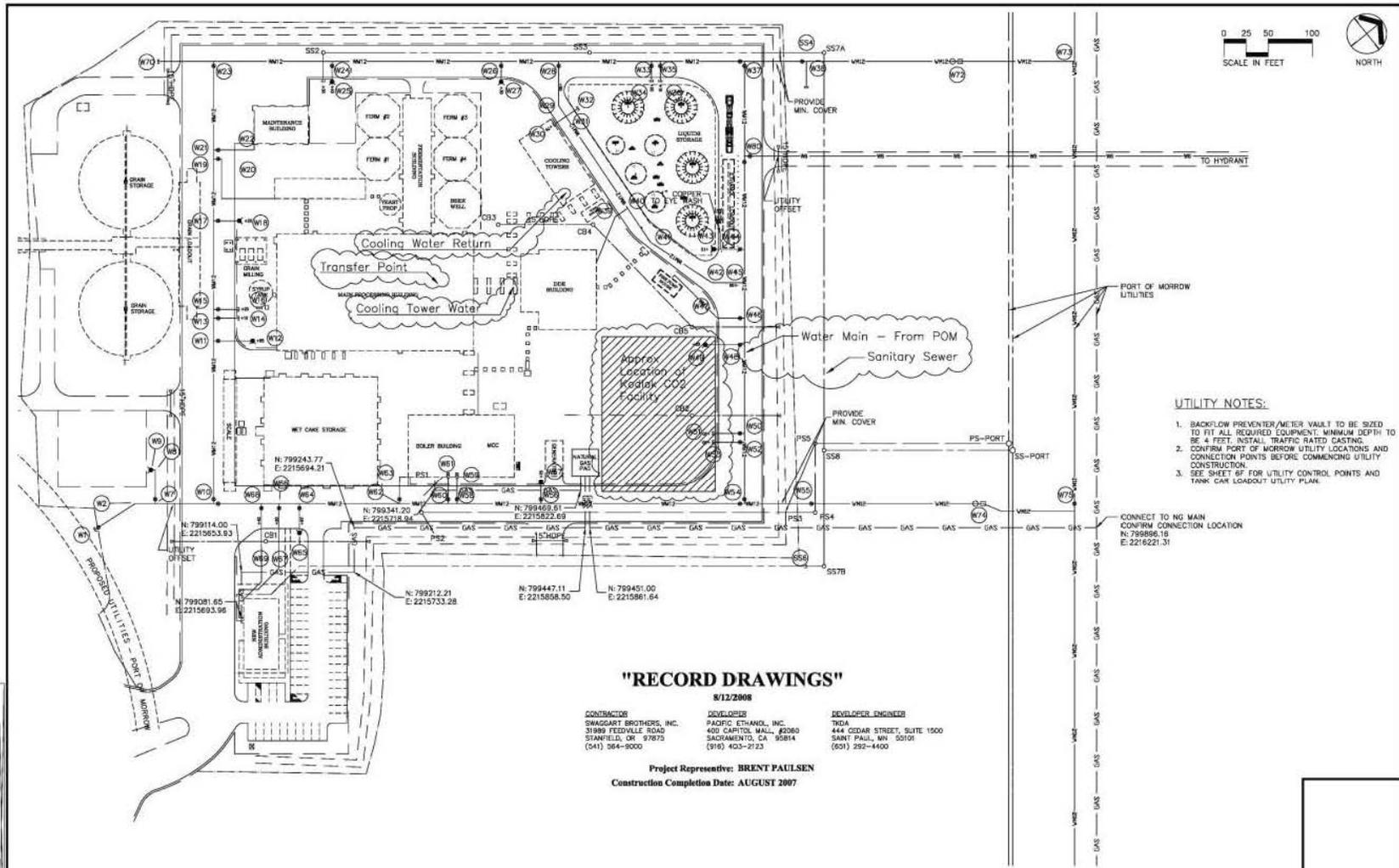
32

33 By: 
 34 Print: BYRON T. MCCREEDY

36

37 Date: 11/22/17

Attachment: Facility Layout (As Approved September 2017)



- UTILITY NOTES:**
1. BACKFLOW PREVENTER/METER VAULT TO BE SIZED TO FIT ALL REQUIRED EQUIPMENT. MINIMUM DEPTH TO BE 4 FEET. INSTALL TRAFFIC RATED CASTING.
 2. CONFIRM PORT OF MORROW UTILITY LOCATIONS AND CONNECTION POINTS BEFORE COMMENCING UTILITY CONSTRUCTION.
 3. SEE SHEET #67 FOR UTILITY CONTROL POINTS AND TANK CAR LOADOUT UTILITY PLAN.
- CONNECT TO NG MAIN
CONFIRM CONNECTION LOCATION
N: 799896.18
E: 2216221.31

"RECORD DRAWINGS"

8/12/2008

CONTRACTOR SWAGGART BROTHERS, INC. 31986 FEEDVILLE ROAD STANFIELD, OR 97875 (541) 364-9000	DEVELOPER PACIFIC ETHANOL, INC. 400 CAPITOL MALL, #2000 SACRAMENTO, CA 95814 (916) 403-2723	DEVELOPER ENGINEER TKDA 444 CEDAR STREET, SUITE 1500 SAINT PAUL, MN 55101 (651) 292-4400
---------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------

Project Representative: BRENT PAULSEN
Construction Completion Date: AUGUST 2007

NO.	DATE	BY	DESCRIPTION OF REVISIONS
1	8/12/08	PSG	RECORD DRAWING

TKDA
ENGINEERS-ARCHITECTS-PLANNERS
444 Cedar Street, Suite 1500
Saint Paul, MN 55101-2143
(651) 292-4400
Fax: (651) 292-0983
www.tkda.com

DESIGNED	DRAWN	CHECKED
MCP	PSG	VJM

DATE IS ONE INCH OR ORIGINAL DRAWING.
IF NOT ONE INCH ON THIS DRAWING
ADJUST SCALES ACCORDINGLY.

Pacific Ethanol, Inc.
400 Capital Mall
Sacramento, CA 95814
Phone: (916) 403-2723
Fax: (916) 406-2007
www.peinc.com

**PEI - COLUMBIA
UTILITY PLAN**

PROJECT NO. 13360.006
DRAWING NO. 6

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

Esterson, Sarah

From: Esterson, Sarah
Sent: Monday, June 27, 2016 5:32 AM
To: 'ljones@pacificethanol.com'; 'vanthofd30@gmail.com'; 'drichards@pacificethanol.com'; 'paulk@pacificethanol.com'
Cc: 'Cornett, Todd'; 'Kilsdonk, Duane'; Gustafson, Virginia; FRANCE Renee M
Subject: CEP AMD1 Additional Information Request
Attachments: CEP AMD1 Additonal Information Request_2016-06-27.pdf

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.



Oregon

Kate Brown, Governor



OREGON
DEPARTMENT OF
ENERGY

625 Marion St. NE
Salem, OR 97301-3737
Phone: (503) 378-4040
Toll Free: 1-800-221-8035
FAX: (503) 373-7806
www.Oregon.gov/ENERGY

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: ljones@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			
AIR Number	RFA Page(s)	Additional Information Request	Comment
AIR-1		Please provide proof of registration to do business in Oregon.	<p>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.</p> <p>Rule: OAR 345-021-0010(1)(a)(H)(iv)</p>

Project Description			
AIR Number	RFA Page(s)	Additional Information Request	Comment
AIR-2		Please provide a description of the foam building, fire pump house, ammonia containment facility, and flare.	<p>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.</p> <p>Rule: OAR 345-021-0010(1)(b)(A)(iv) and (v)</p>

Project Description			
AIR Number	RFA Page(s)	Additional Information Request	Comment
AIR-3		Please identify and explain any changes in the request for amendment compared to ASC Exhibit B related to the facility description.	<p>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.</p> <p>Rule: OAR 345-021-0010(1)(b)(A)(iv)</p>
AIR-4		Please verify and correct the reactor tank capacities provided for the corn oil extraction system.	<p>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.</p> <p>Rule: OAR 345-021-0010(1)(b)(A)(iv)</p>
AIR-5		Please add the 5,560-gallon evaporative flash tank to the corn oil extraction equipment list and a process description.	<p>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.</p> <p>Rule: OAR 345-021-0010(1)(b)(A)(iv)</p>
AIR-6		Please provide a construction schedule and construction cost estimate for all components and facility modifications included in the request for amendment.	<p>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.</p> <p>Rule: OAR 345-021-0010(1)(b)(F)</p>

Solid Waste/Wastewater			
AIR Number	RFA Page(s)	Additional Information Request	Comment
AIR-7		Please explain why a 1200-C and/or 1200-Z permit was not required for management of construction related stormwater.	<p>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.</p> <p>Rule: OAR 345-021-0010(1)(v)(E)</p>
AIR-8		Please provide estimated quantities of materials used during construction of the facility modifications and in current operation of the facility.	<p>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).</p> <p>Rule: OAR 345-021-0010(1)(v)(D)</p>
AIR-9		Please provide a description of hazardous and non-hazardous waste management during construction and operation of the facility modifications.	<p>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.</p> <p>Rule: OAR 345-021-0010(1)(v)(D)-(F)</p>

Water Use			
AIR Number	RFA Page(s)	Additional Information Request	Comment
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			
AIR Number	RFA Page(s)	Additional Information Request	Comment
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			
AIR Number	RFA Page(s)	Additional Information Request	Comment
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			
AIR Number	RFA Page(s)	Additional Information Request	Comment
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			
AIR Number	RFA Page(s)	Additional Information Request	Comment
AIR-15		Please provide supporting evidence from Port of Morrow related to aboveground infrastructure following facility retirement.	<p>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.</p> <p>Rule: OAR 345-022-0050</p>
AIR-16		Please provide the calculations and assumptions associated with the request to modify Condition IV.C.4 from \$800 to \$250k.	<p>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.</p> <p>Rule: OAR 345-022-0050</p>

ESTERSON Sarah * ODOE

From: Daniel Koch <dkoch@pacificethanol.com>
Sent: Thursday, August 18, 2016 3:24 PM
To: sarah.esteron@state.or.us
Cc: David Van't Hof
Subject: CEP - Pacific Ethanol - Response
Attachments: CEP AMD1 Additonal Information Response - 8.18.16.pdf; Business Registry for Pacific Ethanol.pdf; EFSC 8.12.16.pdf

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

Response: Pacific Ethanol Response

Date: 8/18/16

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 dispelling 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.

Table 1
Cost of Facility Retirement and Site Restoration

Utility Disconnects		\$3,435
Preliminary Work (Cut & Cap Lines)		\$14,268
Removal of Buildings		\$123,510
Removal of Tanks and Equipment		\$177,261
General Costs (Permits, mobilization, engineering, overhead)		\$90,784
Total Cost of Facility Retirement and Site Restoration		\$409,258
Performance Bond	1%	\$4,093
Administration and Project Management Costs	10%	\$40,926
Future Developments Contingency	20%	\$81,852
Hazardous Materials Assessments, Testing and Cleanup		\$250,000
Total Financial Assurance Amount (2006 \$)		\$786,129
Total Financial Assurance Amount (rounded to nearest \$1,000)		\$786,000
Total Financial Assurance Amount (adjusted to second quarter 2007)		\$800,000

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.



Business Name Search

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Business Entity Data

08-18-2016
09:05

Registry Nbr	Entity Type	Entity Status	Jurisdiction	Registry Date	Next Renewal Date	Renewal Due?
350208-90	FLLC	ACT	DELAWARE	03-29-2006	03-29-2017	
Entity Name	PACIFIC ETHANOL COLUMBIA, LLC					
Foreign Name						

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Associated Names

Type	PRINCIPAL PLACE OF BUSINESS					
Addr 1	400 CAPITOL MALL STE 2060					
Addr 2						
CSZ	SACRAMENTO	CA	95814		Country	UNITED STATES OF AMERICA

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

Type	AGT REGISTERED AGENT	Start Date	12-13-2006	Resign Date		
Of Record	003292-27 C T CORPORATION SYSTEM					
Addr 1	388 STATE ST STE 420					
Addr 2						
CSZ	SALEM	OR	97301		Country	UNITED STATES OF AMERICA

Type	MAL MAILING ADDRESS					
Addr 1	400 CAPITOL MALL STE 2060					
Addr 2						
CSZ	SACRAMENTO	CA	95814		Country	UNITED STATES OF AMERICA

Type	MEM MEMBER	Resign Date				
Not of Record	PACIFIC ETHANOL HOLDING CO. LLC					
Addr 1	400 CAPITOL MALL STE 2060					
Addr 2						
CSZ	SACRAMENTO	CA	95814		Country	UNITED STATES OF AMERICA

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Name History

Business Entity Name	Name Type	Name Status	Start Date	End Date
PACIFIC ETHANOL COLUMBIA, LLC	EN	CUR	03-29-2006	

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Summary History

Image Available	Action	Transaction Date	Effective Date	Status	Name/Agent Change	Dissolved By
	AMENDED ANNUAL REPORT	02-13-2016		FI		
	AMENDED ANNUAL REPORT	02-14-2015		FI		
	AMENDED ANNUAL REPORT	02-26-2014		FI		
	AMENDED ANNUAL REPORT	02-21-2013		FI		
	AMENDED ANNUAL REPORT	03-16-2012		FI		
	ANNUAL REPORT PAYMENT	03-02-2011	03-01-2011	SYS		
	ANNUAL REPORT PAYMENT	02-16-2010	02-12-2010	SYS		
	ANNUAL REPORT PAYMENT	02-23-2009	02-20-2009	SYS		
	ANNUAL REPORT PAYMENT	03-10-2008	03-07-2008	SYS		
	REINSTATEMENT AMENDED	08-31-2007		FI		
	ADMINISTRATIVE REVOKE AUTHORITY	05-25-2007		SYS		
	NOTICE LATE ANNUAL	03-30-2007		SYS		
	CHANGE OF REGISTERED AGENT/ADDRESS	12-13-2006		FI	Agent	
	APPLICATION FOR AUTHORITY	03-29-2006		FI	Agent	

For comments or suggestions regarding the operation of this site,
please contact : corporation.division@state.or.us



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
by: 

Gary Neal,
General Manager

ESTERSON Sarah * ODOE

From: David Van't Hof <vanthofd30@gmail.com>
Sent: Tuesday, August 16, 2016 3:02 PM
To: ESTERSON Sarah * ODOE
Cc: Daniel Koch; FRANCE Renee M
Subject: Re: CEP Call is at 3:30
Attachments: Pacific Ethanol Agreement with Port.docx

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](tel:(503)373-7945)
C: [\(503\) 385-6128](tel:(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 intend 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.
4. 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:

ESTERSON Sarah * ODOE

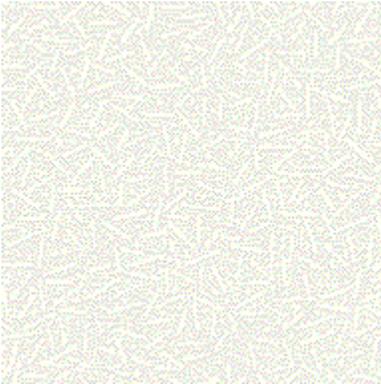
From: David Van't Hof <vanthofd30@gmail.com>
Sent: Monday, August 15, 2016 3:41 PM
To: Esterson, Sarah
Cc: Daniel Koch
Subject: Fwd: EFSC Letter
Attachments: EFSC 8.12.16.pdf

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

----- Forwarded message -----

From: Carmen Mendoza <CarmenM@portofmorrow.com>
Date: Fri, Aug 12, 2016 at 10:46 AM
Subject: EFSC Letter
To: "vanthofd30@gmail.com" <vanthofd30@gmail.com>
Cc: Gary Neal <GaryN@portofmorrow.com>



Good morning David,

Attached is the letter that Gary asked me to send to you, have a great day.

Carmen Mendoza



PO Box 200

Boardman, OR 97818

Phone [\(541\) 481-7678](tel:(541)481-7678)

FAX [\(541\) 481-2679](tel:(541)481-2679)

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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
by: 

Gary Neal,
General Manager

ESTERSON Sarah * ODOE

From: ESTERSON Sarah * ODOE
Sent: Tuesday, November 29, 2016 1:40 PM
To: 'Daniel Koch'
Cc: David Van't Hof; 'drichards@pacificethanol.com'; 'paulk@pacificethanol.com'; CORNETT Todd * ODOE; WOODS Maxwell * ODOE
Subject: CEP AMD1 - Additional Information Request for Decommissioning Cost Estimate
Attachments: CEPAMD1 Information Request 2016-11-29.pdf

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.

From: Daniel Koch [mailto:dkoch@pacificethanol.com]
Sent: Monday, November 28, 2016 10:41 AM
To: ESTERSON Sarah * ODOE <Sarah.Esterson@oregon.gov>
Cc: David Van't Hof <vanthofd30@gmail.com>
Subject: RE: CEP AMD1 - ODOE Notification of Anticipated Date of Issuance for Proposed Order

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 sent 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
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Kate Brown, Governor



OREGON
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ENERGY

625 Marion St. NE
Salem, OR 97301-3737
Phone: (503) 378-4040
Toll Free: 1-800-221-8035
Fax: (503) 373-7806
www.Oregon.gov/ENERGY

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; vanhofd30@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

ESTERSON Sarah * ODOE

From: Daniel Koch <dkoch@pacificethanol.com>
Sent: Friday, January 20, 2017 11:50 PM
To: ESTERSON Sarah * ODOE
Cc: David Van't Hof; Paul Koehler; CORNETT Todd * ODOE; WOODS Maxwell * ODOE
Subject: CEP AMD1 - Additional Information Request for Decommissioning Cost Estimate
Attachments: CEP - Info Request Response 1.20.17.pdf

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



Pacific Ethanol Columbia, LLC

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,

A handwritten signature in black ink that reads "Daniel Koch".

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. The equipment does not include anything differing from the existing clean-up plan. 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, then 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.

Terry Freeman / FCM Project listings - Relevant Experience.
 RE: Pacific Ethanol Inc. Boardman Ethanol Plant

<i>Industrial Projects</i>	<i>Value</i>	<i>FCM Group Responsibilities</i>	<i>Description of Relevant Experience</i>
Pacific Ethanol Inc. - Ethanol Production Facility Stockton, Ca. New Construction	170M	CM Services	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 knowledgeable experience as related to the various structures and systems in place and constraints that are to be encountered during the decommissioning scope of work.
Flint Hills Resources - Arthur, Iowa. - Ethanol Plant - Demolition and rebuild of dryer systems, dryer bldg. and various systems after explosion event.	67M	CM Services	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.
Macpherson Oil - Bakersfield, CA. - Decommission tank farm, soil remediation, new 10 mg solar project.	20M	CM Services	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 industry's EPA standards.
DTE - Stockton Cogen - Stockton, CA. - Modifications to existing Cogen power plant - convert from coal to biofuel.	240M	CM Services	This Power conversion project included the decommission and demolition of an existing boiler ash system, coal storage facilities and related conveying equipment and processing systems.
DTE - Mt Poso Cogen - Bakersfield, CA. - Modifications to Cogen power plant - convert from coal to biofuel.	150M	CM Services	The Mt. Poso Cogen project mirrored the Stockton Cogen project with respect to decommissioning and demolition work structure.
City of Alderwood - Alderwood, WA. Wastewater treatment plant - New wastewater treatment plant and Modification of existing facility.	70M	CM Services	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.
King County - Vashon Island Wastewater Treatment Facility - Wastewater treatment facility King Co., WA. - Demolition, modernization and new construction.	10M	CM Services	
City of Kalama - Wastewater Treatment Facility - Kalama, WA. - Addition and modernization to existing facility.	5M	CM Services	
City of Portland - Wastewater Treatment Facility. - New Chlorine Containment facility and injection system to outfall.	6M	CM Services	
City of Battle Ground - Battleground, WA. New wastewater treatment plant.	4M	CM Services	

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.

Category	cond_ref_num	Source_Ref	Compliance_condition	Evaluation of Compliance by Pacific Ethanol Columbia	Explain how continued compliance could further ensure the certificate holder's ability to restore the site to a useful, non-hazardous condition
IV. SPECIFIC FACILITY CONDITIONS	8	5, 18, IV.C.1	The certificate holder shall retire the facility if the certificate holder permanently ceases construction or operation of the facility.	Pacific Ethanol is aware of this requirement, and through discussion has demonstrated its understanding of the requirements.	By being aware of the requirement to properly retire, no actions will be taken to make this process more difficult to achieve.
IV. SPECIFIC FACILITY CONDITIONS	8	5, 19, IV.C.1	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	Pacific Ethanol (PEI) has demonstrated through discussion with the port and throughout the amendment	By being prepared for a final retirement plan, the company understands the demands of the retirement process.

			to Condition (IV.C.2).	process the need to work with the DOE in the retirement process, including a formal retirement plan when the time comes.	
IV. SPECIFIC FACILITY CONDITIONS	9	5, 23, 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:	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.
IV. SPECIFIC FACILITY CONDITIONS	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 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 developments occur, the final restoration process will be more manageable.

			site conditions is within the control of the certificate holder.	do so by several separate compliance and permit requirements.	
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 CONDITIO NS	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 demonstrat ed 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 CONDITIO NS	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 demonstrat ed 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.

			commences any activity to complete construction or to operate or retire the energy facility.		
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. The	By completing a timely ESA, PEI creates ongoing documentation of any environmental issues that need to be addressed in restoration and retirement.

				facility will ensure it is delivered to the DOE in the required timely manner.	
IV. SPECIFIC FACILITY CONDITIO NS	14	6, 35, 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.	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.	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 CONDITIO NS	15	6, 42, 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.	No such release of hazardous substance has occurred in the history of the site certificate.	PEI understands that such an event may substantially affect the restoration and retirement plan and as such must notify the DOE.
IV. SPECIFIC FACILITY CONDITIO NS	16	7, 2, IV.C.9	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	No such release of hazardous substance has occurred in the history of the site certificate.	PEI understands that such an event may substantially affect the restoration and retirement plan and as such must notify the DOE.

			independently prepared estimate of the additional cost of remediation or correction within such six-month period.		
IV. SPECIFIC FACILITY CONDITIONS	16	7, 9, IV.C.9	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.
IV. SPECIFIC FACILITY CONDITIONS	16	7, 12, IV.C.9	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 requirements 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,

			deficiencies identified in the course of a Phase I Environmental Site Assessment.	obligated to address the deficiency even in retirement.	potentially leading to a cost overrun in retirement.
IV. SPECIFIC FACILITY CONDITIONS	17	7, 17, 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.	PEI understands this requirement and will follow it at said time when retirement occurs.	This requirement helps to ensure that all resources are put towards proper retirement prior to any other company liabilities.
IV. SPECIFIC FACILITY CONDITIONS	18	7, 21, 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.	PEI understands this requirement and will follow it at said time when retirement occurs.	PEI understands the estimate for what it is and this requirement ensures a business understands that costs must be paid regardless of estimate.

IV. SPECIFIC FACILITY CONDITIO NS	19	7, 25, 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.	PEI understands this requirement and will follow it at said time when retirement occurs.	This requirement helps to ensure that a company doesn't try to avoid proper retirement by ceasing operations but never releasing it as retired.
IV. SPECIFIC FACILITY CONDITIO NS	19	7, 31, IV.C.12	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.	This requirement shows that a retirement plan must be developed whether by the company or the DOE.

			the Council's approval.		
IV. SPECIFIC FACILITY CONDITIONS	19	7, 34, IV.C.12	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.	PEI understands this requirement and will follow it at said time when retirement occurs.	This requirement shows that the bond will be used for restoration regardless of who developed the retirement plan.
IV. SPECIFIC FACILITY CONDITIONS	19	7, 39, IV.C.12	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.	PEI understands this requirement and will follow it at said time when retirement occurs.	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.

IV. SPECIFIC FACILITY CONDITIO NS	19	7, 42, IV.C.12	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.	PEI understands this requirement and will follow it at said time when retirement occurs.	This requirement demonstrates a final termination step of the current certificate upon successful retirement.
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Appendix B

Original prepared FCM Cost Estimate

Terry Freeman
FCM Group
Renewable and Alternative Energy Projects

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Cell: (360) 702-9372

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:
 - Planning and CPM scheduling services.
 - Program Management.
 - Meetings as required with PEI and regulatory agencies.
 - Project Controls and Documentation.
 - Pre-Construction survey and final program assessments.
 - 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

Terry Freeman
 FCM Group
 Renewable and Alternative Energy Projects

Project: Pacific Ethanol Inc. - Boardman / Retirement Cost Estimate R1
 Date: October 17, 2016

RE-CAP

T1 - Demolish Buildings and Plant Facility:	Item	Cost
	Utility Disconnects	\$ 3,500.00
	Cut and Cap (all AG/UG Utility /Elect Feeders)	\$ 15,000.00
	Removal of Buildings	\$ 140,659.00
	Removal of Tanks and Equipment	\$ 310,016.09
	General Conditions - Included in Removal costs	\$ -
	Permits	\$ 25,000.00
	Total Cost Facility Retirement as two separate Projects	\$ 494,175.09
	Deductive if both Removal Projects performed Concurrent (Supervision , labor and equipment savings)	\$ (30,000.00)
	Total Cost Facility Retirement if Building and Tanks Projects run Concurrent	\$ 464,175.09
T2 - Decommission Plant Facilities for Turn-Over	TOTAL COST - Plant Decommissioning for turn-over	\$ 178,073.57
T3 - Hazmat Cost - Stand Alone	Totals	\$ 67,900.00

T1 - Building Demolition - Dismantle, Dispose/Recycle, Clean-up

Labor and Equipment

No.	Description	Rate	no.	Hrs.	Extension	Total
	Superintendent/PU	75	1	114	\$ 8,550.00	
	2.5-3 CY Excavator w/heavy shear	220	1	114	\$ 25,080.00	
	1 CY Excavator - thumb bucket	175	1	114	\$ 19,950.00	
	JLG	125	1	57	\$ 7,125.00	
	Laborers	30	2	228	\$ 13,680.00	
	Yard Equip. - water truck	65	1	57	\$ 3,705.00	
Total Labor / Equip						\$ 78,090.00

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

	Haul	loads	MI/trip	Rd Miles	rate	Total
	To RS Davis scrap	2	35	70	\$ 2.50	\$ 175
	To Hermiston Recycling-Disposal	17	35	595	\$ 2.50	\$ 1,488
Total Trucking						\$ 1,663

Subtotal Project Cost		\$ 79,753
Fee / General Conditions-Risk	15%	\$ 11,963
Overhead and Profit (Local Contractor)	20%	\$ 15,951
Total Contract Amount		\$ 107,666

Scrap Reimburse - Tons Rate

Not Included		\$ -
Indirect		
Performance and Payment Bonds	1%	\$ 1,076.66
Administration	10%	\$ 10,766.59
Escalation Development Contingency (10 yr.)	15%	\$ 16,149.88
Hazardous Material testing and Cleanup Allowance		\$ 5,000
Total Indirect		\$ 32,993

TOTAL COST - BLDG's REMOVALS

\$ 140,659

T1 - Plant - Equip Demolition - Dismantle, Dispose/Recycle, Clean-up

Labor and Equipment

No.	Description	Rate	no.	Hrs.	Extension	Total
	Superintendent/PU	75	1	150	\$ 11,250.00	
	2.5-3 CY Excavator w/heavy shear	220	1	150	\$ 33,000.00	
	1 CY Excavator - thumb bucket	175	1	150	\$ 26,250.00	
	JLG	125	1	75	\$ 9,375.00	
	Laborers	30	6	300	\$ 54,000.00	
	Yard Equip. - water truck	65	1	75	\$ 4,875.00	
	Total Labor / Equip			900	\$ 138,750.00	\$ 138,750

Trucking

RS Davis - Scrap yard / Hermiston Disposal - Waste/Recycle
 820 tons @20 t/trip = 41 loads

	Haul	loads	Mi/trip	Rd Miles	rate	Total
	To RS Davis scrap	35	35	1225	\$ 2.50	\$ 3,063
	To Hermiston Recycling-Disposal	6	35	210	\$ 2.50	\$ 525
Total Trucking						\$ 3,588

Subtotal Project Cost

\$ 142,338

Fee / General Conditions-Risk	15%	\$ 21,351
Overhead and Profit (Local Contractor)	20%	\$ 28,468
Total Contract Amount		\$ 192,156

Scrap Reimburse -

Tons Rate

Not Included		\$ -
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Indirect

Performance and Payment Bonds	1%	\$ 1,921.56
Administration	10%	\$ 19,215.56
Escalation Development Contingency (10 yr.)	15%	\$ 28,823.34
Hazardous Material testing and Cleanup Allowance		\$ 67,900
Total Indirect		\$ 117,860

TOTAL COST Tanks and Equipment REMOVALS

\$ 310,016

T-2 Decommission Boardman Plant
PEI - Boardman

T2 - Decommission Boardman Plant for Turn-Over to Port.

Decom - RECAP

No.	Description	Rate	no.	Hrs.	Extension	Total
Directs	Project Manager	80	1	100	\$ 8,000.00	
	Supervisor/Foreman	65	1	80	\$ 5,200.00	
	Labor / small tools and equip.	30	lot	80	\$ 9,230.00	
	Special Equip Allowance	65	1	57	\$ 3,705.00	
	Total Labor / Equip			317	\$ 26,135.00	\$ 26,135
Trucking	Trucking off-site of stored Chemicals (enzyme tanks included)					\$ 42,000
	Chem Totes					\$ 4,000
	Unforeseen Contingency					\$ 5,000
	Total Trucking					\$ 51,000
	Subtotal Project Cost					\$ 77,135
	Fee / General Conditions-Risk	15%				\$ 11,570
	Overhead and Profit (Local Contractor)	20%				\$ 15,427
	Total Contract Amount					\$ 104,132
Indirect	Performance and Payment Bonds	1%				\$ 1,041.32
	Total Indirect					\$ 1,041.32
HazMat	Hazardous Material Testing Allowance					\$ 5,000
HazMat	Hazardous Material Cleanup					\$ 67,900
	Total Hazmat					\$ 72,900
TOTAL COST - Plant Decommissioning for turn-over						\$ 178,074

Decom - Labor Breakdown									
No.	Description	Classification	Rate	Men	Hrs.	Labor \$	Equip/Mat \$	Sub	Total
1	Electrical Systems Lockout	Laborer	30	2	8	480	150		\$ 630.00
2	Mechanical Systems Lockout	Laborer	30	2	8	480	250		\$ 730.00
3	General Site/Area Wash-down	Laborer	30	4	24	2880	500		\$ 3,380.00
4	Cooling Tower - Pump to city wastewater	Laborer	30	2	16	960	150		\$ 1,110.00
5	Boiler Blowdown	Laborer	30	2	16	960	100		\$ 1,060.00
6	Fermentation wash-down	Laborer	30	4	8	960	200		\$ 1,160.00
7	DDE wash-down	Laborer	30	4	8	960	200		\$ 1,160.00
8	Totals				88	7680	1550		\$ 9,230.00

Tanks

- 9 Sulfic Acid Tk - 10ft diam/ 18ft high
- 10 Ammonia Tk - 12ft diam/ 30 ft high
- 11 Sodium Tk - 6ft diam/ 10 ft high

Appendix C

CCS Supplied T3 (Hazmat Cleanup) Estimate



CCS – Longview Operations

A DIVISION OF PNE CORP.

55 International Way, Longview, WA 98632

(360) 423-6316 / Fax (360) 423-3409 / Toll Free 1-888-423-6316

www.pnecorp.com

Pacific Ethanol Columbia
71335 Rail Loop Dr.
Boardman, Oregon 97818

January 19, 2017

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 be disposed of in the current site and or piled up to haul to local customers. We would find designated hazardous waste facilities that will receive the remainder 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.



CCS – Longview Operations

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55 International Way, Longview, WA 98632

(360) 423-6316 / Fax (360) 423-3409 / Toll Free 1-888-423-6316

www.pnecorp.com

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/>. 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: Final Executed Agreement (September 2017)

9

RETIREMENT AGREEMENT

This **RETIREMENT AGREEMENT** (the "Agreement") is made and entered into effective as of this day, September 18th, 2017 (the "Effective Date"), by Pacific Ethanol Columbia, LLC, a Delaware limited liability company ("Pacific"), and the Port of Morrow, a municipal corporation of the State of Oregon ("Port"). Pacific and Port are each referred to as a "Party" and collectively as the "Parties."

RECITALS

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

WHEREAS, Pacific holds a Site Certificate from the Oregon Energy Facility Siting Council (the "EFSC") that requires Pacific to post a bond to cover the cost of removing certain above ground improvements ("Improvements") from the Site upon termination of facility operations and further a condition that Pacific remove all specified Improvements upon termination of facility operations;

WHEREAS, Pacific and Port agree that any Improvements would continue to provide value after termination of facility operations and that the Site can be restored to a useful and non-hazardous condition suitable for further industrial use should the Improvements be left in place;

And WHEREAS, Pacific and Port further agree that they would prefer any Improvements not chosen to be removed by Pacific to remain at the Site and that Port will take over legal ownership and liability for such Improvements upon Pacific's 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 and Conveyance of Improvements Upon Expiration of Site Certificate or Termination of Facility Operations. Upon termination (as defined in OAR 345-027-0110) of the Site Certificate, Pacific shall transfer all of its right, title and interest in all Improvements remaining on the Site to the Port at no cost, by executing and delivering to the Port a bill of sale, quitclaim deed or other instrument(s) reasonably requested by the Port to effectuate the conveyance (collectively, "Transfer Documents").¹ The Improvements will be conveyed to the Port in their AS IS, WHERE IS condition with no representations or warranties whatsoever from Pacific except as expressly set forth in this Agreement.

2. Acceptance of Liability for Improvements by Port and Indemnification of Pacific. Port agrees to assume all legal liability for all remaining Improvements upon transfer of ownership from Pacific to Port.

Port shall defend, indemnify and hold harmless Pacific, its parent company, and all of their respective successors and assigns, its officers, directors, and employees from any losses, liabilities, damages, demands, suits, causes of action, judgments, costs or expenses (including court costs and reasonable

¹ The certificate holder must apply to the Council to terminate the site certificate within two years following permanent cessation of operation of the facility. If the certificate holder fails to apply to Council to terminate the site certificate, the Council may terminate the site certificate according to procedures described in OAR 345-027-0020(16).

attorneys' fees) incurred by Pacific in connection with (i) Port's negligence, willful misconduct, fraud, or violation of law and (ii) any property damage, personal injury or death which results from Port's use of the Improvements after the effective transfer of ownership.

If requested by EFSC after transfer of the Improvements to the Port, the Port shall provide written confirmation to EFSC that the Port waives any claim, existing or future, that the State of Oregon or any of its agencies or departments, including without limitation EFSC, has any responsibility for removal of the Improvements from the Site; provided, however, that any such waiver shall not prevent recourse to the Bond for payment of remediation costs pursuant to the terms of the Bond.

3. Public Statements Against the State of Oregon or EFSC. The Parties agree that neither Party may make any public statement asserting that the State of Oregon or EFSC have any legal obligation to remove any of the Improvements.

4. Conditions on Amendment or Early Termination and 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 Pacific's Request for Amendment 1 to the Site Certificate. The Parties further agree that this Agreement may not be amended or terminated without prior approval of EFSC, or in the alternative:

- (a) Submit to the Oregon Department of Energy of a bond or letter of credit in the amount of \$852,000 (in 4th Quarter 2016 dollars, inclusive of any existing bond or letter of credit already held by the EFSC under the Site Certificate) naming the State of Oregon, acting by and through the EFSC, as beneficiary or payee and consistent with the following terms:
- (b) 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 EFSC shall select a comparable calculation to adjust Fourth Quarter 2016 dollars to present value.
- (c) The form of bond or letter of credit shall be subject to prior approval by the EFSC.
- (d) The issuer of the bond or letter of credit shall be subject to prior approval by the EFSC.
- (e) The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the EFSC under Condition (VI.B.6).

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

The terms of Condition 4(a) through 4(e) shall apply to Pacific if there has been a violation of the terms or conditions of the site certificate for which sanctions may be imposed, as described in OAR 345-029-0000, and shall be complied with within 90-days following the Department's issuance of a notice of violation.

5. Representations and Warranties of Pacific. Pacific represents and warrants that, as of the effective date of the transfer of ownership of the Improvements to the Port:

5.1 Title and Authority. Pacific has good title to the Improvements, free and clear of liens and encumbrances other than liens or encumbrances that benefit the Port, if any.

5.2 Authority. Pacific is the owner of the Improvements and has the right and authority to transfer ownership of the Improvements to the Port.

- 5.3 Condition. The Site and the Improvements are in a useful, non- hazardous condition suitable for industrial use. There exists no contamination of the Improvements or the Site resulting from the acts or omissions of Pacific or Pacific's agents or employees during the term of Pacific's lease of the Site that has not been fully remediated in compliance with Environmental Law. As used herein: (a) "Environmental Law" means any federal, state, or local statute, regulation, or ordinance or any judicial or other governmental order pertaining to the protection of health, safety or the environment; and (b) "Hazardous Substance" means any hazardous, toxic, infectious or radioactive substance, waste, and material as defined or listed by any Environmental Law, including without limitation petroleum products.
6. Personal Property of Pacific. Within thirty (30) days after delivery of the Transfer Documents to the Port ("Removal Period"), Pacific shall remove all moveable personal property and trade fixtures from the Site, including without limitation any and all chemicals, fuels and other Hazardous Substances. If Pacific's lease of the Site has expired or terminated, Pacific shall have an irrevocable license to go onto the Site for the Removal Period to effectuate the removal required by this Section. Any personal property of Pacific remaining on the Site at the end of the Removal Period shall be deemed abandoned by Pacific and may be removed, stored or disposed of by the Port and Pacific's expense.
7. Condition Precedent. The effectiveness of this Agreement shall be conditioned upon the approval by EFSC of Amendment No. 1 to Pacific's Site Certificate in substantially the form requested by Pacific's request to EFSC dated April 2016, and the expiration of any appeal periods applicable thereto with either no appeals having been filed or any appeals having been resolved to a final conclusion that is satisfactory to Pacific in its sole discretion. The foregoing includes without limitation, EFSC's approval of Pacific's requests to: (a) reduce the amount of the Bond to \$295,172 to cover the cost of any potential remediation of environmental hazards at the Site; and (b) amend the conditions of approval of the Site Certificate so that upon expiration of the Site Certificate, the Site needs to be restored to useful, non- hazardous condition suitable for industrial use.

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.

Attorney Fees. If suit or action is instituted in connection with any controversy arising out of this Agreement, the prevailing party shall be entitled to recover in addition to costs such sum as the court may adjudge reasonable as attorney fees at trial, on petition for review, and on appeal.

Correspondence to the Appropriate Parties should be Directed to:

If to Pacific:

Pacific Ethanol Columbia, LLC
c/o Pacific Ethanol, Inc.
400 Capitol Mall, Suite 2060
Sacramento, CA 95814
Attn: Chief Operating Officer

If to Port:

Port of Morrow
One Marine Drive
P.O. Box 200
Boardman, OR 97818

and

Pacific Ethanol, Inc.
400 Capitol Mall, Suite 2060
Sacramento, CA 95814
Fax: 916-403-2785
Attn: General Counsel

(Signatures follow)

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

Pacific Ethanol Columbia, LLC

DocuSigned by:


By: Ken Wilson

Its: vice President of operations

Port of Morrow

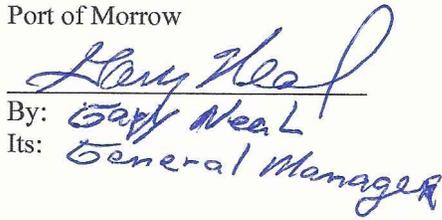

By: Gary Neal
Its: General Manager

Exhibit A
Improvements List