# Section 404/ 10 Permit Application

# Joint Permit Application

This is a joint application, and must be sent to both agencies, who administer separate permit programs. Alternative forms of permit applications may be acceptable; contact the Corps and DSL for more information.

Date Stamp

| U.S. Army Corps of Engineers Portland District | Oregon Department of State Lands |
|---|---|
| Corps Action ID Number | DSL Number |

## (1) APPLICANT AND LANDOWNER CONTACT INFORMATION

| | Applicant | Property Owner (if different) | Authorized Agent (if applicable) ☑ Consultant ☐ Contractor |
|---|---|---|---|
| Contact Name | Caroline Burda | Multiple – Pacific Connector Gas Pipeline, LP (PCGP) must obtain an easement prior to commencing construction. A list of landowners where wetlands/waterbodies would be affected by the Pipeline is provided in the 'Tables' section as Table 1. | Carolyn Last/Dan Duce |
| Business Name | Jordan Cove LNG, LLC Pacific Connector Gas Pipeline, LP | | Edge Environmental, Inc. |
| Mailing Address 1 | 5615 Kirby Drive, Suite 500 | | 405 Urban Street, Ste. 310 |
| Mailing Address 2 | | | |
| City, State, Zip | Houston, TX 77005 | | Lakewood, CO 80228 |
| Business Phone | 713-400-2813 | | 303-988-8844 |
| Cell Phone | 832-242-8177 | | 303-956-4289 |
| Fax | | | 303-988-8999 |
| Email | Caroline.burda@jordancovelng.com | | clast@edgeenvironmental.com |

## (2) PROJECT INFORMATION

**A. Provide the project location.**

| Project Name | Tax Lot # | Latitude & Longitude* |
|---|---|---|
| Pacific Connector Gas Pipeline Project | See Table 1 in the 'Tables' section | MP 0.0=43.4325 -124.2402<br>MP 228.13=42.0335 -121.3753 |
| Project Address / Location<br>See maps in 'Figures' section. Also see Section 1.1.2.2 in Attachment A/Project Description. | City (nearest)<br>Coos Bay, North Bend, Dillard, Myrtle Creek, Trail, Klamath Falls and Malin | County<br>Coos, Douglas, Jackson, Klamath counties. |

| Township | Range | Section | Quarter/Quarter |
|---|---|---|---|
| See maps in 'Figures' section. | | | |

Brief Directions to the Site

See maps in 'Figures' section and Environmental Alignment Sheets (provided under separate cover and on CD). The USGS-topographic location maps provide the proposed access roads. The proposed pipeline is 229 miles long. PCGP will provide directions to specific locations upon request.

**B. What types of waterbodies or wetlands are present in your project area? (Check all that apply.)**

| | | |
|---|---|---|
| ☑ River / Stream | ☑ Non-Tidal Wetland | ☑ Lake / Reservoir / Pond |
| ☑ Estuary or Tidal Wetland | ☐ Other | ☐ Pacific Ocean |

## (2) PROJECT INFORMATION

| Waterbody or Wetland Name** See Tables A.2-2 and A.2-3 in Appendix A.2 to Attachment C/Affected Water Resources and the Wetland Delineation Report (provided under separate cover) | River Mile | 6th Field HUC Name | 6th Field HUC (12 digits) |
|---|---|---|---|
| | | | |

**C. Indicate the project category. (Check all that apply.)**

| | | |
|---|---|---|
| ☐ Commercial Development | ☐ Industrial Development | ☐ Residential Development |
| ☐ Institutional Development | ☐ Agricultural | ☐ Recreational |
| ☐ Transportation | ☐ Restoration | ☐ Bank Stabilization |
| ☐ Dredging | ☑ Utility lines natural gas | ☐ Survey or Sampling |
| ☐ In- or Over-Water Structure | ☐ Maintenance | ☐ Other: |

* In decimal format (e.g., 44.9399, -123.0283)
** If there is no official name for the wetland or waterway, create a unique name (such as "Wetland 1" or "Tributary A").

## (3) PROJECT PURPOSE AND NEED

**Provide a statement of the purpose and need for the overall project.**

The Project is a market-driven response to the burgeoning and abundant natural gas supply in the US Rocky Mountain and Western Canada markets, and the growth of international demand, particularly in Asia.

The overall Project purpose and need is to construct a natural gas liquefaction and deep-water export terminal capable of receiving and loading ocean-going LNG carriers, in order to export natural gas derived from a point near the intersections of the GTN Pipeline system and Ruby Pipeline system.

The Pipeline receipt point near the intersection of the GTN Pipeline system and Ruby Pipeline system is strategically located to give reliable and secure supplies of natural gas from two natural gas supply basins – one in the U.S. Rocky Mountains (through the existing Ruby Pipeline) and a second in western Canada (through the existing GTN Pipeline) – capable of delivering volumes of at least 1,200,000 Dth/d in order to support export of 7.8 mtpa of LNG.

PCGP held an open season for transportation service on the Pipeline in July of 2017. PCGP has executed precedent agreements totaling 96% of the Pipeline's capacity.

## (4) DESCRIPTION OF RESOURCES IN PROJECT AREA

**A. Describe the existing physical and biological characteristics of each wetland or waterway. Reference the wetland and waters delineation report if one is available. Include the list of items provided in the instructions.**

The items listed in the instructions are included in the wetland delineation report, provided under separate cover. Summary information for all wetlands and waterbodies affected by the Pipeline is provided in Attachment C/Affected Water Resources (specifically Sections 2.2 and 2.3; Appendix A.2/Tables (A.2-2, A.2-3, A.2-7, A.2-8, A.2-9); and Appendix U.2/HGM Report).

The Pipeline will affect 346 waterbodies, 63 of which are not crossed by the centerline (31 streams, 10 ponds, 21 ditches, and 1 estuarine feature) but are within the right-of-way or temporary extra work areas. Of the 346 waterbodies, 66 are perennial, 168 are intermittent, 98 are ditches, 10 are lakes or stock ponds, and 4 are estuarine (Coos Bay/2 HDD crossings, the HDD pullback at MP 0.0, and the Coos River).

In Coos County, the Pipeline will cross 18 perennial and 22 intermittent waterbodies, 3 ditches, and the 4 estuarine features. In Douglas County, the Pipeline will cross 32 perennial and 45 intermittent waterbodies, 3 industrial ponds, and 10 ditches. In Jackson County, the Pipeline will cross 13 perennial and 63 intermittent waterbodies, 12 ditches and 3 lacustrine features or stock ponds. In Klamath County, the Pipeline will cross 3 perennial and 38 intermittent waterbodies, 73 ditches and 4 stock or industrial ponds.

Table 2.2-1 in Attachment C/Affected Water Resources describes the beneficial uses of the basins crossed by the Project. Table A.2-2 in Appendix A.2 to Attachment C provides a listing of all waterbodies crossed by the Pipeline and includes: 1) waterbody name; 2) milepost location (centerline of the waterbody); 3) waterbody identification

## (4) DESCRIPTION OF RESOURCES IN PROJECT AREA

number; 4) NHD waterbody reach code, if available; 5) approximate stream width at the crossing location; 6) excavated volume at crossing; 7) proposed crossing method; 8) FERC classification; 9) Cowardin Classification; 10) stream flow type (perennial or intermittent); 11) ODF water quality classification/Northwest Forest Plan Designation; and 12) status of water quality limited streams. The Fish Utilization table (B.3-4) in the 'Tables' section includes the fish presence for each waterbody crossed by the Project.

Table A.2-3 in Appendix A.2 to Attachment C lists the milepost location, classification and the crossing length of the excavated trench (in feet) as well as construction-related disturbance (in acres) for each wetland that will be affected by construction. Table A.2-7 in Appendix A.2 in Attachment C provides a summary of wetland impacts by watershed (Fifth Field/HUC10) and Cowardin classification. The Pipeline will cross a total of approximately 30,777.58 feet (5.83 miles) of wetlands. The construction right-of-way and temporary extra work areas will affect 113.98 acres of wetlands, 109.61 acres of palustrine emergent wetlands, 1.43 acre of palustrine scrub-shrub wetlands and 2.30 acres of palustrine forested wetlands. Additionally, 0.64 acre of palustrine unconsolidated bottom or aquatic bed wetlands (predominantly stock ponds) will be disturbed by the Pipeline. Permanent wetland vegetation type conversion impacts have been quantified for each forested or scrub-shrub wetland where permanent maintenance of the Pipeline's operational corridor would convert the wetland to a different wetland type (see Table A.2-3 in Appendix A.2 to Attachment C). Permanent vegetation type conversion impacts will affect a total of 0.83 acre of wetlands, including 0.71 acre of palustrine forested and 0.12 acre of palustrine scrub-shrub wetlands.

For purposes of the U.S. Army Corps of Engineers (USACE), PCGP agrees that all wetlands/waterbodies affected by the Pipeline are jurisdictional. PCGP understands that jurisdiction for purposes of Oregon Department of State Lands (DSL) will be determined through the concurrence process for the wetland delineation report.

Several appendices to Attachment C address potential effects of the Pipeline on physical, chemical, and biological components of the aquatic environment. The majority of these reports were developed in consultation with Oregon Department of Environmental Quality (ODEQ) to address 401 water quality certification issues. These reports include:

| | |
|---|---|
| Appendix N.2 | Turbidity-Nutrients-Metals Water Quality Impacts Analysis |
| Appendix O.2 | Stream Crossing Risk Analysis and Addendum |
| Appendix P.2 | Stream Crossing Hyporheic Analysis |
| Appendix Q.2 | Revised Draft Thermal Impacts Assessment |
| Appendix R.2 | Mine Hazards Evaluation and Mercury Testing at the Red Cloud, Mother Lode, Nivinson, and Elkhorn Mining Groups |
| Appendix S.2 | Potential for natural-occurring mercury mineralization to enter the aquatic environment between M.P. 109 and East Fork Cow Creek |
| Appendix T.2 | Channel Migration and Scour Analysis |
| Appendix U.2 | HGM Report |

**Federally Listed Threatened and Endangered Species**

PCGP prepared Resource Report 3 as part of the September 2017 FERC Certificate application (provided electronically with the JPA), which provided detailed information regarding federal and state-listed species, impacts to them, and proposed mitigation measures. PCGP will submit an Applicant-Prepared Draft Biological Assessment to the Federal Energy Regulatory Commission (FERC), which will detail impacts to federally-listed species. PCGP has been consulting with U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), U.S. Forest Service, Bureau of Land Management (BLM), and Oregon Department of Fish and Wildlife (ODFW) throughout the FERC pre-filing and National Environmental Policy Act (NEPA) process and will continue to do so throughout the various federal and state permitting processes.

**Cultural Resources**

PCGP prepared Resource Report 4 (provided electronically with the JPA) and various cultural resource survey reports based on survey activities between 2006 and 2017 that have been submitted to FERC, State Historic Preservation Officer (SHPO), Forest Service, BLM, Bureau of Reclamation (BOR), USACE, and Native American Indian Tribes that may have interest in the Project. PCGP continues to consult with these agencies and communicate with Tribes regarding review of and mitigation for various cultural resources. PCGP is in the process of contacting landowners and securing permits to conduct cultural resources surveys on unsurveyed properties. As stipulated in Resource Report 4, the Project Historic Properties Management Plan (HPMP) will be updated to include site-specific avoidance and protection plans following completion of all surveys, but prior to construction. Currently, the schedule for the completion of all surveys is between October 1, 2017 and the fourth quarter of 2018, subject to obtaining access to denied areas. PCGP will ensure that all remaining cultural resources investigations, as identified in the project HPMP, are completed prior to construction. FERC is the lead agency for Section 106 consultation.

## (4) DESCRIPTION OF RESOURCES IN PROJECT AREA

**B. Describe the existing navigation, fishing and recreational use of the waterway or wetland.**
The Pipeline will affect 207 perennial and intermittent waterbodies with various associated navigational, fishing and recreational uses. Table 2.2-1 in Attachment C describes the beneficial uses of the basins crossed by the Pipeline. Table A.2-2 in Appendix A.2 to Attachment C lists the Oregon Department of Forestry stream classification for each waterbody crossed. The Fish Utilization table (B.3-4) in the 'Tables' section also includes the fish presence for each waterbody crossed by the Pipeline. Two horizontal directional drills (HDDs) are proposed across Coos Bay, which will avoid impacts to navigation, fishing and recreational uses within the estuary. HDDs are also proposed for the Coos, Rogue, and Klamath rivers, and a Direct Pipe® method is proposed for one of the South Umpqua River crossings (the other crossing of the South Umpqua River at MP 94.73 is proposed as a diverted open cut).

## (5) PROJECT SPECIFIC CRITERIA AND ALTERNATIVES ANALYSIS

**Describe project-specific criteria necessary to achieve the project purpose. Describe alternative sites and project designs that were considered to avoid or minimize impacts to the waterway or wetland.**
Due to the linear nature of a pipeline, it is impossible to avoid crossing wetlands and waterbodies along the 229 miles of the alignment. As detailed in Attachment B/Alternatives, the preferred route was developed by considering construction requirements for a large diameter, high pressure, natural gas transmission pipeline. Constructability/integrity requirements were the primary consideration for routing the Pipeline while minimizing potential impacts to sensitive resources such as the number of waterbody and wetland crossings (in compliance with the USACE 404(b)(1) guidelines) and landowner encumbrances. Avoidance of scenic waterways, byways, wildernesses, national parks and monuments was also a factor in development of the proposed alignment. Where practicable, the alignment utilized existing pipeline and powerline corridors while maintaining a safe distance between these existing utilities and the proposed Pipeline. Based on the routing feasibility analysis, a cross-country route was selected which traverses ridgelines and watershed boundaries to ensure the safety, stability, and long-term integrity of the Pipeline. By following ridgelines and watershed boundaries, the route significantly avoids and minimizes impacts to wetlands and waterbodies.

The alignment has been developed through an iterative process that included numerous meetings with landowners, federal and state agencies, the Confederated Tribes of Coos, Lower Umpqua and Siuslaw, the Coquille Indian Tribe, the Klamath Tribes, the Confederated Tribes of Siletz Indians, the Confederated Tribes of Grand Ronde and the Cow Creek Band of Umpqua Tribe of Indians.

The proposed alignment is based on routes that were publicly scoped, reviewed, and analyzed as part of FERC's NEPA process under Docket No. CP07-441-000, which is documented in FERC's Draft Environmental Impact Statement (EIS) (FERC 2008) and Final EIS (FERC 2009) as well as under Docket No. CP13-492-000, which is documented in FERC's Draft EIS (FERC 2014) and Final EIS (FERC 2015).

## (6) PROJECT DESCRIPTION

**A. Briefly summarize the overall project including work in areas both in and outside of waters or wetlands.**
Attachments A/Project Description and C/Affected Water Resources detail the construction procedures to install the Pipeline in upland and wetland areas, as well as across waterbodies. Most waterbodies will be crossed using a dry crossing method (i.e., fluming or dam and pump) in order to isolate the work area from the stream flow. Fluming Procedures are provided in Appendix C.2 and Dam and Pump Procedures are provided in Appendix D.2 to Attachment C. A conventional bore crossing is proposed for the Medford Aqueduct/ MP133.38 and for Bureau of Reclamation jurisdictional ditches in Klamath County. These are noted on Table A.2-2 in Appendix A.2 in Attachment C. Waterbody crossing plans and figures are provided in Appendix E. 2 to Attachment C. The South Umpqua River will be crossed twice. PCGP proposes to cross I-5, the South Umpqua River (MP 71.27), Dole Road, and a railroad using a single Direct Pipe® crossing. The Direct Pipe® Technology Overview and Design Report for this crossing is provided in Appendix J.2 to Attachment C. The second crossing of the South Umpqua River (MP 94.73) will be crossed using a diverted open-cut (see Appendix E.2 to Attachment C for the Site-Specific Crossing Plan and Design Support Report). The Coos (MP 11.13R), Rogue (MP 122.65), and Klamath (MP 199.38) rivers are proposed as horizontal directional drills (HDDs). Appendix G.2 to Attachment C provides the HDD Design Reports for the three HDD crossings. An approximate 5,200-foot HDD will be utilized to cross the Coos Bay estuary from the North Spit at about MP 0.12 to MP 1.11 south of North Point on the west side of Highway 101. The HDD will cross the Coos Bay Rail line at MP 0.36 and the shipping channel at MP 0.66. Additionally, from MP 1.40 to MP 3.09, an approximate 9,000-foot HDD will be utilized for the second crossing of the Coos Bay estuary and will cross the shipping channel again at MP 1.6 (see Appendix G.2 to Attachment C for the HDD Feasibility Evaluations for these HDD crossings). Appendix H.2 and Appendix I.2 to Attachment C also provide PCGP's Drilling Fluid Contingency Plan and Failure Mode Procedures for HDD Pipeline Installation Methods.

## (6) PROJECT DESCRIPTION

**B. Describe work within waters and wetlands.**
See Response to A. above.

**C. Construction Methods. Describe how the removal and/or fill activities will be accomplished to minimize impacts to waters and wetlands.**
Attachments A and C detail the construction procedures for the Pipeline in uplands, wetlands, and waterbodies. Most waterbodies will be crossed using a dry crossing method (i.e., fluming or dam and pump) in order to isolate the work area from the stream flow. PCGP will implement the measures in the Spill Prevention, Containment, and Countermeasures Plan (SPCC - see Appendix B.2 to Attachment C) as well as the BMPs described in the Erosion Control and Revegetation Plan (ECRP) (see Appendix B.1 to Attachment A) and FERC's Wetland and Waterbody Construction and Mitigation Procedures (Attachment B to the ECRP) and FERC's Upland Erosion Control, Revegetation, and Maintenance Plan (Attachment A to the ECRP).

The following plans describe the Best Management Practices that will be implemented to minimize potential effects to wetlands and waterbodies during pipeline construction:

- ECRP (Appendix B.1 to Attachment A)
- FERC's Wetland and Waterbody Procedures (Attachment B to ECRP provided in Appendix B.1 to Attachment A)
- FERC's Upland Plan (Attachment A to ECRP provided in Appendix B.1 to Attachment A)
- SPCC Plan (Appendix B.2 to Attachment C)
- Stream Crossing Risk Analysis (Appendix O.2 to Attachment C)
- Hydrostatic Test Plan (Appendix W.2 to Attachment C)
- Culvert Crossing Best Management Practices (Attachment F to ECRP in Appendix B.1 to Attachment A)
- Contaminated Substances Discovery Plan (Attachment E)
- Fish Salvage Plan (Attachment H)
- Wetland and Waterbody Mitigation Plan (Attachment I)

All work in waterbodies will be isolated from flowing water by utilizing dry crossing methods:

- Fluming Procedures (Appendix C.2 to Attachment C)
- Dam and Pump Procedures (Appendix D.2 to Attachment C)
- Diverted Open Cut Design (South Umpqua River #2 Crossing Plan - Appendix E.2 to Attachment C)
- Waterbody Crossing Plans and Figures for the N. Fork Coquille River, E. Fork Coquille River, S.F. Little Butte Creek, Lost River, and Medford Aqueduct (Appendix E.2 to Attachment C).
- HDD Design Reports (Coos River, Rogue River, and Klamath River) and Coos Bay HDD Feasibility Analyses (Appendix G.2 to Attachment C).
- A Direct Pipe® installation has been proposed to minimize impacts to the South Umpqua River #1. An overview of Direct Pipe® technology and a Design Report is provided in Appendix J.2 to Attachment C.

**D. Describe source of fill material and disposal locations if known.**

Native material that is removed from the pipeline trench during excavation will be used to backfill once the pipe is installed in the trench. Fill material will be the native soil or gravel material that is screened to exclude rock greater than a predetermined size. Appendix O.2 to Attachment C/Affected Water Resources also includes the Stream Crossing Risk Analysis, which provides the Bioengineered Best Management Practices using rock and large woody debris (LWD) for stream channel bed and bank restoration. These site-specific BMPs were developed based on field observation of natural analog structures and widely accepted techniques for bank restoration, bed restoration, and aquatic habitat restoration techniques.

## (6) PROJECT DESCRIPTION

**E. Construction timeline.**

| | |
|---|---|
| **What is the estimated project start date?** | Fourth Quarter 2019 |
| **What is the estimated project completion date?** | Fourth Quarter 2022 |
| **Is any of the work underway or already complete? If yes, describe.** | ☐ Yes ☑ No |

**F. Fill Volumes and Dimensions** (if more than 4 impact sites, include a summary table as an attachment)

| Wetland / Waterbody Name * | Fill Dimensions | | | | | Duration of Impact** | Material*** |
|---|---|---|---|---|---|---|---|
| | Length (ft.) | Width (ft.) | Depth (ft.) | Area (sq.ft. or ac.) | Volume (c.y.) | | |
| See Tables A.2-2 and A.2-3 in Appendix A.2 to Attachment C for removal and fill volumes and dimensions in wetlands and waterbodies. | | | | | | | Native material removed from pipeline trench will be used to backfill the trench once the pipeline is placed. |

Appendix J also provides PCGP's estimated fill quantities associated with rock and wood stream crossing restoration bioengineered BMPs, as outlined in the Stream Crossing Risk Analysis included in Appendix O.2 to Attachment C/Affected Water Resources.

**G. Total Fill Volumes and Dimensions**

| Fill Impacts to Waters | Length (ft.) | Area (sq. ft or ac.) | Volume (c.y.) |
|---|---|---|---|
| **Total Fill to Wetlands** | Same as total removal volumes. | | |
| **Total Fill Below Ordinary High Water** | | | |
| **Total Fill Below Highest Measured Tide** | | | |
| **Total Fill Below High Tide Line** | | | |
| **Total Fill Below Mean High Water Tidal Elevation** | | | |

**H. Removal Volumes and Dimensions** (if more than 4 impact sites, include a summary table as an attachment)

| Wetland / Waterbody Name* | Removal Dimensions | | | | | Duration of Impact** | Material*** |
|---|---|---|---|---|---|---|---|
| | Length (ft.) | Width (ft.) | Depth (ft.) | Area (sq. ft. or ac.) | Volume (c.y.) | | |
| See Tables A.2-2 and A.2-3 in Appendix A.2 to Attachment C for removal and fill volumes and dimensions in wetlands and waterbodies. | | | | | | | Native material removed from pipeline trench will be used to backfill the trench once the pipeline is placed. |

Appendix J also provides PCGP's estimated fill quantities associated with rock and wood stream crossing restoration bioengineered BMPs, as outlined in the Stream Crossing Risk Analysis included in Appendix O.2 to Attachment C/Affected Water Resources.

**I. Total Removal Volumes and Dimensions**

| Removal Impacts to Waters | Length (ft.) | Area (sq. ft or ac.) | Volume (c.y.) |
|---|---|---|---|
| **Total Removal to Wetlands** | 30,777.58 | 113.98 acres | 51,295.93 |
| **Total Removal Below Ordinary High Water** | 3,027.85 | | 8,079.79 (295) [1] |
| **Total Removal Below Highest Measured Tide** | | | |
| **Total Removal Below High Tide Line** | | | |
| **Total Removal Below Mean High Water Tidal Elevation** | | | |

* If there is no official name for the wetland or waterway, create a unique name (such as "Wetland 1" or "Tributary A").
** Indicate the days, months or years the fill or removal will remain. Enter "permanent" if applicable. For DSL, permanent removal or fill is defined as being in place for 24 months or longer.
*** Example: soil, gravel, wood, concrete, pilings, rock etc.
[1] 295 CY estimated fill associated with rock and wood Bioengineered BMPs as outlined in the Stream Crossing Risk Analysis (Appendix O.2 to Attachment C/Affected Water Resources). The estimated fill quantities for these BMPs is provided in Appendix J.

## (7) ADDITIONAL INFORMATION

| | | | |
|---|---|---|---|
| Are there any state or federally listed species on the project site? | ☑ Yes | ☐ No | ☐ Unknown |
| Is the project site within designated or proposed critical habitat? | ☑ Yes | ☐ No | ☐ Unknown |
| Is the project site within a national Wild and Scenic River? | ☐ Yes | ☑ No | ☐ Unknown |
| Is the project site within the 100-year floodplain? | ☑ Yes | ☐ No | ☐ Unknown |

*** If yes to any of the above, explain in Block 4 and describe measures to minimize adverse effects to these resources in Block 5.**

| | | | |
|---|---|---|---|
| Is the project site within the Territorial Sea Plan (TSP) Area? | ☐ Yes | ☑ No | ☐ Unknown |

*** If yes, attach TSP review as a separate document for DSL.**

| | | | |
|---|---|---|---|
| Is the project site within a designated Marine Reserve? | ☐ Yes | ☑ No | ☐ Unknown |

*** If yes, certain additional DSL restrictions will apply.**

| | | | |
|---|---|---|---|
| Will the overall project involve construction dewatering or ground disturbance of one acre or more? | ☑ Yes | ☐ No | ☐ Unknown |

*** If yes, you may need a 1200-C permit from the Oregon Department of Environmental Quality (DEQ).**

| | | | |
|---|---|---|---|
| Is the fill or dredged material a carrier of contaminants from on-site or off- site spills? | ☐ Yes | ☑ No | ☐ Unknown |
| Has the fill or dredged material been physically and/or chemically tested? | ☐ Yes | ☑ No | ☐ Unknown |

***If yes, explain in Block 4 and provide references to any physical/chemical testing report(s).**

| | | | |
|---|---|---|---|
| Has a cultural resource (archaeological) survey been performed on the project area? | ☑ Yes | ☐ No | ☐ Unknown |

*** If yes, provide a copy of the survey with this application. Do not describe any resources in this document.**

Identify any other federal agency that is funding, authorizing or implementing the project.

| Agency Name | Contact Name | Phone Number | Most Recent Date of Contact |
|---|---|---|---|
| FERC is the lead federal agency. | | | |

List other certificates or approvals/denials required or received from other federal, state or local agencies for work described in this application. For example, certain activities that require a Corps permit also require 401 Water Quality Certification from Oregon DEQ.

| Approving Agency | Certificate/ approval / denial description | Date Applied |
|---|---|---|
| | See Table 1.6-1 in Attachment A for a list of permits and authorizations required for the Project. | |

Other DSL and/or Corps Actions Associated with this Site (Check all that apply.)

☐ Work proposed on or over lands owned by or leased from the Corps

☐ State owned waterway — DSL Waterway Lease #

☐ Other Corps or DSL Permits — Corps # — DSL #

☐ Violation for Unauthorized Activity — Corps # — DSL #

☑ Wetland and Waters Delineation — Corps # — DSL #

- ☑ A wetland / waters delineation has been completed (if so, provide a copy with the application)
- ☑ The Corps has approved the wetland / waters delineation within the last 5 years
- ☑ DSL has approved the wetland / waters delineation within the last 5 years

## (8) IMPACTS, RESTORATION/REHABILITATION, COMPENSATORY MITIGATION

**A. Describe unavoidable environmental impacts that are likely to result from the proposed project. Include permanent, temporary, direct, and indirect impacts.**

The Pipeline will not require any permanent wetland fill. However, approximately 0.83 acre of wetland type conversion impacts would occur where maintenance of the Pipeline's operational corridor would convert forested or scrub-shrub wetlands to a different wetland type to facilitate corrosion and leak surveys, as allowed by U.S. Department of Transportation (DOT) and FERC (see Section V.D.1 and VI.D.1 in FERC's Procedures included in Attachment B to the ECRP in Appendix B.1 to Attachment A/Project Description).

**B. For temporary removal or fill or disturbance of vegetation in waterways, wetlands or riparian (i.e., streamside) areas, discuss how the site will be restored after construction.**

Please see the Wetland and Waterbody Mitigation Plan included as Attachment I. Also see Section 10.0 (Restoration) in the ECRP in Appendix B.1 to Attachment A.

### Compensatory Mitigation

**C. Proposed mitigation approach. Check all that apply:**

- ☑ Permittee-responsible Onsite Mitigation
- ☑ Permittee-responsible Offsite mitigation
- ☐ Mitigation Bank or in-lieu fee program
- ☐ Payment to Provide (not approved for use with Corps permits)

**D. Provide a brief description of mitigation approach and the rationale for choosing that approach. If you believe mitigation should not be required, explain why.**

See Section 2.3.4.1 in Attachment C/Affected Water Resources and Table A.2-3 in Appendix A.2 to Attachment C for a description of the wetland impacts associated with construction of the Pipeline. Section 2.3.4.2 in Attachment C and the Wetland and Waterbody Mitigation Plan (see Attachment I) describe the measures that will be implemented to restore/rehabilitate all wetlands affected by the Pipeline.

To mitigate for the 0.83 acre of permanent wetland vegetation type conversion impacts, PCGP proposes to co-locate compensatory mitigation efforts with the LNG Terminal mitigation efforts at the former Kentuck Golf Course in Coos County (Kentuck Project). The Pipeline component of the Kentuck Project would be required to enhance a minimum of 2.49 acres of degraded emergent wetlands within the golf course to mixed forested and scrub-shrub wetlands based on a ratio of 3:1. The compensatory mitigation plan is in conformance with USACE and DSL compensatory wetland mitigation requirements. The proposed mitigation would improve hydrologic function within the wetland by removing existing levees and regrading the site to improve hydrology and micro-topography to support a variety of plant species and providing access and refugia to fish during high flow events. Impacts from pipeline construction would be primarily a result of conversion from a mixture of forested and shrub wetlands to a mixture of shrub and herbaceous wetlands. The compensatory wetland mitigation plan will convert existing, degraded pasture wetland within the former golf course to complex native forested wetland, essentially a reversal of the proposed Pipeline impacts. Approximately 9.12 acres of mitigation will be undertaken to achieve this goal, including 6.63 acres of voluntary habitat improvements (above the minimum mitigation requirements). The Compensatory Wetland Mitigation Plan is provided in Attachment J to Part 2 of the Joint Permit Application.

As indicated in the Compensatory Wetland Mitigation Plan, Pipeline construction impacts to wetlands requiring mitigation consist of small impacts spread over a long distance in multiple watersheds; therefore, it is not practical to provide local mitigation for each impact. The emphasis of mitigation planning turned to consolidating mitigation in a single location that would have a high likelihood of success (i.e., the Kentuck Project site). It is also important to note that the Pipeline impacts will result only in a partial loss of wetland functions, as opposed to a loss of acreage and all functions, because the wetlands will remain following construction, but with what is considered to be a lower functioning habitat type than existed before the Pipeline. These functional wetland impacts will be offset at the consolidated Kentuck Project site which will provide clear ecosystem benefits by restoring floodplain connection to Kentuck Creek, which will in turn benefit flood control, water quality, wildlife, and fish functions, including providing high flow refugia and food chain support that will directly benefit listed coho salmon.

## (8) IMPACTS, RESTORATION/REHABILITATION, COMPENSATORY MITIGATION

**Mitigation Bank / In-Lieu Fee Information:**
Name of mitigation bank or in-lieu fee project: N/A
Type of credits to be purchased: N/A

If you are proposing permittee-responsible mitigation, have you prepared a compensatory mitigation plan?

☑ Yes. Submit the plan with this application and complete the remainder of this section.
(see Attachment J to Part 2 of the Joint Permit Application)

☐ No. A mitigation plan will need to be submitted (for DSL, this plan is required for a complete application).

**Mitigation Location Information (Fill out only if permittee-responsible mitigation is proposed)**

| Mitigation Site Name/Legal Description | Mitigation Site Address | Tax Lot # |
|---|---|---|
| Kentuck Project Site (Kentuck Golf Course) | 5,500 feet northeast of the intersection of East Bay Road and Golf Course Lane. See Attachment J to Part 2 of the Joint Permit Application. | Tax Map: 25S12W06C<br>Lot: 0010000400 |
| **County** | **City** | **Latitude & Longitude (in DD.DDDD format)** |
| Coos | North Bend | 43.42811526, -124.1762352 |

| Township | Range | Section | Quarter/Quarter |
|---|---|---|---|
| 25S | 12W | 6 | |

## (9) ADJACENT PROPERTY OWNERS FOR PROJECT AND MITIGATION SITE

| ☑ Pre-printed mailing labels of adjacent property owners attached | Project Site Adjacent Property Owners | Mitigation Site Adjacent Property Owners |
|---|---|---|

**Contact Name**
**Address 1**
**Address 2**
**City, ST ZIP Code**

**Contact Name**
**Address 1**
**Address 2**
**City, ST ZIP Code**

**Contact Name**
**Address 1**
**Address 2**
**City, ST ZIP Code**

**Contact Name**
**Address 1**
**Address 2**
**City, ST ZIP Code**

**Contact Name**
**Address 1**
**Address 2**
**City, ST ZIP Code**

**Contact Name**
**Address 1**
**Address 2**
**City, ST ZIP Code**

**Contact Name**
**Address 1**
**Address 2**
**City, ST ZIP Code**

**Contact Name**
**Address 1**
**Address 2**
**City, ST ZIP Code**

## (10) CITY/COUNTY PLANNING DEPARTMENT LAND USE AFFIDAVIT (TO BE COMPLETED BY LOCAL PLANNING OFFICIAL)

I have reviewed the project described in this application and have determined that:

☐ This project is not regulated by the comprehensive plan and land use regulations.

☐ This project is consistent with the comprehensive plan and land use regulations.

☐ This project will be consistent with the comprehensive plan and land use regulations when the following local approval(s) are obtained:

- ☐ Conditional Use Approval
- ☐ Development Permit
- ☐ Other Permit (see comment section)

☐ This project is not consistent with the comprehensive plan. Consistency requires:

- ☐ Plan Amendment
- ☐ Zone Change
- ☐ Other Approval or Review (see comment section)

An application ☐ has ☐ has not been filed for local approvals checked above.

| Local planning official name (print) | Title | City / County (circle one) |
|---|---|---|
| | | |

| Signature | Date |
|---|---|
| | |

Comments:

## (11) COASTAL ZONE CERTIFICATION

If the proposed activity described in your permit application is within the Oregon coastal zone, the following certification is required before your application can be processed. A public notice will be issued with the certification statement, which will be forwarded to the Oregon Department of Land Conservation and Development (DLCD) for its concurrence or objection. For additional information on the Oregon Coastal Zone Management Program, contact DLCD at 635 Capitol Street NE, Suite 150, Salem, Oregon 97301 or call 503-373-0050.

CERTIFICATION STATEMENT

I certify that, to the best of my knowledge and belief, the proposed activity described in this application complies with the approved Oregon Coastal Zone Management Program and will be completed in a manner consistent with the program.

| Print /Type Name | Title |
|---|---|
| T. DIOCEE | VP LNG PROJECTS |

| Signature | Date |
|---|---|
| T Diocee | 10/23/17 |

## (12) SIGNATURES

*Application is hereby made for the activities described herein. I certify that I am familiar with the information contained in the application, and, to the best of my knowledge and belief, this information is true, complete and accurate. I further certify that I possess the authority to undertake the proposed activities. By signing this application I consent to allow Corps or DSL staff to enter into the above-described property to inspect the project location and to determine compliance with an authorization, if granted. I hereby authorize the person identified in the authorized agent block below to act in my behalf as my agent in the processing of this application and to furnish supplemental information in support of this permit application. I understand that the granting of other permits by local, county, state or federal agencies does not release me from the requirement of obtaining the permits requested before commencing the project. I understand that payment of the required state processing fee does not guarantee permit issuance.*

**To be considered complete, the fee must accompany the application to DSL. The fee is not required for submittal of an application to the Corps.**

| **Fee Amount Enclosed** | $ |
|---|---|

**Applicant Signature**

| Print Name: T. Drocee | Title: VP LNG PROJECTS |
|---|---|
| Signature: Drocee | Date: 10/23/17 |

**Authorized Agent Signature**

| Print Name | Title |
|---|---|
| Signature | Date |

**Landowner Signature(s)**

**Landowner of the Project Site (if different from applicant)**

| Print Name<br>**As required by FERC, PCGP must obtain an easement across all properties affected by the Pipeline (through negotiations or condemnation) prior to construction.** | Title |
|---|---|
| Signature | Date |

**Landowner of the Mitigation Site (if different from applicant)**

| Print Name | Title |
|---|---|
| Signature | Date |

**Department of State Lands, Property Manager (to be completed by DSL)**

*If the project is located on state-owned submerged and submersible lands, DSL staff will obtain a signature from the Land Management Division of DSL. A signature by DSL for activities proposed on state-owned submerged/submersible lands only grants the applicant consent to apply for a removal-fill permit. A signature for activities on state-owned submerged and submersible lands grants no other authority, express or implied and a separate proprietary authorization may be required.*

| Print Name | Title |
|---|---|
| Signature | Date |

## (13) ATTACHMENTS

- ☐ **Drawings (items in bold are required)**
  - ☐ **Location map with roads identified**
  - ☐ **U.S.G.S topographic map**
  - ☐ **Tax lot map**
  - ☐ **Site plan(s)**
  - ☐ **Cross section drawing(s)**
  - ☐ **Recent aerial photo**
  - ☐ Project photos
  - ☐ Erosion and Pollution Control Plan(s), if applicable
  - ☐ DSL/Corps Wetland Concurrence letter and map, if approved and applicable
- ☐ Pre-printed labels for adjacent property owners (Required if more than 5)
- ☐ Restoration plan or rehabilitation plan for temporary impacts
- ☐ Mitigation plan
- ☐ Wetland functional assessment and/or stream functional assessment
- ☐ Alternatives analysis
- ☐ Biological assessment (if requested by Corps project manager during pre-application coordination.)
- ☐ Stormwater management plan (may be required by the Corps or DEQ)
- ☐ Other:
  - ☐
  - ☐

**Send Completed form to:**

**U.S. Army Corps of Engineers**
**ATTN: CENWP-OD-GP**
**PO Box 2946**
**Portland, OR 97208-2946**
**Phone: 503-808-4373**

**Counties:**
**Baker, Clackamas, Clatsop, Columbia, Gilliam, Grant, Hood River, Jefferson, Lincoln, Malheur, Marion, Morrow, Multnomah, Polk, Sherman, Tillamook, Umatilla, Union, Wallowa, Wasco, Washington, Wheeler, Yamhill**

**OR**

**U.S. Army Corps of Engineers**
**ATTN: CENWP-OD-GE**
**211 E. 7th AVE, Suite 105**
**Eugene, OR 97401-2722**
**Phone: 541-465-6868**

**Counties:**
**Benton, Coos, Crook, Curry, Deschutes, Douglas Jackson, Josephine, Harney, Klamath, Lake, Lane, Linn**

**Send Completed form to:**

**DSL - West of the Cascades:**

**Department of State Lands**
**775 Summer Street NE, Suite 100**
**Salem, OR 97301-1279**
**Phone: 503-986-5200**

**OR**

**DSL - East of the Cascades:**

**Department of State Lands**
**1645 NE Forbes Road, Suite 112**
**Bend, Oregon 97701**
**Phone: 541-388-6112**

**Send all Fees to:**
**Department of State Lands**
**775 Summer Street NE, Suite 100**
**Salem, OR 97301-1279**
**Pay by Credit Card Online:**
https://apps.oregon.gov/dsl/EPS/