



Oregon LNG

Questions and Answers

Oregon Department of Environmental Quality
Northwest Region Office
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General

Q: Why doesn't DEQ be a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water like your mission statement says?

A: DEQ regulates businesses to ensure they meet Oregon environmental laws. DEQ's role is to evaluate the permit applications and determine whether they are in compliance with state law and remain in compliance. DEQ works collaboratively with Oregonians for a healthy, sustainable environment.

Q: Clatsop County denied land use for the pipeline so why are we even having this meeting?

A: The permit applications that DEQ is evaluating are specific to the terminal facility and these applications were accompanied by approved land use findings from the City of Warrenton.

Q: If you are just going to issue permits, how do we stop this thing? Who said this could happen?

A: The Federal Energy Regulatory Commission is responsible for deciding where to allow a liquefied natural gas facility to operate. This agency is commonly known as FERC. If a facility gains federal approval, a number of state agencies review applicable permit applications. FERC regulates the interstate transmission of electricity, natural gas, and oil. FERC approves proposals to build liquefied natural gas terminals and interstate natural gas pipelines.

Q: I understand there is another facility proposed in Coos Bay. What's DEQ going to do to assess the cumulative impacts of these facilities?

A: DEQ is responsible for evaluating permit applications for each project.

Q: How is DEQ assessing the cumulative impacts of proposed coal, LNG, and crude oil projects?

A: Each proposed project is evaluated based upon the permit applications received.

Q: How does DEQ evaluate cumulative impacts? Is there an upper limit that emissions are measured against?

A: For air quality, Oregon LNG is subject to a permitting program called Prevention of Significant Deterioration. One of this program's requirements is that Oregon LNG had to submit a modeling analysis of its emissions. This involves a one or two step analysis. The first step is to demonstrate that the facility's emissions would have an insignificant impact on air quality as defined in DEQ's rules. If this was demonstrated, then further analysis was not required. If the modeled emissions impacts exceeded the insignificant impact level, then DEQ would require a more detailed analysis that includes the impacts from other large emissions sources located nearby. The purpose of this more detailed analysis is to show that the new facility's emissions impacts, plus the impacts from other large facilities nearby, plus a background level specified by DEQ do not exceed a National Ambient Air Quality Standard. If the facility cannot meet this second requirement, it cannot get a permit. Oregon LNG submitted an air quality analysis with its permit application, but DEQ has not reviewed it yet.

For water quality, DEQ's Total Maximum Daily Load Program assesses cumulative impacts of pollution in a specific watershed and identifies pollution discharges from various industrial, business and municipal sources as well as runoff sources. This involves large modeling efforts to describe river conditions as water moves through the watershed.

DEQ uses that information in developed river/estuary models to examine the likely effects of pollution discharges in the river at the time of discharge. DEQ's intent is to determine whether state water quality standards would be exceeded at any point in the river outside of the designated mixing zones for individual point sources. DEQ requires permitted facilities to analyze and model their discharges to ensure that state water quality standards are met.

DEQ does not currently have the resources or information needed to model the Columbia River. DEQ needs more detailed information on the concentration of the pollutants each facility discharges, where the discharge occurs, the volume of the discharge, the timing of the discharge, and specific information on river conditions.

Air Quality Permit

Q: What is in an air quality permit application and what would the permit require?

A: DEQ requires an air contaminant discharge permit that would allow Oregon LNG to construct the proposed terminal and begin operating. Within one year of beginning operations, DEQ will require Oregon LNG to apply for a larger Title V permit which will become its operating permit.

Q: How many flare offs of flammable gas will the facility have? We have received inaccurate and misleading information from Oregon LNG. Will DEQ independently verify what is in permit application?

A: DEQ is not able to answer that question at this time. The permit application identifies two flares for use during emergencies and maintenance activities. The emission estimate for the larger flare is based on operation 72 hours per year. The emission estimate for the smaller flare is based on operation throughout the year.

Q: Will the steam plume affect the airport? Will it increase fog or clouds in the area?

A: DEQ cannot regulate the steam plume. Another facility proposed near an airport had to work with the airport and port authority to ensure the steam plume would not affect airport operations. DEQ does not know if the steam plume will cause or contribute to fog or clouds in the area.

Q: Where will the facility get its power? Don't they need to build a 400 megawatt power plant?

A: The application does not include construction of a power generator.

Q: How will the facility limit emissions?

A: Most of the proposed emissions sources are heaters and flares that would burn natural gas. Emissions from these devices will be limited by using modern burners that emit low levels of oxides of nitrogen.

Emissions from the gas pretreatment system will be treated in a thermal oxidizer that will burn these emissions and emit carbon dioxide and water. There will also be some sulfur compounds from the gas pretreatment system. The thermal oxidizer will convert these sulfur compounds to sulfur dioxide. The exhaust from the thermal oxidizer will then go to a scrubber to reduce the sulfur dioxide emissions.

Q: Are there any facilities in the area with comparable emissions?

A: Hampton Lumber Mill has comparable emissions.

Q: How can DEQ issue a permit without knowing about the supply contracts for pipeline gas and what toxics gases will come to the facility by the pipeline?

A: Typically, DEQ does not look into the supply line. DEQ will consider that question in drafting the permit.

Q: Does a DEQ inspector witness regularly scheduled emissions tests?

A: Tests are complicated and a consultant company needs to schedule testing in advance. DEQ staff may or may not be there to observe.

Q: Why is DEQ allowing green house gas emissions given the governor's new climate action plan?

A: Plans inform policy changes. Climate action plans have not been incorporated into laws and regulations. DEQ cannot conflict with the laws we currently have in place. We have to issue permits within the law and regulations of the state.

Q: Does DEQ regulate air emissions from ships?

A: DEQ cannot regulate air emissions from ships. DEQ does, however, require the permit applicant to count ship emissions that are directly related to terminal activities to determine if programs like Prevention of Significant Deterioration apply.

Q: I heard there is sulfur coming out of this facility and I understand that sulfur smells. How can you allow this to happen? It will impact my property value.

A: Sulfur will be removed from the natural gas in the pretreatment process, and will then be converted to sulfur dioxide in the thermal oxidizer. The scrubber will reduce the sulfur dioxide. DEQ does not expect odorous emissions from the proposed facility.

Wastewater Permit

Q: What is in a wastewater permit application and what would the permit require?

A: DEQ requires an individual wastewater permit to regulate wastewater discharges from the proposed terminal. This is a National Pollutant Discharge Elimination permit. DEQ received an application for this permit on July 3, 2013.

The application describes two outfalls, or points of discharge, for the wastewater. It also describes four sources of water the facility would use:

- Recycled wastewater from the City of Warrenton wastewater treatment plant
- Columbia River water
- Captured stormwater
- Potable water from the City of Warrenton's water supply

Regarding wastewater, the first proposed point of discharge is to the Skipanon River. The wastewater to be discharged at this location would be test water from the facility's Fire System.

The water to be used during the tests would be pumped from the Skipanon River and discharged through a pipe back into the Skipanon without any additions. The facility would run this system approximately once per week for four to eight hours. The flow rate from this outfall is expected to be approximately 3.2 million gallons per day.

The second proposed point of discharge is to Young's Bay. This is an existing outfall currently used jointly by the City of Warrenton wastewater treatment plant and by Pacific Seafoods. The wastewater that Oregon LNG proposes to discharge at this outfall would consist of stormwater, wastewater from the water treatment system and wastewater from the facility's cooling towers. The wastewater flow rate from this second outfall is expected to be up to 3.1 million gallons per day, with stormwater adding up to an additional 3.4 million gallons per day.

There will be no discharge to the City of Warrenton wastewater treatment plant.

Q: What pollutants of concern will be in the wastewater?

A: At this time, it appears that the primary water quality concerns related to this discharge that the permit would regulate would be heat, stormwater pollutants, and the concentration of pollutants found in the river water and the city's wastewater.

Q: What level of treatment or class of recycled water would the facility use? What about the stormwater discharge treatment?

A: DEQ has a complete application but we don't have all of the answers at this time.

Stormwater Permits

Q: What stormwater permits are required?

A: DEQ requires Oregon LNG to obtain permit coverage and control stormwater discharges during construction of the proposed terminal. This permit is a National Pollutant Discharge Elimination 1200-C general permit. DEQ received a permit application on July 8, 2013. After reviewing the application materials, DEQ determined the Erosion and Sediment Control Plan needed additional changes. DEQ has not received an updated plan from the applicant. Although the permit application is administratively complete, DEQ will not take further action until technical issues with the Erosion and Sediment Control Plan have been adequately addressed.

Q: Isn't a stormwater permit also required for construction of the pipeline?

A: Yes. DEQ also requires Oregon LNG to get stormwater permit coverage for pipeline construction. However, DEQ cannot begin working on the pipeline application until it is

administratively and technically complete, which includes land use compatibility statements from all affected jurisdictions.

Q: What does the general stormwater construction permit regulate?

A: The permit regulates the discharge of pollutants in stormwater from construction sites to Oregon rivers and streams. Pollutant discharges in stormwater must be controlled by implementing best management practices at construction sites. These practices are intended to minimize sediment transport to surface waters and stormwater collection systems. Businesses may use additional practices, such as treatment, to prevent pollution of stormwater or treat water from other sources onsite such as but not limited to dewatering operations and onsite ponded water.

Q: Shouldn't DEQ require an industrial stormwater permit at the proposed terminal?

A: Based on federal regulations, an industrial stormwater permit is required for specific types of industrial facilities that discharge stormwater from their industrial areas to surface waters of the state or to storm drains that discharge to surface waters. Federal regulations identify which facilities are required to obtain an industrial stormwater permit based on their Standard Industrial Classification code. The code for the Oregon LNG terminal is "4922-Natural Gas Transmission." These types of industrial facilities are not required to obtain industrial stormwater permit coverage.

Q: How can I comment on the Oregon LNG stormwater permits?

A: The stormwater construction permit is a general permit that was effective on Dec. 1, 2010. For general permits, public comment occurs only during defined public comment periods. Public comment on the current National Pollutant Discharge Elimination 1200-C general permit occurred between Aug. 13 and Sept.28, 2010. However, DEQ provides an opportunity for public comment on the Permit Application and Erosion and Sediment Control Plan that are submitted to DEQ when a facility requests coverage under the National Pollutant Discharge Elimination 1200-C general permit. DEQ provides the public a minimum of 14 calendar days to review the permit application and Erosion and Sediment Control Plan for construction projects that disturb five or more acres. DEQ formally responds only to those public comments that pertain to the application and Erosion and Sediment Control Plan. DEQ does not respond to comments on the permit conditions. Public Notice on Oregon LNG's stormwater permit application and Erosion and Sediment Control Plan will occur when all permit application materials are determined by DEQ to be administratively and technically complete.

Q: What is the Erosion and Sediment Control Plan?

A: The Erosion and Sediment Control Plan describes what best management practices the business will implement to control stormwater discharges from the construction site.

Q: Where can I find Oregon LNG’s permit application and Erosion and Sediment Control Plan?

A: During the formal public comment period, Oregon LNG’s stormwater permit application and Erosion and Sediment Control Plan will be available for public review at the DEQ Northwest Region Office and as described in the Public Notice announcement. DEQ has not yet received a technically acceptable Erosion and Sediment Control Plan for the proposed Oregon LNG terminal project.

Q: When will public comment on Oregon LNG’s stormwater permit application and Erosion and Sediment Control Plan occur?

A: Public comment will occur after DEQ determines the permit application and Erosion and Sediment Control Plan are both administratively and technically complete. DEQ determined the permit application materials were administratively complete, but technically incomplete. Although DEQ requested changes to the plan, Oregon LNG has not yet submitted an updated Erosion and Sediment Control Plan to DEQ for the proposed project.

Q: What is the public’s role in commenting on Oregon LNG’s coverage under the construction stormwater general permit?

A: DEQ provides an opportunity to comment on the permit application and Erosion and Sediment Control Plan to ensure public participation before granting Oregon LNG coverage under the 1200-C construction stormwater general permit. Information received during the public comment period may provide DEQ with valuable information on site conditions or other considerations that have the potential to result in environmental benefits. DEQ may require additional changes to the plan based on public comment.

Q: What happens after the public comment?

A: DEQ reviews all public comments and may require Oregon LNG to modify their Erosion and Sediment Control Plan based on comments received. DEQ will provide a summary of comment responses to all persons who comment.

Q: Can DEQ deny permit coverage based on public comment?

A: If the permit application meets all regulatory requirements, DEQ will grant Oregon LNG coverage under the general permit. DEQ may deny permit coverage only if it determines coverage under the permit is not necessary, the applicant does not qualify for coverage under the permit, or the applicant fails to provide all the information required with the permit application. DEQ will deny permit coverage only if public comments demonstrate one of the conditions for denial has been met.

Q: Will DEQ inspect the facility for compliance with their stormwater permit?

A: DEQ's goal is to inspect 10 percent of active stormwater construction permit construction sites in a year. The Oregon LNG terminal project may be one of the sites identified for an inspection.

In addition to DEQ inspections, the permit requires site inspections by an Erosion and Sediment Control Inspector designated by the permit holder. The permit requires routine inspections of the site and potential stormwater discharge locations. On active construction sites, the specific best management practices identified in the Erosion and Sediment Control Plan must be inspected at least daily when stormwater runoff is occurring and at least every two weeks during other periods. All inspections must be documented in reports that are maintained by the permit holder and made available to DEQ on request.

401 Certification

Q: Would the proposed terminal require a water quality certification?

A: DEQ's Water Quality Program 401 certification section staff review projects that require a federal license or permit, and may result in a discharge to state waters. DEQ reviews these projects to ensure compliance with state water quality standards and other relevant portions of the clean water act.

In this case, DEQ anticipates that DEQ will be asked to certify a U.S. Army Corps of Engineers section 404 permit for discharge of dredged or fill material, as well as the Federal Regulatory Energy Commission license. A 404 permit requires a 401 water quality certification. DEQ begins review of a project when the Corps issues a public notice. This public notice informs DEQ of potential water quality impacts.

Because the Corps has not yet issued the public notice, the 401 program has not started an official review of the project.

DEQ has not started a specific review of the project. DEQ will look at impacts to waters due to the footprint of the building as well as related infrastructure, and any dredging that might take place as part of the project.

In most cases, DEQ places specific conditions on a project as part of the certification. These conditions help ensure that a project will not lower water quality. Conditions may include: how a project is built, when impacts can occur, and what kind of dredger can be used. Additionally, project that increase impervious surface must submit a post construction stormwater management plan and treat all water from those impervious surfaces prior to discharge. Many projects also have turbidity monitoring requirement and mitigation for unavoidable impacts.

Before a decision is made regarding the certification, people will have the opportunity to review and comment on the draft evaluations and findings documents, as well as the certification itself. These will go on public notice later in the process.

Q: Will the pipeline and the terminal be covered by one permit?

A: The U.S. Army Corps of Engineers will determine the scope of the permit.

Q: What are you going to do to protect my favorite fishing hole?

A: The National Oceanic and Atmospheric Administration and the Oregon Department of Fish and Wildlife work on fish issues. DEQ's role is to evaluate the project relative to water quality standards.

Q: What about ship discharges of heated water from ships' cooling systems?

A: DEQ can only regulate discharges that would happen while in process at the proposed terminal.

Q: Do ships need air and water quality permits? Who regulates air and ballast water emissions from ships?

A: Ships are not required to have air quality permits. DEQ does not have the authority to regulate ship air emissions. Ship emissions can be regulated by the U.S. Environmental Protection Agency, but at this time EPA's efforts are limited to proposing tighter emissions standards for new ship engines.

EPA issued rules in 2003 that apply to Category 3 engines which are found on large commercial marine vessels, but only for those that are US flagged. The standards adopted conform to an international treaty MARPOL Annex VI, which had not yet met the minimum country adoption standards in order to be in effect.

There is currently no requirement for ships to obtain wastewater permits for discharge of ballast water. State and federal law allows ships to discharge ballast water and take in ocean water as they pass from port to port. However, Oregon law prohibits ships from discharging ballast water into waters of the state. (Oregon statute 783.620) A recent federal district court case decision to require a permit for ballast water discharge is currently under appeal by the EPA. DEQ will continue to track the progress of this appeal. In the interim, DEQ will not issue NPDES permits for ballast water discharge activities.

Emergency Response

Q: Why are you contemplating allowing siting a facility given the expectation of a subduction zone earthquake?

A: Our permits regulate normal operating scenarios, how the plant will operate when everything is functioning.

Q: What is the liquefied natural gas spill response in Oregon?

A: Under Oregon law, the definition of oil or oils includes liquefied natural gas. Therefore, any business that wants to transfer 10,000 gallons or more of liquefied natural gas from a facility or a vessel over water must have a DEQ-approved spill contingency plan.

DEQ has not finalized spill cleanup standards or methods specifically for large releases from a liquefied natural gas facility or vessel. Therefore, if when a business asks to conduct a transfer of liquefied natural gas facility over water, DEQ would seek to change rules based on the best available cleanup practices known for liquefied natural gas.

At a minimum, several existing spill response requirements are likely to remain. DEQ would require a business that has a spill to immediately notify Oregon Emergency Response. DEQ will require a business to prepare to manage a spill by participating in spill scenario tabletop drills including a worst case drill at least once every three years.

Q: Who will Oregon LNG pay for emergency services?

A: There is no provision for that in the permit applications.

Q: When will I have the opportunity to formally comment on the permits?

A: Now is the time for you to provide information you want us to consider when drafting the permits. We anticipate there will be a lot of information to review. We don't have a firm timeline. Drafting of the permits can take months. There will be an opportunity to comment on draft permit