



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10

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OFFICE OF
AIR AND WASTE

SEP 26 2017

Ms. Claudia Davis
Western Region Air Quality Manager
Oregon Department of Environmental Quality
4026 Fairview Industrial Drive S.E.
Salem, Oregon 97302-1142

Dear Ms. Davis:

This letter is in response to the Oregon Department of Environmental Quality's (ODEQ) letter dated June 29, 2017, regarding whether the proposed Jordan Cove liquefied natural gas (LNG) facility is a "fuel conversion plant" and/or a "petroleum storage and transfer plant with a total capacity more than 300,000 barrels" as these terms are used in provisions in the Clean Air Act (CAA) and the Environmental Protection Agency regulations that establish and govern the prevention of significant deterioration (PSD) permitting program. As explained below and based on the information ODEQ provided the EPA Region 10 in the letter, which included the applicability request as well as an attachment containing the facility's reasoning for it not being a fuel conversion plant, in our view, the proposed project should not be considered a fuel conversion plant as that term is used in the PSD permitting program provisions in CAA and the EPA regulations. Additionally, in our view, the proposed project should not be considered a petroleum storage and transfer facility as that term is used in the PSD permitting program provisions.

In part, CAA § 169(1) defines "major emitting facility" as "any of the following stationary sources of air pollutants which emit, or have the potential to emit, one hundred tons per year or more of any air pollutant from the following types of stationary sources: ... fuel conversion plants, ... petroleum storage and transfer facilities with a capacity exceeding three hundred thousand barrels, ..." There is no definition of the terms "fuel conversion plants" or "petroleum storage and transfer facilities" in the statute and the statute does not otherwise contain a description of such types of facilities or plants. When the EPA defined the term "major stationary source" in its PSD regulations, the EPA incorporated these source category terms from the statutory definition of "major emitting facility" without further defining them. Thus, in the absence of more specific direction in the CAA and the EPA regulations, the EPA (and air agencies with approved programs) have some discretion to determine what types of facilities should be included in the "fuel conversion plant" and "petroleum storage and transfer facility" source categories.

The EPA has exercised this discretion in several prior situations. With respect to "fuel conversion plants," the EPA's past guidance describes such facilities as those which accomplish a change in state of a fuel.¹ However, the examples of "fuel conversion plants" given in the guidance statements involve

¹ See Memorandum from Kent Berry, Director Policy Analysis Staff, U.S. EPA, to Asa B. Foster, Jr., Director, Air and Hazardous Materials Division, U.S. EPA Region IV, "Clarification of Sources Subject

more than a simple change in state of a given fuel. The Clarification Memo, the EPA's earliest guidance on defining the source category, offers coal gasification, coal liquefaction, and oil shale processing as examples, all of which irreversibly produce a new type of fuel as the end product. Clarification Memo at 1. Similarly, the fuel conversion process described in the Cleveland Electric Memo involved the "production of low heat value fuel gas" from municipal solid waste and the facility was said to meet the source category criteria by "producing a low heat value fuel gas." Cleveland Electric Memo at 2-3. Implicit in these examples are irreversible changes to an initial fuel and a distinct final product that has generally undergone both a change in state and other chemical or physical changes.

More recent the EPA guidance regarding fuel conversion plants has directly addressed LNG facilities. For example, in 2003, the EPA's Region 6 office concluded, in response to a request for assistance regarding two proposed off-shore gas delivery systems, that the process of vaporization of LNG to natural gas at the proposed facilities would not qualify the facilities as fuel conversion plants as that term is used in the PSD permitting program.² While these facilities were not deemed to be fuel conversion plants, Region 6 based the conclusion on the nature of the conversion from LNG to natural gas as its rationale, rather than the fact that the natural gas itself is not converted into another type of fuel and the change in state is a temporary change, solely conducted for transport purposes. In 2007, the EPA's Region 10 office provided the State of Alaska its view that the ConocoPhillips Kenai LNG Plant was a fuel conversion plant for purposes of the best available retrofit technology requirement of the CAA regional haze program.³ Region 10 followed the approach in the 2003 determination and focused its analysis on the process by which natural gas becomes LNG and whether such a process was naturally occurring.

In similar fashion to the Kenai LNG Plant, the proposed Jordan Cove LNG project would receive natural gas by pipeline, purify the incoming gas, cool it to form LNG, and store and load the LNG into marine tankers for export. However, after further consideration of the EPA's guidance in a context other than the LNG facility and the legislative history described below, it is now our view that LNG plants at marine terminals that cool natural gas into LNG for the purpose of transporting natural gas should not be considered "fuel conversion plants" as that term is used in the statutory definition of "major emitting facility" and the definition of "major stationary source" in the EPA regulations. Both the 2003 Region 6 and 2007 Region 10 letters assumed that a simple change of state was sufficient and moved on to other factors without considering an implicit characteristic of the earlier the EPA guidance—whether the facility was irreversibly converting one fuel type to another.

After a closer examination of the EPA's historical approach, our view is that a change in state is a possible characteristic of a fuel conversion plant but not the sole characteristic – i.e., not everything that accomplishes a change in state is a fuel conversion plant. Where a change of state occurs only for

to Prevention of Significant Deterioration (PSD) Review" (Jan 20, 1976) (hereinafter Clarification Memo), available at: <https://www.epa.gov/sites/production/files/2015-07/documents/phosphat.pdf>; see also Memorandum from Edward J. Lillis, Chief-Permits Program Branch, the U.S. EPA, to George T. Czerniak, Chief Air Enforcement Branch, U.S. EPA Region V, "Applicability of Prevention of Significant Deterioration (PSD) and New Source Performance Standards (NSPS) to the Cleveland Electric, Incorporated, Plant in Willoughby, Ohio" (May 26, 1992) (hereinafter Cleveland Electric Memo), available at: <https://www.epa.gov/sites/production/files/2015-07/documents/clvlnDel.pdf>.

² Letter from C.J. Sheehan, Office of Regional Counsel, EPA Region 6 to M. Cathey, Managing Director, El Paso Energy Bridge Gulf of Mexico (October 28, 2003).

³ Mahbubul Islam, Manager, State and Tribal Air Programs Unit, the U.S. EPA Region 10, to Tom Turner, Alaska Department of Environmental Conservation (Nov. 14, 2007).

transportation needs, the fuel remains natural gas throughout the process, and the process is necessarily reversible. Notably, in the case of an LNG export facility the change of state must be subsequently reversed at another facility before the natural gas is used as a fuel.

This view also appears to be consistent with the history and development of the source category. The term "fuel conversion plant" first appeared in EPA's re-proposed PSD rules on August 27, 1974. 39 FR 31000. The re-proposal included the following statement in the preamble: "[t]he list of sources subject to review has been expanded to include three additional source types - fuel conversion plants (such as coal gasification and oil shale plants)" *Id.* at 31003. The re-proposed rule itself did not contain a definition of the term "fuel conversion plants." Congress, when incorporating this term into the 1977 CAA Amendments, based on the July 29, 1976 debate of S. 3219, appears to have relied on the draft study developed by the Research Corp. of New England for EPA for the purpose of developing New Source Performance Standards. *See* Cong. Research Serv., *A Leg. History of the Clean Air Act Amends. of 1977*, Vol. 6 (Comm. Print 1980) at 5192. In this report, coal gasification again appears to be the predominant example referenced for the fuel conversion plants category. *Id.* at 5192-5199. There is no mention of LNG plants, let alone as fuel conversion plants, in the legislative history of the 1977 CAA Amendments.

Your letter also inquired as to whether the Jordan Cove LNG project should be included in the PSD source category "petroleum storage and transfer plant with a total capacity of more than 300,000 barrels." In one prior statement, the EPA has viewed this source category to be limited to those sources falling within SIC 5171 Petroleum Bulk Stations and Terminals, which includes "establishments primarily engaged in the wholesale distribution of crude petroleum and petroleum products, including liquefied petroleum gas, from bulk liquid storage facilities petroleum products."⁴ Within the regional haze program, the EPA has also stated that this category includes the storage and transfer of gasoline and other petroleum-derived liquids.⁵ Natural gas, by definition, is neither "a petroleum product" nor a "petroleum-derived liquid." Thus, in our view LNG storage tanks at LNG plants like the Jordan Cove LNG project, should not be considered part of the petroleum storage and transfer plant source category as that term is used in the PSD provisions described above.

Since the EPA Region 10 is not presently reviewing or taking action on a specific permit application for Jordan Cove facility or any other LNG facility, this letter does not have any legal force or effect or represent a final agency action with respect to any specific facility. Rather, this letter merely provides the EPA's view on one element of the PSD permitting requirements that ODEQ may consider as it evaluates which permitting requirements are applicable to the proposed Jordan Cove LNG project. We hope this letter is helpful. Please feel free to contact Dave Bray at (208) 553-4253 or me at (208) 553-1783 if you have any additional questions.

Sincerely,


Donald Dossett, P.E., Manager
Stationary Source Unit

⁴ Pamela Blakeley, Chief, Air Permits Section, U.S. EPA Region 5, to Don Smith, Minnesota Pollution Control Agency (Nov. 6, 2003).

⁵ Proposed Guideline for Best Available Retrofit Technology Determinations Under the Regional Haze Regulations, 66 FR 38118 (July 20, 2001).