

INSIGHTS

Inspector General to Audit LNG Safety Oversight

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The Department of Transportation's Office of Inspector General within the (DOT OIG) [announced](#) recently that it will audit oversight of liquefied natural gas (LNG) facilities by the Pipeline and Hazardous Materials Safety Administration (PHMSA). DOT OIG notes that the "self-initiated" audit will assess PHMSA's oversight of LNG facility compliance with federal regulations. The OIG [noted that it planned](#) to begin the audit this month and that it will schedule an initial conference with PHMSA. The audit will be conducted at PHMSA headquarters, field offices *and* select LNG facilities.

The U.S. [has become](#) the world's largest producer of natural gas, and natural gas has now surpassed coal as the primary fuel used to generate electricity. LNG is processed natural gas that has been condensed to a liquid form (through a process known as liquefaction). It takes up roughly 1/600th of the volume of natural gas and for that reason, it can be economically stored and transported in specialized equipment. LNG facilities provide a variety of natural gas services: (1) to the interstate gas pipeline system or local distribution systems (for vehicular fuel or industrial use); (2) storage for periods of increased ("peak") demand; and (3) export of natural gas outside the U.S. Exports of natural gas in the form of LNG have quadrupled since 2016, and the U.S. is on track to become the largest natural gas exporter by 2020. The Energy Information Agency estimates that LNG exports by 2030 will be five times what they are in 2018 (and the DOT OIG's audit announcement notes that the Agency's oversight responsibilities for LNG facilities may increase accordingly). This is a dramatic contrast to a few years ago when the U.S. imported both gas and LNG.

LNG facilities in the U.S. may be regulated by several federal agencies, including the Federal Energy Regulatory Commission, the U.S. Coast Guard, and PHMSA (among others). PHMSA is responsible for oversight of the siting, design, construction, operation and security of LNG facilities. According to the Agency's [website](#), it currently regulates over 150 LNG plants across 38 states and territories and provides regulatory oversight along with associated state pipeline safety partners. PHMSA has been responsible for oversight of LNG transportation and storage since Congress passed the Natural Gas Pipeline Safety Act in 1968. PHMSA has not substantively updated its LNG regulations at 49 C.F.R. Part 193 since the dramatic shift in energy markets, and LNG in particular, brought on by the shale revolution. From the late 1960s to the mid-2000s, LNG facilities were focused on the import of natural gas and peak shaving. With the changes in energy markets, these import facilities are being converted to export and new facilities are planned for export, transportation fuel, and transport, including a focus on "small-scale" facilities. Small-scale LNG generally includes marine fuel (called bunkering), fuel for heavy road transport, and some power generation. With respect to LNG exports, the

refrigeration process presents new technical and safety concerns as compared to the import of LNG (which requires regasification). For these reasons, among others, some have posited that PHMSA's LNG rules may be out of date.

U.S. LNG, and export in particular, is slated to be an important piece of the world's energy portfolio and the industry is working to commission facilities to get those supplies to market. Given FERC's role in siting and certificating LNG facilities under Section 7 of the Natural Gas Act, PHMSA is [coordinating](#) with FERC to expedite the siting and design review of those facilities for permitting through a new [memorandum of agreement](#). Once those permitted facilities are constructed and in operation, it will fall to PHMSA and states to oversee safety. In the 2016 reauthorization of the Pipeline Safety Act, Congress required PHMSA to update minimum safety standards for permanent small-scale LNG pipeline facilities (which is not defined). That review is ongoing and the Agency has various research and development projects in the works regarding LNG facilities. Further, PHMSA anticipates issuing a proposed rulemaking with the Federal Railroad Administration on the bulk transport of LNG in rail tank cars in early 2019. It is unclear, however, whether PHMSA has any further plans at present for purposes of updating its LNG regulations.

With its audit, we expect the DOT OIG to review and comment on the sufficiency of existing 49 C.F.R. Part 193 LNG regulations and agency safety inspections, with a focus on the current uses of LNG such as export, transportation fuel, and transport which were not anticipated when PHMSA's predecessor agency began regulating these facilities. The inspections of select existing facilities could further include large-scale export facilities in operation, of which there are currently three.