

US EPA ARCHIVE DOCUMENT

LIQUEFACTION PLANT

1.0 ADDITION OF EMERGENCY GENERATOR AND BACKUP AIR COMPRESSOR ENGINES

Previous Representations:

In the previous permit application documentation submitted to the EPA, Freeport LNG proposed to install four emergency generators powered with diesel-fired engines (EPNs: LIQEG-1, LIQEG-2, LIQEG-3, and LIQEG-4) each rated at 755 horsepower to serve as a reliable power source for lighting and other emergency equipment in the event of a power failure. Each generator engine will be fired with ultra low sulfur diesel fuel and will be limited to 100 hrs/yr of operation for purposes of maintenance and testing.

Updated Information:

Freeport LNG is proposing the installation of two additional emergency generator engines (EPNs: LIQEG-5 and LIQEG-6), one emergency air compressor engine (EPN: LIQEAC-1), and associated diesel day tanks (EPNs: LEGT-5, LEGT-6, and LEACT-1). The emergency generator engines will each be rated at 755 and 400 horsepower, respectively. The emergency air compressor engine will be rated at 300 horsepower. These engines will be fired with ultra-low sulfur diesel fuel.

Freeport is also proposing to limit the operation of the backup diesel firewater pump engines to no more than 2 hours per day and 100 hours per year for routine testing, maintenance, and inspection purposes only. The emergency generator engines and emergency air compressor engine will be limited for a maximum of 2 hours per day and 50 hours per year for routine testing, maintenance, and inspection purposes only.

The evaluation of BACT for the emergency engines in Section 10.6 of the initial permit application and follow-on information submitted to the EPA is applicable to the additional diesel-fueled, emergency generator and backup air compressor engines proposed for the Liquefaction Facility as the additional engines will be identical or similar to the corresponding emergency engines proposed in the initial application.

2.0 ADDITION TO FUGITIVE EQUIPMENT COMPONENT COUNT

The equipment count used to estimate fugitive emissions has been increased based on the updated plant equipment configuration resulting in an increase in GHG emissions.

Fugitive methane is the major component of the GHG emissions from piping components. Consistent with the previous permit application representations, Freeport LNG proposes to implement a work practice as BACT. The 28MID LDAR program will be used to detect any leaks and repairs will be performed as soon as practicable. In addition, Freeport LNG will implement an AVO program in between LDAR checks.