

Plain Language Summary for New Source Review (NSR) Renewal Amendment Application for Air New Source Review Permit Number 9659

The following summary is provided for this pending air permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 Texas Administrative Code Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

Luminant Generation Company LLC (CN603256413) has submitted an application for renewal of and amendment to permit number 9659. The Permian Basin Steam Electric Station (RN102183969) produces electric power for the grid and is located at 600 North Yucca Drive, Monahans, Ward County.

This renewal will authorize the continued operation of five simple cycle combustion turbines and miscellaneous maintenance, startup, and shutdown activities. The amendment will add existing lube oil reservoir vents to the permit and will remove a retired emergency generator engine from the permit. Luminant Generation Company LLC has listed in the application the pollutants and amounts that will be emitted for each facility. Below is the current amount allowed, the amount to be added or removed, and the total amount for each pollutant that is proposed to be emitted each year for all the facilities.

Pollutant	Permitted Emissions (tons per year)	Emissions Added/Deleted (tons per year)	Total Proposed Emissions (tons per year)
Volatile organic compounds	32.77	0.05	32.82
Particulate matter including particulate matter with diameters of 10 microns or less and 2.5 microns or less	194.05	0.05	194.10
Nitrogen oxides	1411.32	-1.32	1410.00
Carbon monoxide	82.80	-0.30	82.50
Sulfur dioxide	1950.22	-0.22	1950.00

The combustion turbines being renewed are controlled by utilizing good combustion practices and limiting annual electrical generation. Emissions of nitrogen oxides from the combustion turbines are controlled by injecting water, along with fuel and air, into the combustion chamber to cool combustion flame temperature and reduce the formation of nitrogen oxides. Emissions of sulfur dioxide from the combustion turbines are limited by firing low-sulfur fuels, including pipeline-quality sweet natural gas and ultra-low sulfur No. 2 fuel oil. Emissions from maintenance, startup, and shutdown activities being renewed are controlled by limiting operating time. Emissions from the lube oil reservoir vents being added to the permit are controlled by a series of electrically charged plates that transfer an electric charge to the particulate matter and then attract and capture the charged particles.