

**Plain Language Summary for New Source Review (NSR) Amendment
Application for Air New Source Review Permit Numbers 109148, PSDTX1358M1, and GHGPSDTX41M1**

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.

Golden Spread Electric Cooperative, Inc. (GSEC) (CN602663387) has submitted an application for modification of permit numbers 109148, PSDTX1358M1, and GHGPSDTX41M1. Elk Station at the Antelope Elk Energy Center (RN105862510) produces electrical power at 1454 County Road 315, Abernathy, Hale County.

This amendment will authorize construction of a 4th natural gas fueled turbine at Elk Station. This unit was previously authorized but was never built. GSEC has listed in the application the pollutants and amounts that will be emitted for each new 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/Removed (tons per year)	Total Proposed Site- Wide Emissions (tons per year)
Volatile organic compounds	311.77	15.79	327.56
Particulate Matter (all types)	188.81	7.39	196.20
Nitrogen oxides	540.74	58.89	599.63
Carbon monoxide	1018.3	96.01	1114.31
Sulfur dioxide	78.71	5.05	83.76
Carbon dioxide	1960842	217150	2177992
Methane	386.06	57.82	443.88
Nitrous oxide	40.07	5.47	45.54
Carbon dioxide equivalent	1986470	220226	2206696
Hazardous air pollutants	109.78	1.87	111.65

The new turbine will be controlled by using computer-controlled combustors which stage the mixing of natural gas fuel with combustion air to minimize the production of carbon monoxide and nitrogen oxides. Due to the design of the turbine, it achieves a high combustion efficiency, and that helps to reduce the release of other pollutants from the combustion of natural gas. The amount of emissions released by the turbine will be monitored by a continuous monitor. A new small heater burns natural gas to preheat the fuel sent to the turbine. The preheating helps avoid condensation from the natural gas and facilitates combustion in the turbine.