

Plain Language Summary for New Source Review (NSR) Amendment Application for Air New Source Review Permit Number 157170

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.

Texas International Terminals LTD (TxIT) (CN603788084) has submitted an application for an amendment to permit number 157170. The Galveston Terminal (RN102501160) liquid hydrocarbon handling and storage facility with marine loading operations at 4800 Old Port Industrial Road, Galveston, Galveston County.

This amendment will authorize continued operation of the plant in the as-built configuration which differs slightly from the configuration as originally permitted. The differences include removing sources that were authorized but not built, updating products being stored in tanks, updating control device representations, updating marine loading dock operations, and updating piping component counts. This amendment will also consolidate authorizations for several activities originally authorized under permit by rule. TxIT 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/Removed (tons per year)	Total Proposed Emissions (tons per year)
VOC	73.27	-27.22	46.05
Nitrogen Oxides	25.05	-18.00	7.05
Carbon Monoxide	13.17	1.66	14.83
Particulate Matter (PM)	0.43	0.11	0.54
PM less than 10 microns in diameter (PM ₁₀)	0.43	0.11	0.54
PM less than 2.5 microns in diameter (PM _{2.5})	0.43	0.11	0.54
Sulfur Dioxide	0.13	8.42	8.55
Hydrogen Sulfide	0.06	-0.02	0.04

The new and/or modified facilities will be controlled by the same mechanisms proposed in the original permit application:

Fugitive Components – to identify if there are leaks, or “fugitive emissions,” from piping components such as valves, connectors, pumps, and similar equipment, instrument monitoring is used. Using a calibrated hand-held instrument, personnel will check for fugitive emissions by holding the device near each piping component to measure for potential leaks of materials that can be detected by such instruments. This method is designed for early detection and repair of potential leaks, thus reducing the duration of such leaks, resulting in a reduced potential for emissions from this equipment.

Marine Loading – Marine loading refers to the process of transferring bulk liquids from storage facilities onto marine vessels, such as tankers or ships. Emissions during marine loading are primarily released through the displacement of vapors in the cargo tanks of ships as they are filled with liquid cargo. During this operation, volatile organic compounds (VOCs) and other air pollutants can be emitted into the atmosphere. When liquids with a high vapor pressure are loaded, emissions will be controlled by either a flare or vapor combustor unit (VCU).

Flare (control device) – A flare is used to control gases from marine loading of high vapor pressure liquids. Gases from the loading operation will be piped to the flare, which is where the gases will be burned to lower the amount of process pollutants going into the air.

VCU (control device) – A VCU is used to control gases from marine loading of high vapor pressure liquids. Gases from the loading operation will be piped to the VCU, which is where the gases will be burned to lower the amount of process pollutants going into the air.

Internal floating roof storage tanks – Tank roofs will float on the liquid contained inside. This limits the amount of space in the tank for liquid to turn into vapor which will limit the amount of stored liquid that could turn into vapor.

Tank Maintenance, Startup, and Shutdown (MSS) – Tank MSS refers to the emissions that occur during non-routine operations of storage tanks. This includes activities such as cleaning, inspection, and repairs (maintenance), initial filling or refilling of tanks (startup), and emptying or decommissioning of tanks (shutdown). When high vapor pressure liquids have been stored in the tank, emissions will be controlled using a portable thermal oxidizer.

Controlled and Uncontrolled MSS – Controlled and uncontrolled MSS refer to whether measures are taken to manage and reduce emissions during non-routine operations. Emission control measures may include venting equipment vapors, proper drainage of equipment, or managing emissions from the equipment vapor space after control. Uncontrolled MSS emissions can be released directly to the atmosphere without treatment.

Thermal Oxidizer (TO) – A thermal oxidizer is used to control gases from tank MSS when the tank has stored a high vapor pressure liquid. Gases from the loading operation will be piped to the TO, which is where the gases will be burned to lower the amount of process pollutants going into the air.