

Plain Language Summary for New Source Review (NSR) Renewal Amendment Application for Air New Source Review Permit Number 107518

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.

Formosa Plastics Corporation, Texas (CN600130017) has submitted an application for renewal of and amendment to permit number 107518. The Olefins 3 (OL3) Plant (RN100218973) produces high purity ethylene at 201 Formosa Drive, Point Comfort, Calhoun County, with some process operations, including the OL3 and Propane Dehydrogenation (PDH) Plants, occurring within the contiguous plant site but in the adjacent Jackson County.

This renewal will authorize the continued operation of the OL3 Plant to produce ethylene. It will also renew the authorization for construction of the PDH Plant. The amendment will authorize updated fugitive component counts at the OL3 Plant. Formosa Plastics Corporation, Texas 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)
VOC	1,127.93	6.02	1,133.95
NO _x	505.24	0	505.24
CO	1,462.69	0	1,462.69
PM	108.41	4.18	112.59
PM ₁₀	86.53	1.55	88.08
PM _{2.5}	73.83	0.01	73.84
SO ₂	110.85	0	110.85
NH ₃	125.01	0	125.01
Cl ₂	0.04	0	0.04
Chlorine Compounds	0.02	0	0.02
H ₂ SO ₄	0.08	0	0.08
Inorganics	0.02	0	0.02

The new and existing facilities will be controlled as follows. The furnaces and steam boilers are equipped with selective catalytic reduction (SCR) for NO_x control. The furnace decoking operations utilize proper design and operation of the furnaces to minimize coke build-up and decoking drums with internal design for particulate removal. VOC and other organic compound emissions are controlled by routing routine process vent streams, including wash oil truck loading vapors and select storage tanks, to combustion control devices. VOC and organic compound emissions from Maintenance, Startup and Shutdown (MSS) operations will be controlled in combustion control devices which consist of elevated flares and vapor combustion units (VCUs). The elevated

flares have a minimum destruction and removal efficiency (DRE) of 98%. The VCUs are designed with a minimum VOC DRE of 99%. Good combustion operating practices are utilized to minimize combustion emissions (NO_x, CO, PM, and SO₂). The PDH Reactor Charge Heater will be equipped with SCR, low NO_x burners, and flue gas recirculation for NO_x control. The PDH Waste Heat Boiler will be equipped with SCR for NO_x control, and oxidation catalyst for CO and VOC control. Fixed roof storage tanks are equipped with submerged fill and are painted white or aluminum, except for the acid and additive tanks which may be constructed with uncoated stainless-steel to prevent corrosion. The cooling towers are equipped with drift eliminators with a drift rate of 0.001%. Fugitive emissions are minimized by implementing a formal Leak Detection and Repair (LDAR) program.