

Plain Language Summary for New Source Review (NSR) Amendment Application for Air New Source Review Permit Number 6257E

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.

Equistar Chemicals, LP (CN600124705) has submitted an application for an amendment to permit number 6257E. The Bayport Underwood Plant (RN102926920) produces/manufactures ethylene oxide (EO) at 5761 Underwood Road, Pasadena, Harris County, Texas 77507.

This amendment will update the speciation of the permitted volatile organic compound (VOC) emissions to include ethyl chloride (EC), vinyl chloride (VC) and methyl chloride (MC) from the CO₂ Stripper (EPN P-3), Flare (EPN P-15), and Boiler (EPN P-25). This amendment will also authorize the hydrogen chloride (HCl) emissions that can form as a result of the combustion of these species in the Boiler and the Flare. Equistar is also proposing to consolidate by incorporation PBR Registration No. 132763 into this NSR permit and include EC container maintenance emissions under EPNs 4112-VENT, 4114-VENT, and GRP-ECV. Equistar Chemicals, LP 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	107.38*	0.01	107.39
PM	7.46	0.00	7.46
PM ₁₀	4.51	0.00	4.51
PM _{2.5}	2.69	0.00	2.69
NO _x	31.72	0.00	31.72
CO	84.31	0.00	84.31
SO ₂	1.43	0.00	1.43
Pb	0.00	0.00	0.00
HCl	0.00	1.17	1.17

*Includes 0.27 tpy from consolidated PBR.

The new and/or modified facilities will be controlled by a combination of existing controls including the flare, boiler, and a third party that receives process gases for processing. The vent stream that cannot be taken by the third party customer is vented to the atmosphere at the CO₂ stripper. During intermittent maintenance activities, the EC containers are vented to the atmosphere.