

**Plain Language Summary for New Source Review (NSR) Initial  
Application for Air New Source Review Permit Number 172939**

*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 federally enforceable representations of the permit application.*

The Dow Chemical Company (CN600356976) has submitted an application for an initial permit. The Research and Development (R&D) Pilot Plant proposed for construction at the Texas Operations Site in Freeport, Brazoria County, Texas (RN100225945) will be utilized to test different operating scenarios to produce small scale products, which will be analyzed for potential future production scale-up.

This permit will authorize the construction and operation of a new R&D Pilot Plant. This will be a grassroots facility and will test different operating scenarios. The Pilot Plant will require the installation of new equipment. Some equipment will tie into the Light Hydrocarbon 7 (LHC-7) facility to be recovered, or routed into the fuel gas system, or routed to the flare. Dow has listed in the application the pollutants and amounts that will be emitted for each facility. Below is the total amount of each pollutant that is proposed to be emitted each year for all the facilities.

<b>Pollutant</b>	<b>Proposed Emissions (tons per year)</b>
CO	73.41
NO <sub>x</sub>	4.80
PM	3.85
PM <sub>10</sub>	3.78
PM <sub>2.5</sub>	3.74
SO <sub>2</sub>	5.00
VOC	4.59

Process vents from the R&D Pilot Plant will be routed to the process, or routed to the LHC-7 fuel gas system, or routed to the existing flare for control. Other process vents with control measures in place are routed to a particle filtration system used to recover particles in the system before discharge to atmosphere.