The US Environmental Protection Agency is proposing to reject a chemical industry-backed analysis of the health hazards of ethylene oxide.

That analysis, by the Texas Commission on Environmental Quality (TCEQ), concludes that the toxicity of the carcinogenic gas is far lower than the EPA determined in 2016. Made from natural gas or petroleum, ethylene oxide is a basic building block for pharmaceuticals and plastics. It's also used to sterilize medical equipment.

The EPA issued a rule in 2020 that requires chemical makers to cut ethylene oxide emissions from leaks, vents, and storage tanks to protect the health of people living near those plants. The EPA faced a court-ordered deadline to complete the regulation, and the TCEQ's analysis wasn't finalized in time for the federal agency to consider it. The EPA relied on its 2016 ethylene oxide hazard assessment, which the chemical industry calls flawed, as the scientific basis for the rule.

Last year, the EPA agreed to reexamine the ethylene oxide regulation at the behest of the TCEQ, Huntsman Petrochemical, and the American Chemistry Council (ACC), the largest US chemical trade group.

The three organizations asked the EPA to reconsider the rule using the TCEQ's risk number, a move that would likely lead to less stringent regulation of ethylene oxide emissions. Such action could also pave the way for the construction of new facilities or the expansion of existing plants that release the gas.

In a proposed response unveiled Jan. 26, the EPA says it will reject the TCEQ and industry arguments. The federal agency says it addressed those assertions in the 2020 rule. The ACC, TCEQ, and Huntsman “have presented no new arguments,” the agency says.

The ACC's Ethylene Oxide Panel says it is reviewing the EPA's explanation in detail. The EPA is accepting public comments on its proposed decision through mid-March and will likely finalize it later this year.

Eight of the top 10 emitters of ethylene oxide in the US in 2020 were chemical plants in Texas and Louisiana, according to Toxics Release Inventory data. The other two are commercial sterilization facilities in Arkansas and Texas.—CHERYL HOGUE