



1. Why is FCA US LLC seeking a new permit to install?

Fiat Chrysler currently owns and operates the Mack Avenue Engine Plant complex at 11570 Warren Avenue East in Detroit. They are seeking a “permit to install” from the Michigan Department of Environmental Quality to modify the plant to operate a new assembly line instead of an auto engine manufacturing facility. To operate its new assembly line, FCA US LLC must repurpose the existing plant and construct a new paint shop.

2. What air emissions will be result from the FCA US LLC’s proposal?

While it will emit other pollutants, it is estimated that the new assembly line will have the potential to emit a major amount of volatile organic compounds and greenhouse gases:

- *Volatile Organic Compounds:* The new assembly plant would have the potential to emit 382.5 tons of volatile organic compounds (VOCs) per year. VOCs are a class of chemicals, and are one of the ingredients for the formation of ozone, or “smog.” The VOC emissions from the new assembly plant would be caused by the new paint shop proposed by Fiat Chrysler.
- *Greenhouse Gases:* The new assembly plant will also have the potential to emit 118,876 tons per year of greenhouse gases.

3. How do volatile organic compound emissions relate to ozone?

Volatile organic compounds react with nitrogen oxides in the air to create ozone, or “smog.” Ozone can cause respiratory-related health impacts, including the aggravation of asthma. Wayne county, along with several other counties in southeast Michigan, were recently designated as “nonattainment” area because an air quality monitor detected levels that were above the national, health-based air quality standard for ozone.

4. What regulations does FCA US LLC have to comply with to receive their permit?

Since the assembly line will emit a significant amount of VOCs, and is located in an area that is failing to comply with the national air quality standard for ozone, FCA US LLC must satisfy a number of regulations, including the following:

- Must demonstrate why the proposed location and methods are superior to alternatives.
- Emissions of VOCs from the facility must comply with the “lowest achievable emission rate” based on existing pollution control technology and methods.
- Must offset the increase in VOC emissions with a reduction in emissions from another source in the nonattainment area.