

1. What is an Air Permit?

Air permits are required by the Federal Clean Air Act with regulatory authority in Indiana delegated to the Indiana Department of Environmental Management (IDEM). Sources must obtain an air permit to construct and operate a facility that will have air emissions. IDEM typically combines the construction permit for a new source with its air operating permit. Permits impose conditions on emissions, compliance, record keeping and reporting. Facilities must comply with these conditions at all times. Regulated emissions under air permits include Nitrous Oxides (NO_x), Volatile Organic Compounds (VOCs), Carbon Monoxide (CO), Particulate Matter (PM), Hydrogen Sulfide (H₂S), Sulfur Dioxide (SO₂), and Hazardous Air Pollutants (HAPs).

2. What type of Air Permit did Fulcrum Centerpoint apply for?

There are three main types of air operating permits issued by IDEM. Fulcrum Centerpoint applied for a Federally Enforceable State Operating Permit (FESOP). This is known as a “synthetic minor” air permit. It is applicable to facilities that have projected emissions below the “major source” permit thresholds using voluntary emission controls. This can include a combination of pollution controls and/or limitations on operation or processes. The initial FESOP must be renewed by a facility within five years. The renewal period thereafter is ten years.

3. What determines whether a facility is a “major source” or “minor source”?

The United States Environmental Protection Agency (EPA) has set permit thresholds for each of the regulated types of emissions. These thresholds determine whether the facility is a “major source” or “minor source” and therefore, what type of air permit the facility requires. For example, if a proposed facility has projected emissions equal to or greater than 100 tons per year of NO_x, then it is considered a “major source” and may require a Title V Operating Permit. Depending on the air quality in different regions, the permit thresholds for certain emissions can be more stringent than federal standards.

4. What are the permit emission thresholds in Lake County, Indiana?

The permit thresholds in Lake County, Indiana are far more stringent than EPA standards for some criteria pollutants. For example, the Chicagoland area, from Northwest Indiana to Southwest Wisconsin, has a “major source” permit threshold of 50 tons per year for both NO_x and VOCs, while standard EPA “major source” permit thresholds are much greater at 100 or 250 tons per year, respectively.

5. What are the projected emissions from Fulcrum Centerpoint?

The projected emissions from Fulcrum Centerpoint are all under “major source” permit thresholds for Lake County, the State of Indiana, and the EPA. A summary of projected emissions from Fulcrum Centerpoint’s draft air permit are as follows:

Category	Projected Emissions (tons/year)	Major Source Threshold (tons/year)
NOx	44.21	50
VOCs	48.73	50
CO	90.01	100
PM	74.73	100
H ₂ S	5.23	25
SO ₂	13.72	100
HAPs	5.36	25

6. *What produces the emissions that will come from Fulcrum Centerpoint?*

Most of the facility’s air emissions are from the combustion of natural gas. Natural gas is used by the boiler to produce steam and provide direct heat for the gasification process. It is important to note that Fulcrum Centerpoint does not incinerate any feedstock, rather it uses high heat (with minimal oxygen present, a.k.a. gasification) to break the feedstock down into a synthesis gas (or syngas). The syngas is comprised of hydrogen (H₂) and carbon monoxide (CO) and is then converted into a liquid fuel using a proven catalytic process, the Fischer-Tropsch method. Particulate matter is produced at the facility, with the majority coming from the storage and handling of feedstock.

7. *What emissions control equipment will Fulcrum Centerpoint use?*

Fulcrum Centerpoint intends to use several emission control devices to significantly reduce emissions of NOx, VOCs, CO and PM. These include reliable, commercially available, and industry proven equipment such as selective catalytic reduction units, oxidation catalyst units and bag houses.

8. *What happens once the facility is built and starts operations?*

Fulcrum Centerpoint is required to demonstrate that the emission projections in the air permit are being met. If Fulcrum Centerpoint is not able to meet the permitted limits, it will be required to take corrective action and then demonstrate it has met the permit requirements. Any corrective action must be finalized within 180 days of commencing operations.

9. *Who has regulatory oversight for Fulcrum Centerpoint’s air permit?*

IDEM is the regulatory authority for its air permits. Fulcrum Centerpoint will be subject to continuous monitoring, regular inspections, and quarterly reporting obligations of IDEM to demonstrate its operations are in accordance with the permitted limits. Additionally, Fulcrum Centerpoint is required to obtain an Air Operator’s permit from the City of Gary with its own reporting and inspection obligations.

10. *Where can a copy of the draft air permit be found?*

A copy of the draft air permit can be found on the IDEM website www.idem.in.gov/airquality and the public can submit comments to IDEM for a period of 30 days after the draft permit is released. IDEM released Fulcrum Centerpoint’s draft permit on March 31, 2022.