



## **Fulcrum Centerpoint BioFuels Plant Gary, Indiana Frequently Asked Questions**

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### **Environmental Impacts**

***Q: Who is Fulcrum and what does your business do?***

A: Fulcrum is a pioneer in the development, construction, and operations of facilities to produce low-carbon, low-cost renewable transportation fuels from one of our nation's most abundant resources – household garbage. The company helps address two key environmental challenges: greenhouse gas emissions and sending waste to landfills.

***Q: How do you turn waste from local landfills into fuel?***

A: Fulcrum's proprietary process is spread across two separate facilities: two Feedstock Processing Facilities ("FPF") and a Biorefinery. The FPFs receive post-recycled municipal solid waste ("MSW") that is otherwise destined for the landfill. Centerpoint alone will divert approximately 700,000 tons of MSW from landfills each year. The FPFs produce an engineered feedstock for the Biorefinery by sorting, separating, and shredding the material, ultimately turning it into a confetti-like substance, which is trucked to the Biorefinery. At the Biorefinery, this feedstock is first converted into a syngas using a gasification process. Importantly, the gasification process does not burn or incinerate any of the material, rather it is "broken down" into a syngas using heat and moisture. This syngas ultimately becomes renewable jet fuel using conventional refining equipment and processes.

***Q: What are some of the environmental benefits of Fulcrum's renewable jet fuel?***

A: Fulcrum's renewable jet fuel reduces life-cycle carbon emissions by more than 80 percent compared to conventional jet fuel (due in part to the avoidance of landfill methane emissions). It is also an incredibly clean fuel, free of sulfur or metals. While the production process and eventual combustion in aircraft engines produces carbon emissions, these are offset by avoiding methane emissions from diverting waste away from landfills, as well as by the use of renewable power in the production process.

Furthermore, by diverting significant volumes of MSW from landfills, Fulcrum Fuel not only reduces methane emissions, but it also helps address environmental issues associated with landfills and their impact on local communities, including odor, litter, contamination and landfill expansions.

**Q: What is the permitting/oversight process? IDEM? What would their role be in enforcement of EPA standards around air and water quality issues?**

A: IDEM and the City of Gary are the principal permitting authorities related to this project, which will require several permits which Fulcrum is required to obtain. IDEM is responsible for enforcing all EPA standards and requirements. Fulcrum submitted an Air Quality Permit to IDEM in April 2021 and expects a draft soon. State permits for solid waste and land quality as well as city-level permits will be submitted over the next 12 months.

**Q: Will nearby water and air be negatively impacted by Centerpoint?**

A: Fulcrum's Biorefineries use several control and treatment technologies to minimize atmospheric emissions and wastewater. Because the Biorefinery uses a gasification process and does not incinerate or combust the feedstock.

Prior to the conversion from syngas to fuel, the syngas goes through a multi-step clean-up process to capture and remove all contaminants. Once trapped, these contaminants are then disposed of properly in a safe manner without being released into the environment. Wastewater from the process at the biorefinery is captured and pre-treated onsite before being sent to the Gary Sanitary District wastewater treatment plant for further treatment.

**Q: How far is the plant from a water source? Has IDEM approved a permit to allow the discharging of chemicals into a water source?**

A: The Centerpoint Biorefinery WILL NOT directly discharge anything into Lake Michigan or any other water source. All the wastewater from the Biorefinery will be treated in an onsite wastewater pre-treatment plant, before being sent to the Gary Sanitary District's (GSD) wastewater treatment plant for further treatment pursuant to GSDs NPDES permit. Furthermore, the Biorefinery will receive treated effluent/recycled water from GSD for its process water (instead of potable water). This should result in a net decrease in the amount of treated effluent discharged from the GSD treatment plant.

**Q: Does your system control volatile organic compounds? Do you have VOC emission sources? If so, which ones?**

A: Yes. VOCs are controlled by the boiler and the flare, which have a destruction efficiency of greater than 96 percent. Our main VOC emission sources are the boiler, heaters for gasification, flare, and product storage tanks.

**Q: How will stormwater run-off on the site be handled?**

A: The Centerpoint Biorefinery will have a stormwater management plan and a stormwater permit from the City of Gary. Stormwater will be collected in a detention pond on site.

**Q: Has an Environmental Impact Study been completed?**

A: The project is not required to produce an Environmental Impact Assessment or Statement (EIS). This type of environmental assessment is required for large-scale federal projects such as airports, federal buildings, military complexes, highways, etc. under a federal law entitled the National Environmental Policy Act, 42 U.S.C. § 4321-4370m. However, we appreciate that the community would like to understand the full scope of potential environmental impacts. Fulcrum will continue to hold community information sessions for residents of Gary to provide further information on the project's environmental impacts and benefits. Meeting notices will be provided on the City's website and to interested stakeholders.

## **Economic Impacts**

### ***Q: How many jobs will Centerpoint create?***

A: The Centerpoint Biorefinery will provide approximately 130 full-time operational jobs and 1,000 construction jobs. Furthermore, numerous indirect jobs will support the facility including technical trades, logistics and supply chain.

### ***Q: How will Fulcrum ensure jobs, including higher-skilled opportunities, are available for locals?***

A: Fulcrum has made binding commitments to prioritize hiring of Gary residents for operations (long-term) and for construction (short-term). Fulcrum has also committed to working with local technical colleges (e.g. Ivy Tech Community College) to facilitate training and skills development (including beyond the blue collar level) for Gary residents and we are working on a plan for that now with the City.

### ***Q: How much is Centerpoint expected to cost and how will this project be paid for?***

A: The estimated capital cost for the Biorefinery is \$600 million; the Indiana Finance Authority has awarded Fulcrum \$500 million in volume cap for financing. Fulcrum is backed by a number of industry leading strategic partners that have contributed significant equity capital to support Fulcrum's proprietary process platform. Such partners include United Airlines, BP, Cathay Pacific Airways, Japan Airlines, Marubeni, Waste Management, Waste Connections and the U.S. Department of Defense.

### ***Q: How does this project impact the City of Gary?***

A: In addition to creating hundreds of jobs and redeveloping an industrial space, Centerpoint will provide a direct economic benefit of \$7.8 million in tax increment value to the city annually. Furthermore, the project will contribute to the demolition and improvement of abandoned buildings to promote urban renewal within the community.

## General Project

**Q: *What will the full process entail at the Centerpoint facility? When does Fulcrum expect this facility to be fully operational?***

A: Fulcrum expects the Centerpoint Biorefinery to be fully operational in 2025. The Biorefinery will convert processed engineered feedstock into renewable transportation fuels, via a non-combustion, two-step thermochemical conversion process. The feedstock delivered to the Biorefinery will be processed from MSW at two separate feedstock processing facilities located outside of Gary (exact locations TBD).

**Q: *Will municipal solid waste be processed in Gary?***

A: No. Municipal solid waste will be processed into feedstock at one of two feedstock processing facilities located outside of Gary. One FPF is expected to be in Illinois (I-90 corridor) and the other FPF is expected to be located in Northwest Indiana along the I-65 corridor.

**Q: *Where will Centerpoint be located?***

A: The Centerpoint project will consist of a Biorefinery, supported by two FPFs. The Biorefinery will be in the Buffington Harbor area of Gary, Indiana, on an industrial zoned site adjacent to the former Majestic Star Casino. Site selection for the feedstock processing facilities is being finalized, however they will be located outside of Gary elsewhere in Northwest Indiana and in Illinois.

**Q: *If Centerpoint consists of multiple locations, how will products be transported?***

A: Feedstock produced by the FPFs will be transported to the Biorefinery in trucks using designated routes via I-90, Cline Avenue (IN-912) and Buffington Harbor Drive. Feedstock delivery will occur Monday through Friday.

**Q: *How will the hauling of feedstock impact local traffic?***

A: Feedstock delivery during the week will typically occur over a 16-hour period. Trucks delivering feedstock will only use designated heavy vehicle routes and will not travel along residential streets. Access to the Biorefinery will be via I-90 to Cline Avenue (IN-912) to Buffington Harbor Drive. Buffington Harbor Drive was recently upgraded and duplicated for improved truck access to Buffington Harbor. During normal operations, it is expected that 90 trucks per day (Monday to Friday) will deliver feedstock to the Centerpoint Biorefinery.

**Q: *Will the fuel produced by Fulcrum be stored on-site or distributed through a pipeline to the customer?***

A: The fuel will be initially stored on-site in storage tanks before being loaded into rail tank cars and moved off site via rail to their destinations. Fuel produced at the Biorefinery will fill four to five rail tank cars each day.

**Q: *In the event of an accident, what is the company's liability?***

A: Fulcrum has appropriate insurance to cover liability associated with accidents.

**Q: *What is the status of the Reno, NV operation?***

A: Fulcrum's facility near Reno, NV (the Sierra BioFuels Plant – or Sierra) is in the process of starting up operations. Sierra is expected to begin fuel production during the first quarter of 2022. Fulcrum will continue to share updates regarding the status of Sierra's operations with the city officials and the community.