



Air Permit Frequently Asked Questions

Alliant Energy submitted its air permit application to Linn County Public Health on July 21, 2026.

What is the purpose of the air permit application?

The air permit application demonstrates how the Morgan Valley Energy Center will comply with applicable federal and state air quality requirements. The application includes detailed engineering analyses, emissions estimates and environmental modeling that regulatory agencies use to evaluate the project.

Who reviews the application?

Linn County Public Health Department's Air Quality Division leads the review of the application with oversight from the Iowa Department of Natural Resources' Air Quality Bureau. Both agencies conduct their review under protocols and procedures established by the United States Environmental Protection Agency.

This future power plant is in a valley. How does that impact public health and emissions?

Air quality standards have been established by the United States Environmental Protection Agency (USEPA) to protect public health and well-being. Projects that undergo air quality permitting, such as the Morgan Valley Energy Center, are evaluated using robust computer modeling procedures to determine compliance with these standards. These models take into account varying terrain features such as valleys and hills.

What is Selective Catalytic Reduction (SCR) technology?

An SCR uses ammonia and a metal catalyst made of vanadium to create a chemical reaction that converts NO_x to nitrogen and water. An SCR is one of nine potential strategies discussed in the air permit application for reducing NO_x emissions. Its effectiveness can vary depending on site-specific and technology-specific circumstances, which are discussed in the application.

Is Alliant Energy adding Selective Catalytic Reduction (SCR) to Morgan Valley to help with emissions?

The use of SCR was evaluated and found to be infeasible for NO_x reduction at the Morgan Valley Energy Center due to technical, energy, environmental and economic considerations. The details of this evaluation can be found in the air permit application that Alliant Energy submitted for the project.

Why are you building a simple cycle instead of combined cycle?

Alliant Energy's evaluation of power resources showed that a combined cycle facility is not needed at this time and that customer needs can be met economically with a simple-cycle configuration.

However, like any large industrial facility, we are building flexibility into the design of MVEC with an eye toward the future. The design of MVEC allows for the addition of combined cycle capabilities in the future if customer energy needs require the energy, and if the addition is determined to be a cost-effective way to meet those needs. Expansion to a combined cycle facility would require additional approvals from the Iowa Utilities Commission, Linn County Public Health, and the Iowa Department of Natural Resources.



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Isn't a combined cycle more efficient?

There are important operational differences between combined cycle facilities and simple-cycle facilities that affect efficiency, anticipated emissions and the amount they would be expected to operate:

- Combined cycle facilities tend to operate more over the course of a year compared to simple-cycle facilities because the steam turbine does not start up or shut down as quickly as a combustion turbine. Once it is running, it is most efficient to keep it running.
- A combined cycle facility is more likely to have exhaust temperatures and an emissions profile that make additional control technologies, like SCR, more feasible. When you put the two together (increased operations and additional emission controls), we would generally expect the emissions rate (for example, the amount of NO_x per hour) to be lower, but the total amount of emissions per year may be higher due to the larger number of operating hours.

What is BACT? Why does Alliant Energy use it?

BACT stands for Best Available Control Technology. In the context of air permitting, BACT is the emissions limitation standard that must be applied to new or modified major sources of air pollution in attainment areas (areas meeting or expected to meet [National Ambient Air Quality Standards](#)). It is determined on a case-by-case basis by the permitting authority and may include reductions achieved through processes, systems and techniques for controlling each regulated pollutant.

BACT ensures that new or modified major sources (e.g., power plants, refineries and large industrial facilities) use the most effective, commercially available pollution control technology that is technically feasible, economically reasonable, energy efficient and environmentally sound. The BACT analyses for the Morgan Valley Energy Center are included in the air permit application.

How are air quality impacts evaluated?

The application includes emissions calculations and air quality modeling that evaluate how the facility would operate under applicable environmental regulations. These analyses are designed to assess compliance with established air quality standards intended to protect public health and the environment.

What area was evaluated for the air quality modeling?

The modeling analysis evaluated air quality both near the facility and across the broader surrounding region. A 10-km x 10-km (6.2-mi x 6.2-mi) area was used for all modeled emissions to ensure compliance with applicable federal air quality standards, including fine particulate matter, and an expanded area of 100-km x 100-km (62.1-mi x 62.1-mi) was used to ensure compliance with the federal 1-hour nitrogen dioxide (NO₂) standard.

What air quality requirements must the project meet?

The project must demonstrate compliance with federal and state air quality regulations. The application includes analyses required under the [Prevention of Significant Deterioration \(PSD\)](#) permitting program, along with other applicable regulatory requirements.



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What emissions controls would be used at the facility?

As part of the permitting process, the project evaluates Best Available Control Technology (BACT) for regulated emissions sources. This process identifies emissions controls and operational practices designed to reduce emissions while meeting regulatory requirements.

How is compliance monitored after a facility begins operation?

Permitted facilities are subject to ongoing environmental requirements that can include monitoring, testing, recordkeeping and reporting obligations established by regulators. Permit conditions are enforceable and subject to regulatory oversight.

What is Alliant Energy's approach to environmental compliance?

We take our obligations to public health and the environment seriously and have an excellent track record of meeting or exceeding regulatory standards. Alliant Energy works closely with federal, state and local regulators and operates under numerous environmental permits across its service territory. Compliance with environmental requirements is incorporated into facility planning, design, construction and operations.

How can the public learn more about the permit application?

The permitting process includes opportunities for public review and engagement. Information about the application and regulatory review process is available through the permitting agencies. Alliant Energy also remains committed to providing information and answering questions throughout the process.

Those wanting to review the air permit application can do so through the [Iowa EASY Air System](#). Additionally, Linn County Public Health and the Iowa Department of Natural Resources have provided [numerous resources](#) to help explain the process and requirements.

Why should residents trust Alliant Energy's analysis when the company wants the project approved?

Because the permit process is not based on trust alone. The application must be reviewed by environmental regulators using established scientific and technical standards. Just as importantly, Alliant Energy has operated under environmental permits and regulatory oversight for decades. Our business depends on meeting those obligations every day, and we take that responsibility seriously.

How does Alliant Energy demonstrate its commitment to being a good neighbor?

We understand that trust must be earned and maintained. We employ more than 600 people in Linn County, with many more living and working in surrounding communities. These are our neighbors, volunteers, parents, and local business owners, and their livelihoods, along with the strength of the local economy, are closely tied to the decisions we make about infrastructure, investment and long-term planning.

That's why we continue to show up to public meetings, answer questions, provide information and submit to independent regulatory review. While people may have different opinions about the project, our commitment is to be transparent, follow the law and operate responsibly in the communities we serve.



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Have the project's emissions controls been fully evaluated?

Yes. The permit application includes a Best Available Control Technology (BACT) analysis, which is a key requirement of the Prevention of Significant Deterioration (PSD) air permitting process. The analysis evaluates available technologies and identifies the most effective and feasible controls for reducing emissions from the facility.

How trustworthy is Alliant Energy's modeling and environmental analysis?

The analyses are not simply internal company estimates. They are prepared using established regulatory methodologies and are reviewed by permitting authorities. Regulators independently evaluate the assumptions, calculations, and conclusions before making permit decisions.

What if the modeling is wrong?

Air permitting is specifically designed to account for that concern. Regulatory agencies review the modeling approach, assumptions and inputs used in the analysis. The process includes technical scrutiny by environmental professionals whose responsibility is to ensure the project complies with applicable requirements before any permit is finalized. Once the facility is operational, Alliant Energy will be required to continuously monitor emissions and perform periodic stack testing to demonstrate compliance with the air permit.

Will emissions exceed federal air quality standards?

The permit application demonstrates compliance with applicable National Ambient Air Quality Standards and PSD requirements. A permit cannot be issued if the project is shown to cause or contribute to violations of applicable air quality standards.

How can Alliant Energy say it has a strong environmental record?

Alliant Energy operates under extensive environmental oversight across Iowa and Wisconsin. The company routinely works with federal, state and local regulators and operates facilities that are subject to environmental permits, inspections, monitoring and reporting requirements. Compliance is not optional for us. It is a core requirement of operating a regulated utility, and the company has decades of experience meeting those obligations. This is supported by recurring inspections conducted by local and state regulatory officials, which have generally confirmed compliance with applicable requirements.



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