

## Topline messages

*This biogas project will harm communities—with discriminatory impact—and pollute our rivers, streams, and air.*

- The Department of Environmental Quality (DEQ) is considering water permits for 4 of the 19 industrial hog operations involved in the harmful Grady Road swine waste-to-energy biogas project. These permits, if issued, will allow Smithfield to install a new waste pit with a cover – also called a digester – at 3 hog operations and to convert one existing waste pit to a digester at 1 hog operation. These new digesters and waste pits would continue to store untreated hog urine and feces.
- DEQ must require that Align (Smithfield Foods & Dominion Energy) transition to cleaner, more sustainable technology to manage hog waste, as Smithfield promised to do 20 years ago, before issuing these water permits.
- Biogas makes water pollution *worse*, and does little to address noxious odors from industrial hog operations. Capping a lagoon, as Align proposes to do here, leads to higher concentration of ammonia in the liquid waste. This liquid waste is sprayed onto fields next to the industrial hog operations, runs off into our rivers and streams, and seeps into the groundwater.
- DEQ has already issued an air quality permit for this project. If DEQ issues these water permits, the agency will lock-in the lagoon and sprayfield system—including its harms to rivers, streams, our air, and neighbors—for decades to come.
- Align’s first major directed biogas project in North Carolina is located in Duplin and Sampson counties, and is called the Grady Road Project. The project includes:
  - Installing lagoon covers at 19 industrial hog operations in Duplin and Sampson counties;
  - Laying a maze of 30+ miles of pipelines across Duplin and Sampson counties to transport biogas from hog operations to the upgrading facility; and
  - Constructing a central upgrading facility, where the biogas would be processed and injected into the existing natural gas pipeline. On January 6, 2021, DEQ issued an air quality permit for this facility.
- Align’s biogas project relies on and entrenches an outdated system that the legislature banned in 2007, which stores untreated hog feces and urine in large, often unlined pits, and then sprays the liquid waste onto nearby cropland causing harmful air and water pollution.
- Align’s biogas project disproportionately harms communities of color who bear the burden of air and water pollution and adverse health impacts that are caused by the lagoon and sprayfield system. Native Americans, African Americans, and Latinx Americans are 2.18, 1.54, and 1.39 times more likely than whites to live within three miles of industrial hog operations, respectively.
- Align’s project will make pollution of our rivers, streams, and the air we breathe across eastern North Carolina even worse. Meanwhile, Smithfield and Dominion Energy stand to make money by displacing the burden of their pollution onto families and communities.

*DEQ must take action.*

- DEQ must consider pollution from every component of the project, including the 19 industrial hog operations that emit harmful pollution as well as the upgrading facility, when drafting permits for the project.
- DEQ must consider the cumulative impacts of the Grady Road Project and all other pollution sources in this area, which is already burdened by the hog industry, when drafting permits for the project.
- To date, DEQ has not ensured that the permitting process for the Grady Road Project is transparent, that the public has full information, and that the public has ample opportunity to provide input in the permitting processes. Align won’t tell anyone—including DEQ—which hog operations are involved in the project or where the pipeline will be located, depriving the community and agency of critical information. Yet DEQ went ahead and issued the air permit for this project. The same cannot happen with these essential water permits.

## DEQ virtual public meeting information

- DEQ is hosting a virtual public meeting at 6:00 pm on January 26 to discuss draft water quality permits for 4 of the 19 hog operations producing biogas for the Grady Road Project. The public can tune into the meeting online by WebEx or by phone.
  - **You must register by 12:00 pm on January 26 to offer comments on the Grady Road Project.** You can register online at <http://bit.ly/2KI3Uie> or by calling (919) 707-3645.
  - More information about the hearing, including how to register for the hearing can be found [here](#).
- DEQ will accept public comments via email, U.S. Postal Service, and voicemail until January 29. Full information about how to submit written or oral comments can be found [here](#).
  - Comments can be submitted via email to: [publiccommentsDWR@ncdenr.gov](mailto:publiccommentsDWR@ncdenr.gov) with the subject line “Swine Biogas”
  - Comments can be submitted via U.S. Postal Service at the following address:
    - Ramesh Ravella
    - Department of Environmental Quality
    - 1636 Mail Service Center
    - Raleigh, North Carolina 27699-1636
  - Comments may also be left via voicemail by calling this number: (919) 707-9010.

### **What is biogas?**

- Energy generated from swine feces and urine is often called “biogas.” Biogas consists of methane gas, carbon dioxide gas, and water vapor. Biogas, once it is processed, can be used to generate electricity.
- Biogas is created by covering a large, unlined hog waste lagoon and trapping the methane that comes off the waste in the lagoon. Methane can be processed and used to generate electricity on-site. Methane can also be transported through pipelines, processed at a central facility, and injected into a natural gas pipeline. This type of project is called a directed biogas project. Directed biogas projects cause more pollution than projects that develop biogas for on-site electricity use.
- A 2007 North Carolina law requires that utilities generate 0.2% of the state’s energy from hog waste.

### **What is the Grady Road Project?**

- Smithfield Foods, the largest pork producer in the country, and Dominion Energy are putting \$500 million into a joint biogas venture called Align Renewable Natural Gas—or Align RNG—to make money from producing biogas in North Carolina. These industry giants are not taking responsibility for their air and water pollution, and are instead displacing those costs and health burdens onto nearby and downstream families and communities.
- Align’s first major directed biogas project in North Carolina is located in Duplin and Sampson counties, and is called the Grady Road Project. The project includes:
  - Installing lagoon covers at 19 industrial hog operations in Duplin and Sampson counties, most of which have not yet been identified;
  - Laying 30+ miles of pipelines across Duplin and Sampson counties to transport biogas from individual hog operations to the upgrading facility; and
  - Constructing a central upgrading facility, where the biogas would be processed and injected into the existing natural gas pipeline.
- The contract growers at the 19 facilities would have to comply with Smithfield mandates to cap their hog lagoons for this project. It is unclear whether contract growers would reap the financial benefits of biogas production.
- Align’s next directed biogas project in North Carolina will be even larger and involve even more hog operations, entrenching foul odors and pollution across many counties.
- The Grady Road Project will dirty the air in Duplin and Sampson counties with sulfur dioxide and other pollutants.
- The Grady Road Project will further pollute the lower Cape Fear River, which is already overburdened by pollution from hog operations. DEQ must fully evaluate these impacts and develop management strategies to restore and protect water quality downstream.

## What are the risks of biogas?

*Biogas relies on the primitive lagoon and sprayfield system that harms residents that live where these projects are located and pollutes the environment.*

- In North Carolina, biogas production relies on an outdated waste management system that involves storing untreated hog manure and urine in uncovered pits where the solid waste falls to the bottom and the liquid waste rises to the top. The liquid waste is then sprayed onto cropland. This waste management system is called the lagoon and sprayfield system. The 2007 law mandating biogas production does *not* require that the hog industry clean up water or air pollution or address foul odors.
- The lagoon and sprayfield system harms human health and pollutes air, rivers, and streams in eastern North Carolina.
  - People of color disproportionately bear the burden of pollution from industrial hog operations.
  - People living near industrial hog operations have higher death rates from causes such as anemia, kidney disease, and tuberculosis.
  - Noxious odors prevent neighbors of hog operations from enjoying their property and destroys their quality of life, and pollution from hog operations dirty the air for the surrounding community.
  - Untreated hog waste runs off into rivers and streams, polluting our waterways. Untreated hog waste also contaminates soil, groundwater, and well water resources for residents in eastern North Carolina.

*Biogas is harmful to the environment.*

- Biogas makes water pollution *worse*, and does little to address noxious odors from industrial hog operations.
- Capping a lagoon leads to higher concentration of ammonia in the liquid waste. This liquid waste is sprayed onto fields next to the industrial hog operations, runs off into our rivers and streams, and seeps into the groundwater.
- Directed biogas projects may exacerbate other pollution problems. Methane leakage during digestion, transport, and storage may mitigate any climate benefits, and constructing pipelines may destroy wetlands, which provide important protections against flooding.
- Covering a lagoon with a digester does not make the lagoon any less vulnerable to flooding during hurricanes or other major weather events.
- Biogas is **not** a truly renewable resource like solar and wind energy because the emissions that biogas depends on are not naturally occurring. Align's technology actually creates methane, a potent greenhouse gas, under the lagoon cover that would not otherwise exist.
- Pipelines transporting biogas can leak harmful greenhouse gas emissions into the air.
- Align (Smithfield/Dominion) could be investing in cleaner, more responsible technology that protects families, communities, and our air and waterways -- especially in the face of more intense storms. Instead, Align is choosing to further entrench the polluting and primitive lagoon and sprayfield system, and its injustices and harm.
- Twenty years ago, Smithfield promised to install cleaner technology to deal with hog waste and invested millions of dollars ago to research cleaner technology. But the corporation has refused to implement any cleaner technology to clean up water, air, or foul odors because it claimed doing so was too expensive. There is nothing cheaper than digging a hole in the ground while displacing the costs and health burden of the resulting pollution onto families and communities.
- Impacted communities are not expected to receive any benefits, additional protections, or other consideration from these biogas projects to account for the added pollution, health burden and reduced quality of life that these projects cause.