Facility Description:
- Waste No Energy, LLC owns and operates a biomass anaerobic digester that is located at 300 South 800 East, in Monticello (White County), Indiana.
- Animal manure and other non-hazardous biological materials are processed at the facility to make biogas, which is combusted to produce electricity. In addition to swine and cattle manure, the facility accepts food waste, cooking oil and grease, fat, oils, food processing waste (DAF float), grocery & bakery wastes, carbohydrates, brewery wastes, cheese whey, and biofuel production wastes. The facility may request approval to accept additional feedstocks that meet the definitions of biomass or appropriate feedstock.
- Liquid manures and organic substrates received at the facility are placed in closed, above ground holding tanks that are constructed of stainless steel and/or concrete. Solid feedstocks are stored in a bunker indoors. Materials are blended in an indoor pit and piped to closed, anaerobic digester tanks, where biogas, mainly methane, is produced. The biogas is used for heating and electricity production. Solid residue is removed from the digester and applied to nearby farm fields as a beneficial soil amendment.
- Waste No Energy, LLC has constructed and is operating the facility under the following permits from the Indiana Department of Environmental Management (IDEM):
  - A Biomass Anaerobic Digestion Facility Registration, #91-01B, issued November 22, 2013. The registration allows the facility to receive and process feedstocks for the production of biogas, which is in turn combusted to produce electricity. The registration also holds the facility responsible for complying with Indiana’s Biomass Rule requiring adequate control of dust, odor, wastewater, vectors, litter and leachate. The registration contains requirements for the identification of sources of the materials and lab testing of the materials being accepted from the sources. As the company adds or changes the source of its feedstocks, it must modify its registration. Registration #91-01B replaces approval 91-UP-02 issued in the Biomass and Organic Feedstock Processing Facility Commissioner’s Approval dated February 15, 2013.
  - A Nonsite-Specific Industrial Waste Product Land Application Permit, IN LA 000838, issued July 1, 2014. The permit contains conditions and requirements for the appropriate land application of complete mix anaerobic digester effluent from the Waste No Energy digesters as a soil amendment on fields in Carroll and White counties. A certified wastewater treatment plant operator or approved equivalent must supervise all land application operations.
  - An air permit, which is a New Source Construction and Minor Source Operating Permit (MSOP), M181-32255-00055, issued August 28, 2012. The MSOP contains a number of conditions and requirements for controlling emissions from the digester and combustion engines.

IDEM’s Role:
- IDEM is responsible for protecting human health and the environment while allowing safe industrial, agricultural, commercial, and government operations vital to a prosperous economy.
- In addition to issuing approvals and permits that comply with federal and state environmental regulations designed to protect public health and our environment, IDEM is also responsible for overseeing regulated activities and monitoring compliance at regulated facilities. IDEM conducts routine inspections and responds to pollution complaints.
IDEM's Office of Land Quality, Office of Air Quality, and Pollution Complaints Coordinator receive complaints from citizens about odors and emissions from Waste No Energy.

IDEM’s Office of Land Quality staff has the direct authority to inspect the digester’s operation to ensure compliance with the terms of the facility’s Biomass Anaerobic Digestion Facility Registration, Nonsite-Specific Industrial Waste Product Land Application Permit, and applicable land quality regulations.

IDEM’s Office of Air Quality has the direct authority to inspect the engine and engine emissions to ensure compliance with the terms of the facility’s New Source Construction and Minor Source Operating Permit, and applicable air regulations. State air regulations do not provide IDEM’s Office of Air Quality with the direct authority to address odors.

IDEM works to keep interested parties informed about its activities and has been providing its findings to citizens upon request.

Findings and Future Activities - IDEM's Office of Land Quality:

- Since the first site visit by Office of Land Quality Solid Waste Compliance Staff on May 20, 2014, efforts have been focused on ensuring the facility understands all of the conditions of its registration and can meet its responsibilities for adequate control of dust, odor, wastewater, vectors, litter, and leachate.

- May 20, 2014: Staff coordinated with the facility prior to the inspection to make sure company personnel would be available to discuss compliance issues with us when we arrived. Staff observed that a facility sign was installed on the building and advised the facility to post an additional sign at a second entrance. Prior to arriving, staff drove around the area near the facility to check for odors, but did not detect anything off of the property. Inside the gate, staff noticed a slight odor next to the above ground concrete tank and next to the blending pit. The owner informed the inspector that the facility intended to enclose the blending pit, retrofit pipes to the storage tank vents, and install scrubbers to address odor concerns. The inspector suggested planting a windrow of pine trees to help with odor control. No major issues were observed during inspection.

- June 3, 2014: Staff conducted an unannounced inspection and found that additional signs were installed. Odor observations were similar to the May 20, 2014, visit, but more noticeable next to the mixing pit on the property. Staff was present during a delivery of feedstock. Standing downwind of the building, the odor intensified as the doors opened to allow the truck into one side of the building and out the other side. Once the doors closed again for a few minutes the odor diminished. The owner had contracts in place and was working at that time to schedule construction to enclose the mixing pit. While on-site, IDEM Office of Air Quality inspector staff arrived for an air inspection.

- July 2, 2014: Unannounced site visit. Staff observed that the biofilter was installed.

- July 9, 2014: Unannounced follow-up site visit to check on progress at the facility. Construction to enclose the blending pit was under way. An overhead door to provide access for manure loading was on back order. An exhaust fan for the enclosure to biofilter had been installed. The doors were open during the inspection due to construction. No other issues of concern were observed during inspection.

- August 20, 2014: Unannounced follow-up site visit. Visual inspection revealed that construction on venting of storage units is complete. All storage units are piped into enclosure over blending pit. Inspector drove to the corner of US 24 and 800 E to see if any odor could be detected. No odor at time of inspection. Manager stated that overhead doors for the blending pit were to be shipped that day. All doors were closed when arrival at site. No other issues of concern were observed during inspection. Will continue to do routine inspections of facility to make sure all compliance is met under 329 IAC 11.5.

- August 27, 2014: Unannounced follow-up site visit. The results of this inspection will be provided once the report is finalized.

- To date, IDEM’s Office of Land Quality has not cited the facility for violations of its biomass digester registration or solid waste regulations; the company has been cooperative thus far in their efforts. Regular, unannounced inspections will be conducted at the site to ensure that the facility complies with all regulations and applicable requirements.
Findings and Future Activities – IDEM’s Office of Air Quality:

- IDEM’s Office of Air Quality Compliance and Enforcement Branch received its first complaint about odors on May 27, 2014. In response, staff conducted an inspection of Waste No Energy on June 3, 2014, and has been working since then to ensure the facility’s compliance. While state air regulations do not provide IDEM’s Office of Air Quality with the direct authority to address odor, Office of Air Quality staff are also working with Waste No Energy to help address odor complaints.
- During the June 3, 2014, inspection, staff noted that some biofilters and a 100,000 gallon fixed-roof effluent storage tank had not been installed per the description in the summary of emission units and pollution control equipment. In addition, a 7.5 million gallon above ground concrete waste tank constructed at the site was not referenced in the permit. The Office of Air Quality issued the company a Violation Letter on June 19, 2014, requiring it to submit a permit application for the correct tank capacity. IDEM received a response dated July 17, 2014, from EarthWise, Inc., on behalf of Waste No Energy, LLC, stating that Waste No Energy, LLC was in the process of constructing the biofilter system, had not constructed the 100,000 gallon effluent storage tank at this time, and that the 7.5 million gallon above ground concrete tank was approved by IDEM under both the Biomass and Organic Feedstock Processing Facility Commissioner’s Approval and the Biomass Anaerobic Digestion Facility Registration. The Office of Air Quality Compliance and Enforcement Branch has reviewed this response and considers it a timely and adequate response at this time.
- Regular, unannounced inspections will be conducted at the site to insure that the facility complies with their New Source Construction and Minor Source Operating Permit, and all applicable air regulations.

About Indiana’s Rule for Biomass Anaerobic Digestion Facilities and Biomass Gasification Facilities:

- State solid waste rules found in the Indiana Administrative Code at 329 IAC 11.5 provide the Indiana Department of Environmental Management (IDEM) with the authority to issue registrations and oversee the construction and operation of biomass anaerobic digestion facilities and biomass gasification facilities. These facilities provide a renewable source of energy and may produce other byproducts such as animal bedding or soil amendments.
- Biomass facilities process biomass and other appropriate feedstocks. Biomass is biological material that is available on a renewable basis and is used as a source or renewable energy. Common examples of biomass include agricultural crops, wastes and residues, wood and wood byproducts, and animal wastes and byproducts. Appropriate feedstocks are wastes that have been segregated from other solid wastes that can be successfully processed in a biomass facility. Common examples of appropriate feedstock include food service and food manufacturing wastes, cooking oil and grease, livestock operation residues, off-spec or unused animal feed, dried distiller’s grain, paper pulp and other industrial wastes. “Biomass” and “appropriate feedstock” are defined in more detail in 329 IAC 11.5-2-2 and 3.
- Waste must be in enclosed buildings, tanks, lagoons or containers, or as approved by the Commissioner. Processing and storage areas must be able to contain wastewater and control surface water. No speculative accumulation of waste is allowed. Processing must take place on an impervious surface such as concrete or asphalt with curbs.
- The rule’s development involved the participation and feedback of several external groups. Its final adoption by the Indiana Environmental Rules Board occurred on September 28, 2012, and facilities were then allowed to construct and/or expand and operate upon the receipt of a letter of exclusion from IDEM. As of April 13, 2013 (the rule’s effective date), registration is required for construction/expansion and/or operation.
- All Indiana businesses must comply with applicable local ordinances. State law does not provide IDEM with the authority to address local zoning issues. IDEM permits do not supersede local requirements.

Additional Information:
To report a pollution complaint, call (317) 232-4464 or use the online form on IDEM’s website at www.IN.gov/idem/5274.htm.

To view public documents for Waste No Energy, including permits and inspection reports, visit IDEM’s Virtual File Cabinet at http://108.59.49.89/Pages/Public/Search.aspx, type “Waste No Energy” in the Primary Name field and click the Search button.

For questions about solid waste regulations, contact Kelly Hall, Chief of the Solid Waste Compliance Section of IDEM’s Office of Land Quality, at (317) 234-8488.

For questions about air regulations, contact Janusz Johnson, Chief of the Compliance and Enforcement Section of IDEM’s Office of Air Quality at (317) 233-1134.

For general information about the anaerobic digestion process, including manures and organic substrates (feedstocks) used in the process, as well as products, byproducts and uses, visit the U.S. Environmental Protection Agency (U.S. EPA) AgStar Program website at www.epa.gov/agstar.