



Meat Packing and/or Smoking

Office of Air Quality – Air Permits Branch

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Meat Packing and/or Smoking Information Sheet

Disclaimer: This information sheet is intended solely to provide information and guidance for meat processing and/or rendering plants, and meat packing and/or smoking plants. It does not replace applicable rules and laws, and if it conflicts with these rules or laws, the rules or laws shall control.

1.0 PURPOSE

The purpose of this information sheet is to provide information and guidance to owners/operators of meat processing and/or rendering plants and meat packing and/or smoking plants about the types of air pollution emitting activities that may require a registration or permit from the Office of Air Quality (OAQ).

2.0 GUIDANCE AND INFORMATION

2.1. What activities should be reviewed for purposes of permitting?

In order to determine whether (or not) a registration or permit is needed for a given plant, the potential to emit (PTE) air pollution (in tons/year) of all air pollution emitting equipment/processes/activities at the entire plant will need to be calculated.

Common types of air pollution emitting equipment/processes/activities include fuel combustion equipment, smoking operations, emergency and non-emergency generators, organic solvent degreasing operations with less than 145 gallon per years usage rate, and vehicle traffic on paved and unpaved roads.

There may be other air pollution emitting activities (e.g., meat byproduct incinerators, meat deep frying operation, animal rendering activities, and aerobic or anaerobic digestors for meat byproduct wastes, gasoline and diesel dispensing operations and storage tanks, cooling towers, organic solvent cleaning/sterilization, and degreasing units using greater than 145 gallons per year) located at meat packing and/or smoking plants that are not included in this information sheet or the associated spreadsheet and would need to be included in the total plant-wide emissions.

2.2. Potential to Emit

The potential to emit (PTE) of the entire plant and the required level of permit (if any) is based on the maximum capacity of the equipment/processes/activities, operating at a maximum (worst case) of 8760 hours/year, before the use of any air pollution control devices. If the company will have an engine that is primarily intended to be used as an “emergency” generator (or fire pump) to provide power to equipment when the power provided by the grid is interrupted (i.e., during a power outage), then EPA has allowed IDEM OAQ to assume 500 hours/year of operation as the maximum (worst case) operating scenario.

2.3. Example Emission Calculations

IDEM has developed a calculation spreadsheet to help estimate the PTE of meat packing and/or smoking plants. The following units and activities were included in the calculation spreadsheet.

- Smoking operations including wood smokers and liquid smoke operations.

- Natural gas combustion equipment including ovens, boilers, water heaters, space heaters.
- Diesel-fired emergency and non-emergency generators.
- Natural gas-fired emergency and non-emergency generators.
- Organic solvent degreasing operations with less than 145 gallon per years usage rate.
- Vehicle traffic on paved and unpaved roads.

2.4. Situations that would require a permit or registration

Using the calculation spreadsheet, IDEM has identified several example situations that would require a registration or a permit.

The below example situations, **by themselves**, would require a registration or permit. If a plant has one (1) or more of these example situations, then a registration or permit would be required. Contact IDEM for assistance in submitting an application for a registration or permit. See Section 2.5 for more information.

- Smokehouses with capacity greater than 40 lbs/hour of wood, with vehicle traffic on paved and unpaved roads.
- Liquid smoke operations with capacity greater than 17 tons of meat/hour.
- Total natural gas combustion greater than 24 MMBtu/hour, including ovens, boilers, water heaters, space heaters (not including generators).
- Total diesel-fired emergency generator capacity of greater than 1670 hp.
- Total diesel-fired non-emergency generator capacity of greater than 74 hp.
- Total natural gas-fired emergency generator capacity of greater than 2370 hp.
- Total natural gas-fired non-emergency generator capacity of greater than 136 hp.

If the estimated PTE from the associated spreadsheet indicates the plant requires a registration or permit, contact IDEM for assistance in submitting an application for a registration or permit. See Section 2.5 for more information.

If a plant has other air pollution emitting activities (e.g., meat byproduct incinerators, meat deep frying operation, animal rendering activities, and aerobic or anaerobic digestors for meat byproduct wastes, gasoline and diesel dispensing operations and storage tanks, cooling towers, organic solvent cleaning/sterilization, and degreasing units using greater than 145 gallons per year) then you may contact IDEM for assistance to determine whether (or not) a registration or permit is needed for your plant.

2.5. Assistance

Owners and operators of meat packing and/or smoking plants may contact IDEM's Compliance and Technical Assistance Program (CTAP) for free, confidential compliance and technical assistance. CTAP can be contacted by phone at 800-988-7901 (in-state only) or 317-232-8172. A confidential consultation may be requested online at: <https://www.in.gov/idem/ctap/about-compliance-and-technical-assistance/online-portal/>

Owners and operators of meat packing and/or smoking plants may also contact the IDEM OAQ Permits Branch to discuss individual situations by phone at 317-234-5132, by requesting a pre-application meeting by email to mcline@idem.IN.gov.

2.6. Federal regulations

Meat packing and/or smoking plants that contain boilers and/or stationary internal combustion engines may be subject to one (1) or more of the following federal regulations:

- The National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63, subpart ZZZZ (RICE NESHAP) limits emissions of toxic air pollutants from stationary reciprocating internal combustion engines. This federal rule can be found at: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-ZZZZ>
- The National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers, 40 CFR 63, subpart JJJJJ (Boiler MACT) limits emissions of toxic air pollutants from industrial, commercial, and institutional boilers. This federal rule can be found at: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-JJJJJ>
- Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, subpart IIII (Compression Ignition ICE NSPS) limits emissions of Non-methane Hydrocarbons, NOx, Hydrocarbons, Carbon Monoxide and Particulate Matter. This federal rule can be found at: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-IIII>
- Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60, subpart JJJJ (Spark Ignition ICE NSPS) limits emissions of NOx, Carbon Monoxide and Volatile Organic Compounds. This federal rule can be found at: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-JJJJ>
- Standards of Performance for Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, subpart Dc (Boiler NSPS) limits emissions of SO2 and Particulate Matter. This federal rule can be found at: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-Dc>