

Regulatory Requirements of Stationary Generators on Poultry Farms

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Delaware's Department of Natural Resources and Environmental Control (DNREC) adopted a new regulation on January 11, 2006 to control the emissions from all stationary generators in Delaware, so that their emissions do not adversely impact the public's health, safety, and welfare. Many poultry growers have stationary generators installed on their farm(s) to provide backup power during a power outage (an "emergency"). This article discusses the requirements of the new regulation, Regulation No. 1144, "Control of Stationary Generator Emissions," as the requirements relate to poultry growers.

Regulation No. 1144 applies to all stationary generators on poultry farms, except for generators which are rated at 10 kW or less, or are mobile. Examples of the types of generators which are exempt from the regulation include small "Honda"-type portable generators, and power-take-off (PTO) driven generators.

The first requirement which all generator owners must do is submit an initial notification to DNREC. A form is available on the Regulation No. 1144 website (<http://www.awm.delaware.gov/Info/Regs/AQMReg1144.htm>), which a generator owner can fill out and return to Air Quality Management (AQM) via email, fax, or mail. This initial notification will include information about the generator and its owner, and a declaration of whether the generator operates as an emergency generator (for emergencies only) or as a distributed generator (for emergency and non-emergency purposes). The deadline by which this information was to be submitted to AQM was **April 11, 2006**, for all existing generators (installed prior to January 11, 2006). Although this deadline has passed, AQM is still working to help generator owners understand and comply with the requirements of the regulation. Owners of existing generators should still submit an initial notification to AQM as soon as possible. Also, this initial notification information must be submitted to AQM **before** a new generator is installed.

The regulation does not restrict how long a generator may run when it is being operated during an emergency (a power outage), during testing, or for maintenance. A distributed generator (running for non-emergency purposes) may run at any time, for any reason, for any length of time. However, no testing or maintenance may be performed before 5 p.m. on a day which has a Ground Level Ozone Pollution Forecast or Particle Pollution Forecast of "Code Red" or "Code Orange" as announced by DNREC. These forecasts occur on days when Delaware's air quality is at unhealthy levels, and the forecasts are posted on DNREC's website and are typically announced by local newspapers and television news programs.

On and after April 11, 2006, any diesel fuel purchased for use in a generator must have a sulfur content less than or equal to 0.05% by weight. This diesel fuel is referred to as “low sulfur diesel fuel”. This low sulfur diesel fuel can be purchased from most fuel distributors. Also, a shipping receipt and certification must be obtained from the fuel distributor for each shipment of fuel purchased. The receipt and certification should identify the type of fuel delivered (ex., “diesel fuel”), the sulfur content of the fuel (ex., “sulfur content = 0.05% or less”), and the method used to determine the sulfur content (ex., “ASTM method D129, D1552, D2622, or D4294”).

Records of a generator’s operating hours and fuel usage must be recorded each calendar month. Additionally, a generator’s yearly fuel usage and operating hours must be recorded, by adding the current month’s total to the totals of the previous eleven consecutive months. Each generator must have a non-resettable hour metering device installed on it, which will help owners calculate a generator’s operating hours each month. If a generator does not have one installed (most current generators have hour meters factory-installed), a non-resettable hour meter can be purchased at most engine parts stores and can be easily installed on a generator. Owners of emergency-only generators must also record monthly and yearly operating hours when testing or maintenance is performed on the generator, along with a brief description of what was performed. By having generator owners record such information, it will help ensure that the generators are being properly maintained and serviced so that they can be relied upon to operate when needed. Records must be kept for at least five years, and though the records do not need to be submitted to DNREC at any specific time, they must be provided to DNREC if the records are requested. To help generator owners maintain the necessary records, DNREC has developed sample forms for recording monthly operating hours and monthly fuel usage. Although it is not mandatory that these specific forms be used, they are available on the Regulation No. 1144 website, and use of these forms is encouraged.

The following table summarizes the emissions requirements for the various classes of generators:

Existing Emergency Generators	Existing Distributed Generators	Existing Distributed Generators Participating in Delaware Electric Cooperative’s Interruptible Service Program	New Emergency Generators	New Distributed Generators
Follow manufacturer’s recommendations on operation and maintenance.	Must meet the specific emission standards listed in Section 3.2.1.1 of Regulation No. 1144.	1. *If diesel-fueled: sign up for cost-share program offered by Kent & Sussex Conservation Districts; OR 2. If gaseous fueled: no emission standards.	Must meet the EPA’s Nonroad standards for non-road engines (manufacturers build generators to meet these standards).	Must meet the specific emission standards listed in Section 3.2.2.1 of Regulation No. 1144.

* If a diesel-fueled, existing, distributed generator (participating in DEC’s program) does not sign up for the cost-share program, it must meet the specific emission standards listed in Section 3.2.1.1 of Regulation No. 1144.

Generator owners must demonstrate to DNREC that they are meeting the regulation’s requirements. This can be done by submitting documentation to DNREC which verifies that the applicable emissions standards, sulfur content limit, recordkeeping, and operating requirements are being met. DNREC has developed a “Compliance Verification Form” which a generator owner can sign and submit to DNREC as proof that they are meeting the regulation’s requirements. This letter is also available on the Regulation No. 1144 website, along with the

Initial Notification form. The following table shows the dates by which a generator owner must comply with the regulation, which can be demonstrated by submitting this verification to DNREC. Again, although the deadline of April 11, 2006 has passed for some existing generators, AQM is still working to help generator owners fill out the necessary forms and comply with the requirements of the regulation.

Existing Emergency Generators	Existing Distributed Generators	Existing Distributed Generators Participating in Delaware Electric Cooperative's Interruptible Service Program	New Emergency Generators	New Distributed Generators
April 11, 2006	April 1, 2007 w/possibility of one year extension	April 11, 2006	Prior to the installation of the generator.	Prior to the installation of the generator.

Also, the owner of a generator which is being reclassified from an emergency generator to a distributed generator, or vice versa, must submit a letter to DNREC stating this reclassification, and comply with any new requirements before this reclassification. An example of such a reclassification would be if an owner of an existing generator signs up in the future to participate in Delaware Electric Cooperative's (DEC) Interruptible Service Program. Prior to participating in DEC's program, the generator owner would have to sign up for the Conservation District's cost-share program (or comply with the specific emissions requirements in the regulation) and notify DNREC that the generator will begin operating for non-emergency purposes.

For more information about Regulation No. 1144, or for copies of the regulation or any of the forms, please contact AQM's Mark A. Prettyman at 302-739-9402, or via email at: mark.prettyman@state.de.us.