



April 2010

W089-Discharge Events

The University of Tennessee Agricultural Extension Service

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Recommended Citation

"W089-Discharge Events," The University of Tennessee Agricultural Extension Service, , http://trace.tennessee.edu/utk_agexani/58

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Livestock Waste Management and Conservation

Discharge Event

(Class I & II – Large and Medium CAFOs)

Tennessee CAFO Factsheet #10

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All wastewater discharges from a CAFO to waters of the state of Tennessee are prohibited. For existing CAFOs, new dairy CAFOs and new cattle CAFOs, an exception will be made when either chronic or catastrophic rainfall events cause an overflow from a facility properly designed, constructed, maintained and operated to contain all process wastewater from the operation (such as wash water, parlor water, watering system overflow, etc.), plus all runoff from a 25-year, 24-hour rainfall event. For new swine and poultry CAFOs, the exception will be made if the facility was properly designed, constructed, maintained and operated to contain all process wastewater from the operation, plus all runoff from a 100-year, 24-hour rainfall event, and chronic or catastrophic rainfall events cause an overflow.

If for any reason, there is a discharge to waters of the state, the producer must make oral notification to the TDEC within 24 hours, and notify the TDEC in writing within five working days of the discharge from the facility. In addition, the producer must keep a copy of the notification submitted to the TDEC together with the Nutrient Management Plan. The notification must include the following information:

1. *Description of the discharge:* a description and cause of the discharge, including a description of the flow path

to the receiving waterbody. Also, an estimation of the flow and volume discharged.

2. *Time of the discharge:* the period of discharge, including exact dates and times, and the anticipated time the discharge is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the discharge.
3. *Cause of the discharge:* if caused by a precipitation event(s), information from the onsite rain gauge concerning the size of the precipitation event must be provided.

In the event of any overflow or other discharge to waters of the state from a manure-storage structure, producers must take a grab sample from the overflow. A minimum of one sample should be collected within 30 minutes of the initial discharge. Samples taken should be representative of the discharge. Do not take samples from un-discharged effluent. If conditions are not safe for sampling, producers will have to provide documentation explaining why samples could not be collected. Once the unsafe conditions have passed, samples from the discharging effluent should be taken. If

conditions do not allow for safe sampling during the overflow event, producers should take a sample from the pond or lagoon that is discharging within 30 minutes.

Samples should be analyzed and reported in milligrams per liter for the following: BOD5, total suspended solids (TSS), total nitrogen, total ammonia nitrogen, total Kjeldahl nitrogen, nitrate nitrogen, total phosphorus, dissolved phosphorus, total copper, E. Coli, total zinc and fecal coliform. Additionally, producers must record the temperature of the discharge sample and perform a pH analysis within 15 minutes of sample collection. Producers must also estimate the flow volume or discharge volume in million gallons per day (MGD), and record the date and time of the discharge.

Monitoring results must be submitted to the TDEC on Discharge Monitoring Report forms by the 15th of the month following the discharge. These forms are available from any of the Tennessee Environmental Assistance Centers. These forms are available from any of the Tennessee Environmental Assistance Centers and on the Livestock Waste Management and Conservation website at <http://animalscience.ag.utk.edu/WasteManagement/WasteManagement.htm>.

If there is evidence indicating potential or realized impacts on water quality or on a listed endangered species due to any effluent discharge covered by this permit, the producer may be required to obtain an individual permit or the permit may be modified to include different limitations and/or requirement.