

**North Carolina Department of Environment and Natural Resources
Division of Soil and Water Conservation**

Michael F. Easley, Governor
William G. Ross Jr., Secretary
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TO: Applicants and interested parties

FROM: Patricia K. Harris, Director
Division of Soil & Water Conservation

SUBJECT: Lagoon Conversion Program and updated guidance for use of an “existing” anaerobic lagoon, i.e., an anaerobic lagoon permitted prior to 1 September 2007 that does not meet the requirements of G.S. 143-215.10I.

We continue to receive questions regarding the use of an “existing” anaerobic lagoon as it relates to the Lagoon Conversion Program (LCP). Since the Environmental Management Commission has not adopted permanent rules for innovative animal waste management system performance standards at this time and in accordance with S1465, the LCP is based on the “*Development of Environmentally Superior Technologies – Phase 3 Report*”, and only *existing* farms are eligible to participate in the program.

Is it permissible to maintain and/or incorporate a swine operation’s “existing” anaerobic lagoon into a new innovative animal waste management system under the LCP?

The answer is “yes” under the following conditions:

1. The permit for the anaerobic lagoon issued prior to 1 September 2007 is maintained as a valid permit, including compliance with its requirements such as maintaining the system components, submitting required reports and seeking renewal when necessary. The innovative system is not permitted as a *new* or *expanding* facility, but rather a *converted* facility. In essence, the farm will maintain two permits, the anaerobic lagoon system permit (NPDES or state general permit) and the converted innovative system permit. The converted innovative system permit does not allow the farm to increase its steady state live weight (herd size).
2. If the farm plans to maintain the “existing” anaerobic lagoon, the structure shall not continue to receive waste. All permit conditions apply under the farm’s NPDES or state general permit including maintenance of compliant sludge and freeboard levels. In addition, the waste application system and receiving crops (e.g. sprayfields) must be maintained in accordance with the farm’s existing permit.

3. The “existing” anaerobic lagoon may be incorporated as a component of the new innovative animal waste management system as long as the earthen structure is not located within the 100 yr. floodplain and:
 - As a treatment component, it is designed and constructed with a synthetic liner to eliminate discharge to groundwater or
 - As a storage component for final effluent only, it meets current permitting requirements. (Note: while the water quality parameters are not defined for final effluent, the waste system must reduce total nitrogen mass by 75% from influent levels for the whole farm, and phosphorus, copper and zinc mass by 50% from influent levels for the whole farm in accordance with the “*Development of EST - Phase 3 Report*”. Nitrogen, phosphorus, copper and zinc transported off of the farm is considered a reduction.)
4. In the event the new waste system fails (e.g. system unable to meet performance standards as established in the permit), the farm may petition the Soil and Water Conservation Commission to allow it to *revert* back to the existing anaerobic lagoon and waste application (sprayfield) system without penalty through a “No Fault Failure” clause in the LCP contract. The “No Fault Failure” clause cannot be used if it is determined that the owner or operator either failed to properly maintain the “existing” anaerobic lagoon and land application system, or failed to properly construct, operate and maintain the innovative waste management system.
5. If farm elects to *revert* back to the existing anaerobic lagoon and waste application (sprayfield) system for reasons other than system failure, the farm owner will be required to reimburse the cost-share funds back to the state at a pro-rated amount as required by the NC Agriculture Cost-Share Program. *Reversion* will not be permitted if it is determined that the owner or operator failed to properly maintain the “existing” anaerobic lagoon and land application system.