

WET WEATHER EMERGENCY LAGOON MANAGEMENT PRACTICES

FACT SHEET

January 2005

If you've tried to get into your fields lately, you know this winter season has been a particularly wet one. Just how wet? According to data from weather stations across the state, parts of northeastern, central and southern Missouri are experiencing the wettest January on record – with some areas receiving 5–7 times the normal expected precipitation. Additionally, much of the state experienced an unusually cool and wet summer and fall.

This abnormally wet weather pattern, combined with the short, cold days of winter and below-normal evaporation, has resulted in drainage and flooding issues in some parts of the state. The Missouri Department of Agriculture, Missouri Department of Natural Resources and University of Missouri Commercial Agriculture Extension Program would like to remind farmers and land owners to be vigilant in monitoring lagoon levels.

In addition, the partnering agencies have joined together to issue the following **emergency management practices** for lagoons to be utilized during this period of **unusually wet and cold weather**:

1. Do not allow lagoon to overflow. Overflowing effluent is highly concentrated and likely to cause a fish kill if it enters a stream. Additionally, overflow may compromise lagoon berm integrity, resulting in a much more catastrophic discharge.
 2. Application to frozen or saturated soils is preferable to allowing lagoon to overflow. Do not attempt to increase lagoon storage by sandbagging or raising lagoon berms.
 3. Apply effluent to vegetated areas (hay or pasture) if at all possible to reduce runoff potential. If hay or pasture land is not available, apply to land with high levels of crop residue. Apply to bare soil only as a last resort.
 4. Finding land suitable for land application may require using land not in your nutrient management plan or permit. You must follow all relevant management practices in your nutrient management plan and permit. Keep complete records of all applications and submit records of applications to land not in your nutrient management plan or permit as a separate list in your end-of-year report.
 5. Increase separation distance as much as possible between application areas and waterways, streams, lakes, etc. Required minimum separation distances for land application are:
 - >300 feet from losing streams, sinkholes, caves, wells, abandoned wells, water supply structures and impoundments or any other connection between surface and groundwater
 - >100 feet from permanent flowing streams
 - >50 feet from intermittent flowing streams
 - >50 feet from property lines
 - >100 feet from a privately owned impoundment not used as a water supply
 - >150 feet from dwellings or public use areas if applied with spray irrigation systems
 - >50 feet for application by tank wagon or solid spreader from dwellings or public use areas
 6. Utilize land with the least slope possible for land application to minimize runoff potential.
 7. Operate irrigation equipment at a low, minimal application rate to decrease runoff potential. Surface applications less than 0.25 inches per pass and gun travel speeds of 5 feet per minute or more may be necessary.
 8. You must watch the pumping operation continuously to minimize potential for runoff or equipment malfunction. Regularly observe points of potential runoff around perimeter of land application area. Runoff during land application must not occur.
 9. If overflow from lagoon or runoff from land application does occur, implement emergency secondary containment (i.e. emergency response plan).
 10. By law, the Missouri Department of Natural Resources must be notified of any lagoon discharge. The emergency response phone number to call is 573-634-2436 (24-hour environmental emergency number).
- * *Record keeping is always recommended and is required for all permitted operations. In unusual weather periods it is particularly important to be diligent about keeping complete precipitation, lagoon and land application records.*

FOR FURTHER INFORMATION:

Commercial Agriculture Program, University of Missouri:
573-882-0378

Missouri Department of Natural Resources Regional Offices:

Kansas City	816-622-7000
Northeast Office – Macon	660-385-8000
Southeast Office – Poplar Bluff	573-840-9750
Southwest Office – Springfield	417-891-4300
St. Louis	314-416-2960

Operations with site-specific permits (requires an annual permit fee) must contact Randy Kixmiller with DNR at 573-751-6568 before adopting any of these procedures.