EMERGENCY HOLDING POND MANAGEMENT DURING WET WEATHER May 2016

Developed by: Amy Millmier Schmidt, UNL Livestock Bioenvironmental Engineer, in cooperation with the Nebraska Department of Environmental Quality

Many areas of Nebraska have experienced higher than normal precipitation events recently, with some areas receiving rainfall that far exceeded a 25-year, 24-hour storm event. This abnormally wet weather pattern has caused drainage and flooding issues in some parts of the state. The Nebraska Department of Environmental Quality and Nebraska Extension would like to remind producers and landowners to be vigilant in monitoring lagoon and runoff holding pond levels.

The NDEQ and NE Extension have partnered to issue the following recommended practices for emergency management of runoff holding ponds during this period of unusually wet weather:

- DO NOT ALLOW YOUR HOLDING POND TO OVERFLOW! Over-topping earthen berms may compromise the berm integrity and cause a much more catastrophic discharge. Likewise, discharge of this highly concentrated effluent is likely to cause fish kills if it enters a water body.
- 2. Application to saturated soils is preferable to allowing a storage basin to overflow. Building up earthen berms with soil or sandbags to increase storage capacity should not be attempted.
- 3. When applying effluent to saturated soil, it is preferable to apply to vegetated areas such as pasture or hay to reduce the potential for runoff. If vegetated land is not available, apply to land with high amounts of crop residue. Application to bare soil should be a last resort.
- 4. It may be necessary to utilize land that is not included in your nutrient management plan or permit for application of effluent. Keep in mind that all relevant management practices in your NMP and permit must still be followed. Complete records of applications should be maintained and submitted with your year-end report to DEQ.
- 5. Utilize land with the least possible slope to minimize runoff potential from effluent application.
- 6. Operate irrigation equipment at a minimal application rate to minimize runoff potential.
- 7. Greater separation distances between application areas and water bodies than what is dictated by current regulations should be used when possible. Under NDEQ regulations (Title 130, Chapter 9, Section 005), small and medium animal feeding operations may not apply manure or effluent closer than 30 feet of any streams, lakes and impounded waters and large concentrated

animal feeding operations may not apply manure or process waste water closer than 100 feet from any downgradient surface waters, open tile line intake structures, well heads, or other conduits to surface or ground water. Exceptions include one of two compliance alternatives substituted for the application setback requirement:

- a. A 35-foot wide vegetated buffer where the application of manure or process waste water is prohibited; or
- b. Satisfactory demonstration that an alternative conservation practice provides pollutant reduction equal to or better than what would be achieved by the 100-foot setback.
- 8. Pumping operations should be monitored continuously to minimize potential for runoff or equipment malfunction. Runoff during land application must not occur and points of potential runoff around the perimeter of the land application area should be observed throughout the pumping process.
- If runoff from land application or discharge from a holding pond occurs, emergency secondary containment should be utilized as defined in your farm's emergency response plan.
- 10. By law, you must notify the Nebraska Department of Environmental Quality of any discharge within 24 hours by telephone and within five working days by written notification. The emergency response number to call is (402) 471-4220.
- 11. To be considered a legal discharge, you must have records that indicate that the holding pond was below the start-pump level prior to the onset of the rain event causing the discharge.
- If you need assistance determining how best to manage specific wet weather conditions on your farm, contact your NDEQ Field Inspector.

Remember: Record-keeping is always recommended and is required for all permitted operations!

During periods of unusual weather, it is particularly important to keep complete and detailed records of precipitation, storage basin management, and land application.



For additional information:

UNL Extension Amy Millmier Schmidt (402) 472-0877 aschmidt@unl.edu NDEQ Offices

Lincoln Agriculture Section: (402) 471-4239 Holdrege Field Office: (308) 995-3150 Norfolk Field Office: (402) 370-4427 North Platte Field Office: (308) 535-8142 Scottsbluff Field Office: (308) 633-0731