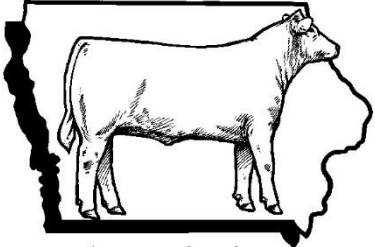


Iowa Cattlemen's



Association

NPDES Permit Open Feedlot Discharges Due to Unusually Wet Weather

ICA Fact Sheet

June 2018

Knowing how to properly handle a manure discharge, or the potential for a discharge, from a cattle open feedlot with an NPDES (National Pollution Discharge Elimination System) permit due to a large rainfall (25 year/24hour storm) or prolonged wet period (chronic precipitation event) can keep your operation in compliance with the IDNR and protect environmental quality. According to Iowa law, any release of manure to surface or groundwater that is not in compliance with an NPDES permit or other minimum control requirements of Iowa law is a violation and must be reported to the Iowa Department of Natural Resources (IDNR) as soon as possible.

Prevention 1st

Written in each NPDES permit are parameters that are general across all operations as well as individual to specific operations. Here are steps you can and need to take regularly to get ahead of the game when it comes to managing basin levels prior to a rain event that will affect your ability to comply.

1. Maintain a strong working relationship with the design engineer for your facility. These experts are invaluable when it comes to understanding your designed structures and how they should be managed.
2. Ensure that your management is consistent with the terms of your permit. If your facility is required to maintain a specific level of free board space for additional capacity ensure that manure is disbursed in a manner that allows your facility to work as it was designed.
3. When excess moisture is predicted take opportunities to dewater your basin to prepare for additional volume.

When there is potential for basin overflow:

1. Make sure you have location specific weather and precipitation information. Many storms are localized and your burden of proof regardless if it's a 25 year/24hour rain event or a chronic precipitation event (see discussion in the next section) is important as the process unfolds.
2. Contact your design engineer, not only do they understand the strengths of your structure, but they too will be invaluable when it comes to problem solving potential challenges when moisture is abundant.
3. Notify the IDNR if you believe an overflow may occur. Your permit compels you to notify your district office and if an overflow is the end result, your connection to this resource is important in the process.
 - a. Document your call (Date, Time, Person Contacted, Discussion).
 - b. DNR should advise you as to the specific procedure to properly discharge by reducing your basin levels while at the time trying to avoid an overflow.

Chronic Wet Period Exception

NPDES permits are written specifically to an operation's capacity and area weather conditions. The benefit to having an NPDES permit is the ability to discharge during a 25-year, 24-hour rainfall event. Unfortunately, or maybe fortunately, these weather events are a rarity. More commonly, Iowa

cattlemen have experienced extended periods of rainfall, none of which meet the 25-year, 24-hour level, during summer and spring months that produce challenges for feedyard operators. Both the IDNR and Environmental Protection Agency (EPA) have recognized the occurrence of these “chronic precipitation events” as allowable discharge events. In February of 2012 the EPA recognized an exception for qualified feedyards in the EPA NPDES Permit Writers’ Manual for Concentrated Animal Feeding Operations (EPA 833-F-12-001) regarding chronic precipitation events. This guidance allows feedyards to discharge pursuant to 40 CFR 122.42(e)(1)(i) and 40 CFR 412.31(a)(1)(i) if a chronic precipitation event occurs.

A chronic precipitation event is defined as a series of wet-weather conditions that could preclude dewatering of liquid retention structures. During a chronic precipitation event, the remaining capacity of the storage structure is reduced. When dewatering is not possible, a rainfall event of any size, both smaller and larger than the 25-year, 24-hour storm event, could result in an overflow that complies with effluent limitations based on 40 CFR part 412. In Iowa, the IDNR has the ability to determine if wet weather period conditions are prevalent.

The chronic precipitation period exception does not allow feedyards to discharge without first working with the local IDNR office. Following a review of dewatering records by the IDNR, authorization to discharge may be provided. CAFOs that do not actively maintain the capacity of the storage structure, such as CAFOs that dewater only when the storage structure is completely full, are not entitled to chronic storm event discharge authorization. It is unlikely that any given series of storms would result in an overflow from a properly developed liquid storage structure, unless the series of storms occurs so close to the end of the designed storage period that the storage structure is already filled close to capacity at the beginning of the chronic rainfall event.

All feedyards with NPDES permits that have followed the dewatering requirements in their permit should qualify for the chronic precipitation event discharge exception, regardless of whether the following chronic event text is in the current permit. However, it is preferable to have the following text included under Section 1.A of the NPDES permit:

When a precipitation event equal to or greater than a 25-year, 24-hour precipitation event or when a precipitation event that is a chronic precipitation event causes an overflow, then Pollutants in the overflow may be discharged to waters of the United States provided the manure control system is designed, constructed, operated and maintained to contain all manure including the runoff and the direct precipitation from a 25-year, 24-hour rainfall event.

As cattle producers in Iowa, it’s our mission to reap the rewards of a strong management plan that is folded precisely with strong stewardship. **For more information related to knowing your permit or what to do if you have an environmental operational challenge feel free to contact your Iowa Cattlemen’s Association** for answers and resources to better lay your path for the next generation.