FAQs for Combined Open Lot and Confinement Animal Feeding Operations

Q. Most of my 690 dairy cows are under a roof (in a confinement), but I keep the dry cows outside (open lot). Most of the time there are about 70 dry cows outside. Do I have to add those 70 to the 690?

A. Yes, mature dairy cows are all one animal type as defined by the U.S. Environmental Protection Agency. So, you would include any cow that has had a calf, whether dry or milked. Thus, you would have to add 70 + 690 to equal 760 mature dairy cows. Since the number of dairy cows is equal to or more than 700, you would need to apply for an NPDES permit or make a change in operation so that you don’t need a permit.

Q. What if I have 500 mature dairy cows inside, 40 dry cows outside, 400 replacement heifers inside and 500 dairy steers outside? Do I need an NPDES permit?

A. No, you would not. You would add your mature dairy cows that are in indoor and outdoor housing together (500 + 40 = 540). Since this is less than 700, you would not be a large CAFO and in most cases would not need to apply for an NPDES permit for your mature dairy cows.

The replacement heifers and dairy steers are considered a different type of cattle and should be added together (400 + 500 = 900). Since there are less than 1,000 “other cattle,” your operation would not be a large CAFO and would not need a permit.

In explanation, neither of these situations would combine enough animals of the same type in indoor and outdoor housing to require an NPDES permit (700 mature dairy cattle or 1,000 head of other cattle). However, if the facility discharges, proposes to discharge, has a man-made conveyance carrying runoff out of the building or has a stream running through it, an NPDES permit may be needed. Producers in these situations would be wise to visit with their local DNR field office to determine if an NPDES permit is required.

Also, in the example of other cattle above, if you had an additional 120 calves in calf huts, that would make your other cattle more than 1,000 head (400 + 500 + 120 = 1,020) and you would need an NPDES permit.

Check the DNR web site for a fact sheet on NPDES requirements and a table giving animal types and numbers that require a permit.

Q. What if I have 800 head of beef cattle and 2,400 head of finishing swine in confinement? Do I need an NPDES permit?

A. No, you would not. Beef cattle and swine are different animal types. Also, because the animals, cattle and swine, are all in confinement (under a roof), state law prohibits any discharges. Another reason that an NPDES permit would not be required.

However, if the facility discharges, proposes to discharge, has a man-made conveyance carrying runoff out of the building or has a stream running through it, an NPDES permit may be needed. Producers in these situations would be wise to visit with their local DNR field office to determine if an NPDES permit is required.
Also, in this example, if you added 100 finishing swine outside, you would need to add the swine together (2400 +100 = 2500 head) to determine that you would need the NPDES permit.

Q. What happens if I do not get my NPDES application form and nutrient management plan completed by Dec. 31, 2008?

A. Persons not in compliance are subject to potential enforcement action from the DNR or EPA.

Q. I have only a few animals outside, but I have 1,200 beef cattle. What happens if my open feedlot area does not have a discharge?

There are very few open feedlots in Iowa that do not have a discharge, simply because we have plentiful rainfall that is likely to co-mingle with manure, bedding, feedstuff or silage products and run off the lot into a stream or drainage ditch. It is up to the producer to determine if the lot has a discharge. However, producers should understand that if they take the position that there is no discharge, the U.S. Environmental Protection Agency or the Iowa DNR can still check to see if there is evidence of a discharge. There are also models, such as the Soil Plant Air Water (SPAW) Hydrology Tool, to determine if runoff would occur given the particular specifics of the operation including soil types and crop rotations. Producers who decide they do not need an NPDES permit because their operation does not discharge and then have a discharge could receive federal or state penalties both for having the discharge and for not having the required NPDES permit.

Q. My operation has a confinement housing 750 head of beef cattle and a manure management plan (MMP) which renews every year. I also have an open feedlot of 600 head of beef cattle that discharges (1,350 head total). If I decide to keep the open feedlot, how long will I have to construct a containment system so that I am in compliance?

A. The important issue here is to get the NPDES application form, nutrient management plan (NMP), compliance schedule and fees in by Dec. 31, 2008. If you can’t make that deadline, document when and who you contacted for soil sampling and the NMP development. Send that information in by Dec. 31, along with the contact information for an engineer and a schedule of when you will be submitting pre-plans, final plans and completing construction. A Compliance Schedule (form 542-0190) can help producers with planning and scheduling. DNR’s initial target is to have all producers who need the permits in compliance by December of 2009, including completing any needed construction or alternative method of compliance. The important thing for producers who need permits but don’t have them is to make continual progress towards obtaining the permit and completing any required construction.

Q. Will an open feedlot have to be totally contained?

A. Yes, depending on the definition of total containment. For example, in Iowa, for cattle, you must be able to store the runoff from a 5.5-inch rainfall received within 24 hours (25-year, 24-hour storm event) in addition to the runoff received between periods of land application as specified in Division II of Chapter 65 of the Iowa Administrative Code. An NPDES permit is a permit to discharge under very specific circumstances. This means the operation must be properly designed, constructed, operated and maintained. Discharges due to poor management (such as not emptying a basin) would not be allowed.

Q. Where can I find design criteria or the effluent limitation guidelines for my combined operation?
A. For more information on what is required, see state regulations in Division II of Chapter 65 of the Iowa Administrative Code or consult with a design engineer. Chapter 5 of the U.S. Environmental Protection Agency’s Producers Compliance Guide for CAFOs may also contain some helpful information.

Q. So I need an NPDES permit, what forms and attachments should be used when I have some animals in confinement with an existing manure management plan?

A. If you have an existing confinement with a manure management plan (MMP), then you can continue to use that form (542-4000) and the shorter annual updates (542-8162) for the confinement portion of the operation. You would also need a nutrient management plan (NMP) form (542-2021) for the open feedlot and any other animals not covered by the MMP. In both the MMP and NMP, you would need to keep records of actual application rates and fields.

You will also need the NPDES application form (542-4001), the NPDES fee form (542-1250) and the compliance schedule (542-0190). Before you begin construction, you will also need to apply for a Construction Permit (form 542-1427). Other forms such as a storm water permit, floodplain permit or water use withdrawal permit may be needed. All forms can be found on the DNR forms page.

Q. Can manure plans be combined into one?

A. It’s up to the producer. You may keep the confinement portion of the operation covered by an existing manure management plan (MMP) which offers the convenience of using the short forms for three years out of four and allows producers to keep records of any changes in application rates and fields without filing a new MMP each time a field changes. If you continue to use the MMP, there is a spot on the nutrient management plan form to indicate that the confinement animals are covered under an existing MMP.

In this case, only the open feedlot portions would need to be covered with a nutrient management plan (NMP). Or, a producer could choose to cover the entire operation under a nutrient management plan (NMP). It’s your choice. However, compliance fees are due each year for the confined animals.

Q. Will silage effluent have to be contained?

A. Yes, silage effluent is considered part of manure and process wastewater under state rules and must be contained. (See manure definitions in Chapter 65 of the Iowa Administrative Code on pp. 7 and 57) It’s also important to contain the runoff from feed and feed stocks because it has high organic matter content which can rob waters of oxygen when the runoff reaches a stream. The resulting low oxygen conditions can cause poor water quality in streams and in extreme conditions can cause a fish kill.

Q. Will a manure management plan (MMP) be required with an NPDES application?

A. Not unless you are already required to submit a manure management plan (MMP) for the confinement portion of the combined operation. Otherwise, no, the federal rules under the U.S. Environmental Protection Agency require facilities that need an NPDES application to file a nutrient management plan or NMP. While many requirements of an NMP and MMP are similar, the NMP also asks producers to document their management practices for handling dead animals, chemicals, maintaining clean water and more. Following the NMP also becomes part of the NPDES permit. (See questions on NMPs and MMPs above.)

Q. Is the application sent to DNR field offices or Des Moines?
A. The NPDES application form along with the NMP and/or MMP, documentation of public notice, compliance schedule and fee should be sent to the DNR’s Des Moines office at 502 East Ninth St., Des Moines 50319.