

2004 NPDES Permit Program for Concentrated Animal Feeding Operations

Frequently Asked Questions (FAQ)



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This question-and-answer series is a result of a Purdue Extension videoconference that was held around Indiana on March 25, 2004. Some of the answers were generated by the authors before the conference in anticipation of questions, but most were asked by owners or managers of some of Indiana's 500 Concentrated Animal Feeding Operations (CAFO) who are most affected by the new National Pollutant Source Discharge Elimination System (NPDES) Permit Program.

Deadlines, Permits and Rule Issues

Q Is the definition of a "farm" the same for a confined feeding operation (CFO) as it is for a CAFO?

A Yes. The Indiana Department of Environmental Management (IDEM) defines a single farm, for the purpose of obtaining a permit, as contiguous properties that are owned or controlled by the operation, or that use a common manure application land base.

Q Does the annual report that I must prepare for IDEM become a public document?

A Yes. Anyone can view any of the materials you have submitted to IDEM.

Q For farmers who deferred submitting the Notice of Intent (NOI) to comply with the rule, what happens?

A The NOI must be submitted by April 13, 2006.

Q How do you file for a deferment so that you can delay keeping records for as long as possible?

A All confined feeding operations that are newly defined as CAFOs under this rule are allowed to defer permitting until December 2006. A CFO that is currently permitted under state rules but that qualifies as a CAFO will have until December 2006 to develop and implement a Soil Conservation Practice Plan, Storm Water Pollution Prevention Plan and to comply with the Natural Resources Conservation Service (NRCS) Nutrient Management Conservation Practice Standard #590. Those who submit an NOI will be covered by the rule immediately and must develop those plans and initiate appropriate records.

Q Will the NRCS provide assistance on IDEM-required nutrient management plans?

A NRCS will be able to provide some assistance, but many CAFO producers will need to use private consultants in order to complete plans and documentation needed for their farms in a timely manner (See the final question in this FAQ for how to find a list of Technical Service Providers that are currently certified by NRCS.)

Q Can site preparation work for a new livestock confinement building at a CAFO be done “before” IDEM approves the permit application?

A There is some allowance for this. For example, driveways and utilities can be installed (Note Rule 5 in the IDEM Storm Water Rule, 327 IAC 15-5 that covers a disturbance of 1 acre or more), but NO work can begin on the actual facility until approved by IDEM.

Q Are the required CAFO record forms on the IDEM web site?

A Yes. Go to: <http://www.in.gov/idem/land/permits/forms/index.html>.

Q In the rule, what is meant by the wording: “IDEM or Applicant will public notice”?

A The rule says the applicant should notify adjoining property owners. The rule needs to be referenced in the notice to make certain the applicant is providing the adjoining property owners with the appropriate information. If the applicant does not do this, IDEM may publish a notice in the local newspaper. Note that this will be different for Individual permits where a draft permit must be placed on public notice for 30 days.

Q Are public notice requirements the same for all NPDES permits, whether filing for a General or Individual permit, or permitting a new operation or renewing the permit for an existing operation?

A Many requirements are similar, especially when permitting undeveloped land or land not currently

permitted as a confined feeding operation. With both types of permits, the applicant must notify adjoining property owners or occupants as well as the county commissioners within 10 days of the application submittal. For existing NPDES-permitted farms that seek approval to construct or for those submitting renewals, IDEM will publish a public notice once it has received the application. Note that the farm can provide its own notice to adjoining property owners or occupants in lieu of IDEM placing a notice in the newspaper.

Public Notification for General or Individual NPDES CAFO Permit Application:

IC 13-18-10 and 327 IAC 15-15-8(a) require an owner or operator who submits an NPDES CAFO permit application containing a construction proposal on land that is undeveloped or for which a valid existing CFO approval or NPDES permit has not been issued to notify all adjoining landowners or occupants and the County Board of Commissioners within 10 working days after submittal of the application. The cost is borne by the applicant.

Optional Notification for General NPDES CAFO Permit Application:

327 IAC 15-15-8(c) states that for CAFOs submitting a NPDES CAFO permit application for the first time, or for CAFOs submitting a NPDES CAFO permit application containing a construction proposal that will increase the manure storage capacity by 25 percent or more above the most recent submitted application submission, IDEM will publish a public notice about receipt of the NPDES CAFO permit application. Additionally, 327 IAC 15-15-8(d) states that IDEM will annually publish public notice of NPDES CAFO permit renewals received. However, 327 IAC 15-15-8(e) states that for CAFOs which certify to the department that adjoining landowners or occupants and the County Board of Commissioners were notified within 10 working days after the submittal of a NPDES CAFO permit application as listed in 327 IAC 15-15-8(c) or 327 IAC 15-15-8(d), IDEM will not publish a public notice about the receipt of the NPDES CAFO

permit application. 327 IAC 15-15-8(e) allows CAFOs the option to either provide the notice themselves, in situations as listed above to adjoining landowners or occupants and County Board of Commissioners, or for IDEM to publish a notice in the local newspaper.

Q Will aquaculture CAFOs be incorporated into the Indiana state law?

A There are no plans to do this, and it is not likely to happen unless the U.S. Environmental Protection Agency insists on the need to incorporate such requirements into state regulations.

Land Application of Manure

Q What is the effect of the “method of application” on nitrogen availability?

A The current NRCS nutrient management conservation practice standard #590 requires that plant available nitrogen (PAN) be determined at the point where manure leaves the storage. At present, the 590 standard does not allow for any adjustments to that measurement based on nitrogen loss due to the method of application, whether irrigating, surface application or injection. IDEM, NRCS, and Purdue are working to develop a new Indiana 590 standard that will more accurately account for this loss and arrive at more precise PAN values for manure land application rates.

Q With regard to the nitrogen content of stored manure, can 20 percent more nitrogen be land applied to account for volatilization losses?

A Loss mechanisms are built into the 590 standard to provide up to a 30 percent allowance for projected crop yields, calibration, and meeting a specified rate. There are no specified volatilization losses.

Q How do you determine the amount of manure to apply if the soil is deep tilled or minimum tilled or if the manure is surface applied vs. injected?

A At present, no credit is given for loss of volatile nitrogen during manure application. Therefore, all would have the same application rate. A proposed revision to the NRCS 590 standard may better reflect the losses known to occur due to method of application.

Q What is acceptable when it comes to spreading manure on cropland?

A The farmer must meet certain requirements that are documented in the farmer’s Soil Conservation Practice Plan. Specifically, the plan must consider the effect of topography, proximity to surface water, vulnerability of ground water, and practices to reduce contaminated runoff from the application area, such as reduced rate of application, residue management, and filter strips. Application on frozen ground, if done, must be covered in the plan.

Q What is a Nitrate Leaching Index?

A This value is described in the NRCS Field Office Technical Guide (FOTG) that is available in any USDA-NRCS county office. The Web site for the NRCS eFOTG is: <http://www.nrcs.usda.gov/technical/efotg/>. (To get Indiana-specific data, select IN [from the map in the bottom right corner] and then select the appropriate Indiana county. To find the Nitrate Leaching Index, select the Section II folder, then select “H. Detailed Soil Information...,” select your county, select the “Nitrate Leaching” folder, and select “Nitrate Leaching.”)

Q Who can help me prepare a “Soil Conservation Practice Plan” for my operation?

A It needs to be prepared by someone with expertise in evaluating and recommending solutions to the risks of land application of manure to cropland. This person will need expertise in nutrient management planning and the design and application of conservation practices found in the NRCS Field Office Technical Guide. IDEM does not require that a certified individual prepare the plan. Farmers with sufficient knowledge and skill can prepare their own plans.

Q What does covered staging mean?

A Staging is manure or litter that is stored temporarily in a stack at the field where it will be land applied. Staged manure should be covered so precipitation does not result in runoff from the stacked manure area. Alternatively, an earthen berm can be installed around the staged manure to protect against runoff.

Q What is the difference between the manure application record and the manure distribution record?

A The manure application record documents the land application of manure, and the manure distribution record documents manure that is sold or distributed off the farm.

Q Is the Purdue Manure Management Planner computer program an effective tool? Will it be updated to include the 590 standards?

A It is an effective tool and has been updated to include the current 590 Standard. You can download the MMP Windows™-based program from the Purdue Web site:
<http://www.agry.purdue.edu/mmp/>.

Q Why aren’t all manure storages required to hold at least 180 days of manure production? Then frozen or saturated ground should no longer be a concern.

A IDEM decided not to require retrofitting all previously approved farms to meet a 180-day standard. If a farm demonstrates a problem in managing manure during adverse weather periods, the farm would be advised to construct additional storage.

Q In fields with areas with P test under 50 and other areas over 100, what rates would you apply?

A This will depend on soil tests, manure tests, and the needs of the crop to be grown. Changing from a “one size fits all” recommendation to site-specific recommendations is one of the major benefits of this rule.

Storm Water Plan

Q What is the difference between “storm water” for purposes of the Storm Water Pollution Prevention Plan and “process wastewater” such as the runoff from around barns and feed storage/mixing areas that EPA says must be treated the same as manure?

A Leachate or storm water runoff from silage storage or compost areas is process wastewater. Process wastewater is subject to the “zero discharge” effluent limitation. The Storm Water Pollution Prevention Plan applies to specific areas that are ancillary to the production area, including sites used for the storage and handling of material other than manure and process wastewater. The purpose of a Storm Water Pollution Prevention Plan is to keep this clean water from being contaminated by areas that contain process wastewater, thus increasing the amount of wastewater that must be stored and land applied.

Q Who can help a CAFO develop a storm water plan?

A Someone with expertise in dealing with contaminated runoff should prepare the Storm Water Pollution Prevention Plan. IDEM does not require that a certified individual prepare the plan. Farmers with sufficient knowledge and skill can prepare their own plans.

Q When must a CAFO submit a storm water plan to IDEM?

A The rule does not specify a deadline for this plan, but IDEM encourages farmers to begin working on it right away. IDEM’s compliance inspectors will be asking producers about their progress on developing this plan.

Q With regard to storm water, what about roof runoff and the areas where feed is mixed and stored and areas between the buildings?

A Clean runoff from roofs and roads should be drained to vegetated areas. The drainage area between buildings that contains dust from buildings, around areas that contain spilled food, etc., however, must be addressed. If contaminants are present in runoff from these areas, the runoff may need to be stored and then land applied.

Q The rule mentions “offsite” with regard to runoff. How far away is offsite?

A Basically, runoff from an upslope area must be diverted far enough around the CAFO that it does not come in contact with any manure or other contaminants.

clarify this issue and publish the CAFO requirements in its upcoming Guidance document.

Q Why do farmers need to check for leaks in their water supply system on a daily basis?

A Leaking and broken livestock waterers and water lines can cause lagoons and holding basins to fill up very quickly, perhaps causing an overflow or requiring manure application on wet or frozen ground, which increases the chance of contaminated runoff. This is a precautionary tactic that is intended to protect the farmer and the environment.

Q Do I need to check all water lines on the farm? Should water lines be checked daily for dry manure storages also?

A EPA says that any water line or animal waterer that could impact the capacity of manure storages in the case of a leak should be inspected daily.

Q Do waste handling systems really need to be inspected every day, including holidays?

A No. Waste storage structures must be inspected weekly, and records documenting the inspections must be maintained in the farm operating record.

Q What is the producer required to inspect when it comes to field tile drains?

A The producer is only required to visually inspect tiles that empty to a surface waterway or drainage ditch on the producer’s property or adjacent to the land application area. This needs to be done during and for a couple days after manure is applied.

Q How is subsurface drainage determined in calculation of the Offsite Risk Index (ORI)?

A The Offsite Risk Index reflects the potential for a soil to have subsurface drainage. It is based on soil properties of Soil Drainage Class and Depth to Seasonal High Water Table found in Section II of the NRCS Field Office Technical Guide. The easiest way to make this determination at this time is to use the Purdue MMP computer program, which makes the ORI calculation for you.

Monitoring and Self-Inspection

Q When monitoring storm water, what should a producer be looking for?

A IDEM has talked about the need for a producer to monitor at least monthly or quarterly. A grab sample of water that runs off the site should be taken during rain events. The IDEM storm water rule specifies certain parameters that should be tested for. IDEM recognizes that agriculture is different from manufacturing, and that different parameters should be evaluated. IDEM hopes to

Record Keeping

Q Can a CAFO maintain records on a computer instead of on paper?

A IDEM believes that a producer should be able to keep records in whatever manner works best for that operation. However, you should always keep printouts or copies of all up-to-date records in a binder or similar format. Remember, the required forms and information must be made available to IDEM inspectors at all times, and “lost records” is not an acceptable excuse for noncompliance.

Q Should old CFO record books that I used to keep for IDEM be eliminated?

A If your operation has been reclassified as a CAFO under the new rule, IDEM suggests that you keep the old CFO record books for five years, but from now on, you should use the CAFO record forms.

Q Does a CAFO have to record mortalities each day?

A Mortality must be documented, but not necessarily every day. Proper management of animal carcasses at the operation is what IDEM is primarily concerned with.

Manure Transfers and Application on Land Not Owned by CAFO

Q If all manure produced on the operation is sold or given to other farmers, what happens?

A The person who receives the manure must follow all land application requirements of the CAFO NPDES rule, including setback distances. The farmer must complete a transfer form, must provide the person receiving the manure with a summary of the land application requirements, including setbacks and procedures for determining application rates, and must keep track of who gets the manure, but once the person receives the manure, they have ownership and are bound by

the NPDES rules. The CAFO, if all manure were brokered off the farm, would not be required to have a Soil Conservation Practice Plan, since no manure is applied on land that it owns or controls.

Q If a land use agreement exists between a CAFO and a neighboring farmer, does the farmer have to have a soil conservation plan?

A If the CAFO operator applies the manure to the neighbor’s land, then a Soil Conservation Practice Plan is required. If the landowner or a custom hauler does it, a Soil Conservation Practice Plan is encouraged, but not required.

Q What requirements must grain farmers follow if they apply manure from a CAFO to their land?

A This is addressed in the marketing and distribution section of the rule. If the grain farmer receiving the manure from the CAFO is responsible for applying the manure, the CAFO operator must provide the grain farmer with an information sheet that explains the CAFO requirements for setbacks and application rates. The grain farmer is responsible for complying with these requirements.

590 Standard

Q Where do producers get information to determine if they are a high, medium, or low environmental risk with regards to the 590 standard?

A This risk determination is site specific and made county-by-county, soil-by-soil. The USDA NRCS District Conservationist or a crop consultant will need to assist in determining this for the producer. (Use of the MMP computer program automatically computes risks for Pre-Screening and the Offsite Risk Index).

Spill Response

Q Will the emergency response plan and land use agreements developed under the old IDEM CFO program be recognized by the CAFO rule?

A Yes.

Q If a spill occurs on a CFO or on a CAFO with a general permit, and is documented, will the farmer be required to seek an individual NPDES permit?

A Not necessarily. IDEM plans to work with each farm where problems occur to determine the appropriate action. Not promptly documenting a spill, however, could be a factor in whether the permit factor is changed.

Financial Assistance

Q Can EQIP funding be used to offset the costs of the rule?

A Yes, however, adequate funding for all projects does not currently exist in Indiana. The state was allocated \$9 million in 2004 in EQIP money, but had received over \$64 million in requests in 2003. It should be noted that 60 percent of the funds are earmarked for livestock operations.

Q Is money available to pay “certified” Technical Service Providers (TSPs) to assist producers in developing nutrient management plans?

A NRCS has money to provide payment for certified TSPs to farmers who have 2003 and 2004 EQIP contracts. See the next question for how to find a list of TSPs that are currently certified by NRCS.

Technical Service Providers

Q Who can serve as a certified technical service provider in Indiana and help with the development of a nutrient management plan?

A NRCS’s Technical Service Provider (TSP) Web site is: <http://techreg.sc.egov.usda.gov/>. On the left hand side of this Web page, select “Find a Technical Service Provider,” select “Indiana,” and select the county of choice or all counties. Selecting a specific “Category” or “Service” will assist in finding TSPs that will provide the service you need.