Tips for Completing the DEQ Permit Process

Some say laws exist to protect our rights. Others feel they only restrict us. Regardless of your viewpoint, a new requirement that owners of confined animal feeding operations apply for a permit through the Michigan Department of Environmental Quality means another law is affecting some dairy producers. The tips in this article can make the permitting process go more smoothly for your dairy farm.

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As of July, owners of large confined animal feeding operations (CAFOs) in Michigan were to apply for the National Pollution Discharge Elimination System (NPDES) permit through the Michigan Department of Environmental Quality (DEQ). According to the DEQ, most farmers in that category either applied for the permit or notified the DEQ that they no longer operate large CAFOs or had no potential to discharge.

In mid-July, the Environmental Protection Agency (EPA) extended the deadline for newly defined CAFOs seeking NPDES permit coverage and for permitted CAFOs to develop and implement nutrient management plans (NMPs) to February 27, 2009.

The deadline extensions were necessary to allow the EPA time to respond adequately to an array of public comments on issues raised by the Second Circuit Court’s decision that the Clean Water Act does not authorize the EPA to regulate all CAFOs before certain compliance dates take effect. The February 27, 2009, deadline will provide additional time, after the final rule is promulgated, to allow states, the regulated community and other stakeholders the opportunity to adjust to the new regulatory requirements.

Michigan, however, has its own dates already in state rules, which supersede the federal deadlines. (States have the prerogative to require stricter standard for any industry, as long as they use the federal law as their baseline.)

Large CAFOs in Michigan must follow the DEQ NPDES general permit (number MIGO19000) from January 1, 2008, to April 1, 2010. These farms are entering this permit in the middle of its five-year cycle. Six farms are seeking individual permits, which will last five years. In addition, a few medium and small AFOs are under a permit because of environmental violations.

Know your Permit

Read your permit carefully and completely. Sort the information that pertains to your operation and study it. The general permit was written for all livestock species, so some
items may not apply to your operation. Others may have a dramatic impact.

Next, put a strategy in place that will work on your farm by seeking consultants and other resources, such as sample record-keeping forms available at <http://www.animalagteam.msu.edu>.

If you have questions about permit requirements, call your DEQ district office. DEQ staff members would much rather answer questions about compliance up front than have to take enforcement action later.

The Process

Producers seeking an individual permit will receive a draft permit. If necessary, they may work with the DEQ to make revisions. Once revisions are approved, producers must complete a CNMP within a certain period of time (which will be outlined in the permit).

Applicants who agreed to comply with the general permit will receive a draft certificate of coverage (COC). That, too, will include a timeline for CNMP completion. Once the COC is ready, there may be a public notice period. (Individual permits are automatically subject to a 30-day public notice period.)

COCs for new CAFOs, CAFOs that were not MAEAP-verified or CAFOs that are permitted currently are posted on the DEQ Web site for two weeks. COCs for CAFOs that are MAEAP-verified or have current permit coverage will be publicly posted on the DEQ Web site in late summer/early fall 2007. After public notice, the permit or COC can be issued.

Complying with the Permit

You must comply with permit requirements as soon as the permit is issued. The permit’s timeline will include time to develop or revise a CNMP. It also will allow evaluation time and, if necessary, time to upgrade storage structures, time to build six months of manure storage and time to choose a certified operator. Other issues may be negotiated in an individual permit. Other permit requirements—such as collection of wastewater, inspections, record keeping and land application requirements—must be implemented when the permit is issued.

Developing a CNMP

Many farmers work with a consultant to develop or modify their CNMPs.

Michigan producers have typically included several items in their CNMPs that are not required under the current permit. NPDES permits are for water protection (mostly surface water). Therefore, such items as odor management, feed management, emergency plans, vet waste, employee training, whole-farm nutrient budgeting, and prescriptive field assessment tools (such as RUSLE 2), wind erosion calculations and other non-water-related items, do not need to be included in the CNMP. These issues are obviously important and producers should keep them in their management system, but the DEQ does not require them. One approach might be to continue the management practices but choose not to provide this documentation to the DEQ. Remember, anything on file with the DEQ is public record.

The issues that the DEQ is focused on include an annual reporting requirement, six months of manure storage, diversion of clean water, not disposing of pesticides in manure storage, checking and recording weather forecasts before spreading and noting actual weather 24 hours before and after land application, release or discharge reporting with monitoring requirements and specific land application requirements. (GAAMPs allow for 48 hours.)

Storage and Management

The permit’s focus on manure storage includes the physical design, construction and management. Management includes weekly inspections of storage volumes and of the structure’s integrity and the operation and maintenance of all aspects of the storage, including pumps, piping and valves. Keep records of all inspections.

If the previous evaluation of existing components was not conducted by a professional engineer (PE), producers may be asked to have this done by a PE. This requirement is new in the current DEQ permit. PEs should work with the DEQ to be sure they meet DEQ criteria. Previous evaluations of existing components were limited in scope and may not meet permit requirements. Other issues may arise if storages were evaluated when they were full of manure because this limits the inspection process.

The volume design needs to show that 6 months’ storage capacity is available, and between Nov. 1 and Dec. 31 each year, farmers must record that fact. This storage capacity must account for freeboard, a 25yr/24hr storm event, and any runoff or additional water.

The DEQ also needs to know your procedure for inspection, operation and maintenance. The procedural description doesn’t have to be long but must be specific to your manure storage system(s). You may want to include language in your CNMP about how they will be inspected and what they will be inspected for—weekly visual inspections for cracks, leaks, seepage, overflow and structural integrity, for example.

Operation and maintenance will be a written procedure specific to the storage. The procedure for earthen systems may include mowing, checking the integrity of the banks and checking inflow pipes, as well as mechanical maintenance of pipes, pumps, concrete structures and clean water diversions. You also must keep records of inspections, operation and maintenance.

Land Application

Another major portion of the CNMP is about land application. Some specific aspects from the permit are:
Field-by-field assessment (includes form, source, amount, timing, rate and method of large CAFO waste application).

Testing production area waste and soils at land application sites (test manure annually and test soil every three years).

Field inspections prior to and following land application (inspect fields within 48 hours before manure applications and 24 hours afterward, looking for tile outlet discharges, soil cracking, soil moisture-holding capacity), and inspecting again if 1/2 inch of rain falls within 30 days after application.

Daily inspection of land application equipment when it’s in use.

Field-specific application rates for manure (following the phosphorus soil test thresholds and never overapplying nitrogen, and utilizing the winter spreading technical standard).

Appropriate prohibitions for land applications to wet soils and/or for winter applications, and for applications when the impending weather forecast calls for precipitation.

Methods of application (inject or incorporate within 24 hours, and observe a 100-foot spreading setback or maintain a 35-foot vegetative buffer, with all types of application, from surface waters and sensitive areas). (GAAMPS call for 150-foot setback only when surface applied, and no conservation practices are employed).

Remember to keep records of all of the above, read your permit and ask the DEQ if you have any questions.

Once you’re into the permit process, annual updates are due each April 1, including records or reports from the past 12 months (January-December) and an estimated projection of land application for the upcoming 12 months.

Records

Because records are such a large part of permit compliance, MSU Extension has developed sample forms that help sort the permit by creating column headings, following the permit language and helping producers determine which records should be kept. The forms also attempt to make the process easier by creating check boxes showing that the inspection or process was completed and noted. Visit <http://www.animalagteam.msu.edu> to download the forms. They also are categorized by which records are kept on the farm and which are submitted in the annual report. The DEQ Web site also has some examples for the manifest and manure storage criteria.

Remember, there is no substitute for reading the permit! Read it, study it and ask questions about things you don’t understand.