What Requirements Will My NPDES Permit Contain?

Your NPDES permit will say what you have to do to comply. Certain minimum requirements must be in every NPDES CAFO permit, and this guide describes those minimum requirements. Your permitting authority may include more than the minimum requirements in your NPDES permit. You should read your permit carefully to find out exactly what you have to do at your CAFO.

Your NPDES permit will have four main sets of requirements:

- 1. Effluent limitations.
- 2. Special conditions.
- 3. Standard conditions.
- 4. Monitoring, record-keeping, and reporting requirements.

Preamble: IV.C [68 FR 7207]

Regulations: 40 CFR 122.42 and 412 [68 FR 7268 and

7269]

Remember to read your permit and check with your permitting authority to find out exactly what your permit requires. This guide describes the minimum requirements established by the federal CAFO regulations. Your permit might require you to do more than the minimum requirements described here, for example, to meet your state's water quality standards or to comply with CAFO requirements specific to your state. See the appendix to find out how to contact your permitting authority.

What effluent limitations will be included in my NPDES permit?

Your permit will contain technology-based effluent limitations (based on the amount of pollutant reduction that can be achieved by applying pollution control technologies or practices), water quality-based effluent limitations (based on the condition of the receiving water body), or both. It

might also contain additional best management practices (BMPs), as needed.

A water quality-based effluent limitation is designed to protect the quality of the receiving water by ensuring that state or tribal water quality standards are met. In cases where a technology-based permit limit does not protect water quality, the permit must include appropriate water quality-based standards. For example, a technology-based standard for a CAFO might allow overflows from storage lagoons under certain circumstances. In some cases, the overflows might have to be restricted or further controlled to ensure that water quality standards in the receiving water are met. This is most likely to happen where the receiving water is impaired or likely to be impaired by CAFO discharges.

Effluent limitations for Medium and Small CAFOs

The ELGs don't apply to medium- and small-sized AFOs that are defined or designated as CAFOs. Instead, effluent limitations for production areas and land application areas at Medium and Small CAFOs are based on the best professional judgment (BPJ) of the permitting authority. The effluent limitations are determined case by case, and BPJ is sometimes based on the effluent limitations for Large CAFOs. Medium and Small CAFOs must also develop a nutrient management plan, but the management practices and application rates in the nutrient management plan are specified by limitations based on BPJ.

Preamble: IV.C.3 [68 FR 7226]

BPJ-based effluent limits are also included in permits for CAFOs that confine a kind of animal not identified in the regulations (such as emus or bison).

Effluent limitations for Large CAFOs

For most animal sectors, the federal ELGs apply only to Large CAFOs.³ The ELGs address two main areas of Large CAFOs—the production areas and the land application areas. The following sections describe the requirements that must be included in permits for CAFOs that are subject to the ELGs. If you own or operate a Large CAFO, you must comply with the requirements in your permit, which will include at least the following effluent limitations for your production areas and land application areas. Your permitting authority may include additional effluent limitations in your permit.

Regulation: 40 CFR Part 412, Subparts C and D [68 FR 7271 and 7273]

Preamble: IV.C.2 [68 FR 7207]

Production area requirements for existing CAFOs

The production area is the part of your farm that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. (See "What parts of my CAFO are regulated?" on page 19 of this guide.) All of these are considered together to define the production area at your operation.

No discharges of manure, litter, or wastewater from the production area of your CAFO may enter waters of the United States. You must also comply with the record-keeping requirements described in "What records do I have to keep?" on page 37 of this guide. These records and measures will help you show that you're complying with the effluent limitations in your NPDES permit.

What is the difference between storage and containment? Storage refers to the structures used to hold manure, litter, or process wastewater to reduce the need for frequent hauling and land application, to allow land application at a time when soil and climatic conditions are suitable, and to allow nutrient application at or near the crop's growing season. Containment refers to the structures and areas used to control runoff of precipitation from confinement areas and manure storage areas.

Is a discharge from the production area ever allowed?

The requirements do allow a discharge caused by rainfall events, but only if you meet certain conditions. Dry-weather discharges are never allowed. Discharges from the production areas of Large horse, sheep, beef, dairy, swine, turkey, and chicken CAFOs are allowed if the operation meets all of the following conditions:

- The production area must be designed, built, operated, and maintained to handle all of the manure, litter, and process wastewater, including the runoff and direct precipitation (rain) from all normal rainfall events up to a 25-year, 24-hour rainfall event. To meet this requirement, the design volume of your storage structures should reflect the following:⁴
 - ✓ The maximum length of time you expect to go before emptying the structures (the storage period).
 - ✓ All waste accumulated during the storage period.
 - ✓ Normal precipitation and evaporation during the storage period.
 - ✓ Normal runoff during the storage period.
 - ✓ The direct precipitation from a 25-year, 24-hour rainfall event.
 - ✓ The runoff from the 25-year, 24-hour rainfall event.
 - ✓ Residual solids after liquid has been removed.

GLOSSARY

A 25-year, 24-hour rainfall event is the largest precipitation event that is likely to occur over 24 hours once every 25 years. Similarly, a 10-year, 24-hour or 100-year, 24-hour rainfall event is the largest precipitation event that is likely to occur over 24 hours once every 10 years or once every 100 years. The National Weather Service defines these rainfall events for different areas of the United States. Some states also publish statistical rainfall probability information. Contact your local weather service or the local NRCS office to get the rainfall values for your area.

³ For CAFOs in the sector "Ducks (operations with other than a liquid manure handling system)," the ELGs apply to Large, Medium, and some Small CAFOs. The CAFO ELGs apply to all duck operations with 5,000 or more ducks that use dry or wet manure handling systems. For duck operations with fewer than 5,000 ducks, regardless of the manure handling system used, there are no applicable ELGs. Instead, BMPs would apply on a case-by-case basis.

⁴ You must keep records to document that you have adequate storage volume and that your storage structures are properly operated and maintained. (See "What records do I have to keep?", beginning on page 37 of this guide.)



Roofed and concrete wall solid manure stacking facility with a settling basin and filter strip.

- ✓ Necessary freeboard to maintain storage integrity. For treatment lagoons, the design volume should also reflect a minimum treatment volume and any additional storage you might need to meet management goals or other regulatory requirements.
- The discharge may consist of only overflows caused by the rainfall event. Dry-weather discharges are not allowed.
- For beef, dairy, swine, turkey, and chicken CAFOs, you must comply with the record-keeping requirements described in "What are the record-keeping requirements for all CAFOs?" and "What are the additional record-keeping requirements for all Large CAFOs?" on page 37, and "What are the additional record-keeping requirements for Large beef, dairy, veal calf, swine, and poultry CAFOs?" on page 38 of this guide. These records and measures will help you show that you're complying with the ELGs. If you're not keeping the required records, no discharges are allowed.

Discharges caused by poor management are never allowed, even if it's raining. Your production area must be properly designed, constructed, operated, and maintained and you must keep the required documents and records. Proper design and operation includes designing lagoons for the rainy season, draining lagoons before the rainy season begins, and not applying manure to saturated soils or during rain events. Proper operation

and maintenance also include activities such as dewatering when appropriate and in accordance with a nutrient management plan. Occasionally a series of rainfall events that are far above normal rainfall might occur so close together that they prevent dewatering. Under such conditions, even though your storage structures have been properly designed, constructed, and managed, a series of smaller storms could in rare events cause a permissible overflow. However, with proper planning and maintenance, you should usually be able to avoid these situations.

Regulation: 40 CFR 412.13, 412.31(a), and 412.43(a) [68 FR 7270, 7271, and 7273]

Preamble: IV.C.2.c and d [68 FR 7214 and 7217]

Discharges from duck CAFOs with 5,000 or more ducks (regardless of the type of liquid manure handling system⁵) must meet the following discharge limits:

- Biochemical oxygen demand (BOD₅): You may not discharge more than 3.66 pounds (1.66 kilograms) per day per 1,000 ducks and your maximum monthly average discharge may not exceed 2.0 pounds (0.91 kilograms) per day per 1,000 ducks.
- Fecal coliform bacteria: Your discharge may not exceed 400 most probable number (MPN) per 100 milliliters at any time.

Regulation: 40 CFR 412.22(a) [68 FR 7271]

Production area requirements for new sources
Some new CAFOs designed and built after
April 14, 2003, are subject to more stringent ELG
requirements for the production area. (No additional
requirements apply to the land application areas
for new source CAFOs.) (See "New Sources" on
page 24 of this guide for more information on which
operations are considered new source CAFOs.)

New Source Performance Standards for horse and sheep CAFOs

The production area requirements for new CAFOs with horses and sheep are the same as those for existing CAFOs.

Regulation: 40 CFR 412.15 [68 FR 7271]

⁵ For duck CAFOs, the ELGs apply to all operations with 5,000 or more ducks that use dry or wet manure handling systems (Large duck CAFOs with a liquid manure handling system and Large, Medium, and some Small duck CAFOs with other than a liquid manure handling system).

New Source Performance Standards for duck CAFOs
No discharges of process wastewater pollutants
from the production areas of new source duck
CAFOs with 5,000 or more ducks may enter waters
of the United States. The requirements do provide
for a discharge during a rainfall event, but only
if you meet certain conditions. If you don't meet
these conditions, you may not discharge under
any circumstance. Discharges from the production
areas of new source duck CAFOs are allowed if the
operation meets all the following conditions:

- The production area must be designed, built, operated, and maintained to handle all of the process wastewater, plus the runoff and direct precipitation (rain) from a 25-year, 24-hour rainfall event.
- The discharge may consist of only overflows caused by the rainfall event. Dry-weather discharges are not allowed. Discharges caused by poor management are never allowed, even if it's raining.

🔳 Regulation: 40 CFR 412.25 [68 FR 7271]



A flush tank and lagoon system keeps the feeding area clean for these dairy cattle. The lagoon also stores nutrients for future application to pastures.

New Source Performance Standards for beef and dairy cattle CAFOs

The production area requirements for new CAFOs with dairy and/or beef cattle other than veal calves are the same as those for existing CAFOs.

Regulation: 40 CFR 412.35 [68 FR 7272]

Voluntary Alternative Performance Standards (for new and existing Large CAFOs with dairy cows or cattle other than veal calves, and for existing Large CAFOs with veal calves, swine, or poultry). To encourage the development of new and more effective technologies to increase pollutant reductions from CAFOs, EPA allows the use of Voluntary Alternative Performance Standards. Operators of new and existing Large CAFOs with dairy cows or cattle other than veal calves and existing Large swine, poultry, and veal calf CAFOs may use innovative technologies to achieve pollutant reductions for the production area that are equal to or better than those which can be achieved under the baseline effluent limitations. Each CAFO operator who wants to be regulated under the Voluntary Alternative Performance Standards must submit to the permitting authority a site-specific performance analysis. This analysis must show the amount of pollutants that would be discharged from the production area if the system were designed to meet the baseline effluent limitations. In addition, the analysis must show how the proposed innovative technologies and/or management practices will meet standards that are equal or superior to the baseline requirements. Based on these analyses the permitting authority may set alternative performance standards that allow discharges from the production area that meet or exceed the pollutant reductions that would be achieved under the ELGs. (See 40 CFR 412.31(a)(2) and 412.45(a).)

SDA NRCS

New Source Performance Standards for swine, turkey, chicken, and veal calf CAFOs

No discharges of manure, litter, or wastewater from the production areas of new source swine, turkey, chicken, and veal calf CAFOs may enter waters of the United States. The requirements do provide for a discharge in the largest of rainfall events, but only if you meet certain conditions. If you don't meet the conditions, you may not discharge under any circumstance. Discharges from the production areas of new source swine, turkey, chicken, and veal calf CAFOs are allowed if the operation meets all the following conditions:

- The production area must be designed, built, operated, and maintained to handle all the manure, litter, and process wastewater, including the runoff and direct precipitation (rain) from a 100-year, 24-hour rainfall event.
- The discharge may consist of only overflows caused by rainfall events. Dry-weather discharges are not allowed.
- You must also comply with the record-keeping requirements described in "What are the record-keeping requirements for all CAFOs?" and "What are the additional record-keeping requirements for all Large CAFOs?" on page 37, and "What are the additional record-keeping requirements for Large beef, dairy, veal calf, swine, and poultry CAFOs?" on page 38 of this guide. These records

and measures will help you show that you're complying with the ELGs. Discharges caused by poor management are never allowed, even if it's raining.

Negulation: 40 CFR 412.46 [68 FR 7273]

Additional production area requirements for Large beef cattle, dairy cattle, veal calf, swine, turkey, and chicken CAFOs

New and existing Large CAFOs (except duck, sheep, and horse CAFOs) must meet the following additional measures:

- Inspect at least once a week all storm water diversion devices, runoff diversion structures, animal waste storage structures, and devices channeling contaminated storm water to the wastewater and manure storage and containment structure.
- Inspect daily all water lines, including drinking water or cooling water lines.
- Install depth markers in all open liquid storage structures, such as lagoons, ponds, and open tanks, to measure the liquid level needed to properly handle the design volume, rainfall from large storms, and any extra storage needed.
- Correct any problems found as a result of the daily and weekly inspections as soon as possible.

Voluntary Superior Environmental Performance Standards (for new Large swine, poultry, and veal calf CAFOs) New Large CAFOs with swine, poultry, and/or veal calves may voluntarily enter into a program where the permitting authority establishes alternative discharge limits or ELG requirements that apply across all media and are equal to or better than the New Source Performance Standards for swine, poultry, and/or veal calf CAFOs. The alternative requirements will apply to all areas of the operation, not just the production area. To determine appropriate limitations, the CAFO owner or operator should conduct a whole-farm audit at the points of manure, litter, and process wastewater generation, handling, and application or disposal. In addition, a demonstration of how the innovative technology will increase pollutant reductions in multiple environmental media should be made. Based on these analyses, the permitting authority may set alternative performance standards for the CAFO to meet. (See 40 CFR 412.46(d).)

USDA NACS



Improper disposal of dead chickens poses a water quality concern.

 Properly dispose of dead animals and livestock to prevent disposal in the wastewater treatment system and to prevent discharges of pollutants to surface water.

You should include these measures in your CAFO's nutrient management plan. (See "First special condition for all CAFOs: Develop and implement a nutrient management plan" on page 33 of this guide.)

Regulation: 40 CFR 412.37 and 412.47 [68 FR 7272 and 7274]

Land application area requirements

The land application area is any land that is under the control of the AFO owner or operator, whether it is owned, rented, or leased, and to which manure or process wastewater from the production area is (or might be) applied. For example, if you applied litter to field "A" last year and do not intend to apply litter again until next year, that field is still part of your land application area for purposes of your nutrient management plan. The land application requirements are the same for existing and new sources.

Even though the ELGs do not set land application area requirements for horse, sheep, or duck CAFOs, NPDES permits for these operations will require land application BMPs as part of the nutrient management plan. (See "First special condition for all CAFOs: Develop and implement a nutrient management plan" on page 33 of this guide.)

The federal ELGs require that owners or operators of all Large beef cattle, dairy cattle, veal calf, swine, turkey, and chicken CAFOs properly apply manure, litter, or wastewater to land application areas under their control. The CAFO operator must do this by using BMPs developed in accordance with a nutrient management plan. Your nutrient management plan must be designed to achieve realistic production goals, while minimizing nitrogen and phosphorus movement to surface waters. (See "First special condition for all CAFOs: Develop and implement a nutrient management plan" on page 33 of this guide.)



Liquid manure from a hog feeding operation is being land applied.

Owners or operators of Large beef cattle, dairy cattle, veal calf, swine, turkey, and chicken CAFOs must also perform the following BMPs and any other BMPs required by their permits (as specified in the ELGs):

 Land apply manure, litter, and process wastewater in accordance with a nutrient management plan that specifies application rates for each field.
 Your permitting authority will establish technical standards that you must use to determine your land application rates.



For some CAFOs, wastewater samples must be collected at least once a year.

- At least once a year, collect representative samples of manure, litter, and other wastewater and analyze them for nutrient content, including nitrogen and phosphorus.
- At least once every 5 years, collect representative soil samples from all fields where manure, litter, and process wastewater are applied and analyze them for phosphorus content.
- Maintain a setback area within 100 feet of any down-gradient surface waters, open tile intake structures, sinkholes, agricultural well heads, or other conduits to surface waters where manure, litter, and other wastewaters are not applied. As a compliance alternative, the CAFO may elect to establish a 35-foot vegetated buffer where manure, litter, and other wastewater are not applied. The CAFO owner or operator may demonstrate to the permitting authority that a setback or vegetated buffer is unnecessary because of site-specific conditions or practices.
- Periodically conduct leak inspections of equipment used for land application of manure, litter, or wastewater.

If a CAFO has a permit and is in full compliance with the permit, which includes properly developing and implementing the nutrient management plan, a precipitation-related runoff from the land application area is an allowable discharge. On the other hand, if a CAFO does not have a permit or does not have a nutrient management plan, or the CAFO operator does not follow the nutrient management plan when applying manure, litter, and process wastewater, a discharge resulting from land application at that CAFO would be a violation of the Clean Water Act.

Regulation: 40 CFR 122.23(e), 412.31(b), and 412.43(b)

[68 FR 7267, 7272, and 7273]

Preamble: IV.C.2.b [68 FR 7209]

What are special conditions?

Some NPDES permits contain special conditions that supplement the effluent limitations because they address unique conditions at an operation. Typical special conditions include BMPs, monitoring activities, and stream surveys.

What special conditions will be included in my NPDES CAFO permit?

The CAFO regulations establish two special conditions that must be included in all NPDES CAFO permits and one additional condition for only Large CAFOs. Your permitting authority may include other special conditions in your NPDES permit as well. Remember to read your permit to find out what you have to do, and contact your permitting authority if there is anything in your NPDES permit that you don't understand.

Preamble: IV.C.6 [68 FR 7229]

First special condition for all CAFOs: Develop and implement a nutrient management plan

If you own or operate a CAFO of any size, your NPDES permit will require you to develop and implement a nutrient management plan. The goal of a nutrient management plan is to minimize your CAFO's impact on water quality. Your nutrient management plan must describe the practices and procedures that will be implemented at your operation to meet all of the production area and land application area requirements that apply to your operation. If you own or operate a Large CAFO (or a duck CAFO with more than 5,000 birds), your nutrient management plan must describe how you'll achieve the discharge limits and specific management practices described in "Effluent limitations for Large CAFOs" on page 28 of this guide.

Regulation: 40 CFR 122.42(e)(1) [68 FR 7268]
Preamble: IV.C.4 [68 FR 7226]

What minimum elements must my nutrient management plan address?

At the least, your nutrient management plan must describe how you plan to manage nutrients and waste for each element shown in Table 15 that applies to your operation.

Table 15. Minimum Standards for Nutrient Management Plans

Adequate Storage Capacity

Your nutrient management plan must include specific practices to ensure adequate storage capacity to protect water quality, including provisions to ensure proper operation and maintenance of your storage facilities. Your plan should demonstrate that you are

- ✓ Maintaining enough storage capacity in all of your liquid manure, wastewater, or storm water storage structures to ensure that you are complying with all of your permit requirements.
- ✓ Storing dry manure in production buildings or storage facilities, or otherwise storing it in such a way as to prevent polluted runoff.
- ✓ Providing adequate storage capacity to ensure compliance with your state's technical standards for nutrient management.
- ✓ Ensuring proper operation and maintenance of all manure, wastewater, and storm water storage facilities.
- Storage includes structures like waste ponds, lagoons, tanks (above and below ground), stockpiles, and other structures.

Proper Management of Dead Animals

Your nutrient management plan must describe how you handle and dispose of dead animals in a manner that protects water quality. Common practices include composting, incineration, rendering, and landfill disposal. EPA recommends that you do not bury dead animals in pits because they might contaminate groundwater. You must not put dead animals in any liquid manure, storm water, or process wastewater storage or treatment system unless the system is designed to handle dead animals.

Clean Water Management

Keeping clean storm water away from production areas can reduce the amount of wastewater storage needed. Your plan must describe how you design and implement management practices to divert clean water from the production area, where appropriate. Clean water includes rain falling on the roofs of facilities, runoff from adjacent land, and rainwater from other sources. If you don't prevent clean water from coming into contact with manure or process wastewater, you must collect it in accordance with your permit requirements.

Preventing Your Animals from Contacting Waters of the United States

Your plan must describe how you make sure that animals and manure in the production area don't come into direct contact with waters of the United States. Animals in the production area must not be allowed to stand in waters of the United States.

Proper Chemical Handling

Your plan must show how you handle chemicals and other contaminants. Unused and waste chemicals and other contaminants must not be allowed to enter waste lagoons or other structures for storing manure, litter, or process wastewater, or any storm water storage or treatment system, unless the system is designed to treat the chemicals and other contaminants. Examples of such chemicals are pesticides, hazardous and toxic chemicals, and petroleum products and by-products.

Implementing Conservation Practices to Control Nutrient Loss

Your plan must describe how you develop and implement BMPs to control the runoff of pollutants from your production and land application areas to waters of the United States. These practices may include residue management, conservation crop rotation, grassed waterways, strip cropping, vegetated buffers, riparian buffers, setbacks, terracing, diversions, and other practices that are appropriate for the conditions at your operation.

Testing Manure, Litter, Process Wastewater, and Soil

Your plan must describe the specific methods you use to test the nutrient content of manure, litter, and process wastewater. If you apply manure from your CAFO to the land, your plan must also describe the methods you use to test the soil. Your NPDES permit will tell you how often to test manure, litter, process wastewater, and soil.

Methods for the Land Application of Manure, Litter, and Process Wastewater

If you apply manure, litter, or process wastewater from your CAFO to land areas, your plan must describe the site-specific procedures and practices you will use to ensure appropriate agricultural use of the nutrients in these materials. These procedures should address the rates, timing, and method of land application. Your plan should describe the site-specific conditions that control the amount of nutrients you apply to your land. Site-specific conditions include the results of your nutrient analyses, past nutrient applications, and the soil types in your application fields, as well as terrain, weather conditions, and any other conditions specific to your operation.

Keeping Records

You must keep records that document your nutrient management practices. Your nutrient management plan should describe the kinds of records you will keep to show how you are carrying out and managing the minimum standards described above. (See "What records do I have to keep?" on page 37 of this guide.)

Are there any other requirements for a nutrient management plan?

Your nutrient management plan has to describe the practices at your operation that achieve the discharge limits and specific management practices in your NPDES permit. If the minimum elements described above don't address all of the discharge limits and specific management practices in your permit, you'll have to include the missing elements in your plan.



Covered, temporary poultry litter storage.

The ELG requirements for Large CAFOs require you to implement specific BMPs for the production and land application areas. They also put some conditions on the land application of manure, litter, and process wastewater. Therefore, if you have a Large CAFO, your nutrient management plan must describe how you'll implement, operate, and maintain these BMPs and how you'll meet the land application requirements.

If you operate a Small or Medium CAFO, your NPDES permit will contain any additional requirements for your nutrient management plan. If you do have additional requirements for your nutrient management plan, they will be based on the discharge limits and specific management practices your permitting authority sets in your permit.

When do I have to do a nutrient management plan?

Because nutrient management plans are important tools for helping CAFO operators achieve realistic production goals while minimizing nutrient discharges to surface waters, EPA encourages you to develop and implement your nutrient management plan as soon as you can. The federal NPDES regulation sets the deadlines shown in Table 16 for CAFOs to develop and implement nutrient management plans, but your permitting authority might have earlier deadlines. Be sure to check with your permitting authority to find out what your specific deadlines are.

If I already have a nutrient management plan, do I have to do a new one?

Not necessarily. If the nutrient management plan you've already done meets the requirements in your NPDES permit, you don't have to develop a new one. If your existing plan meets some but not all of the minimum requirements, you may add the missing elements to your existing plan. Any nutrient management plan that includes all the required elements satisfies this NPDES permit condition.

Some CAFO operators might choose to use USDA's CNMP Technical Guidance to develop and

Table 16. Deadlines for developing and implementing nutrient management plans

If you apply for a permit before December 31, 2006:	
If your CAFO is not a new source ^a and your NPDES permit is issued before December 31, 2006	Your deadline will be set by your permitting authority. The deadline will be no later than December 31, 2006.
If your CAFO is not a new source ^a and your NPDES permit is issued after December 31, 2006	Your deadline is the date that you obtain coverage under an NPDES permit.
If your CAFO is a new source ^a	Your deadline is the date that you obtain coverage under an NPDES permit.
If you apply for a permit after December 31, 2006:	
All CAFOs	Your deadline is the date that you obtain coverage under an NPDES permit. You must certify in your NOI or permit application that you already have a nutrient management plan and will implement the plan when your facility begins to operate.

^a For the definition of new source, see "New sources" on page 24 of this guide and the Glossary. The ELGs require new sources to meet the nutrient management plan requirement immediately, no matter when their permits were issued.

implement a CNMP. A CNMP that follows USDA's or your state's guidance and is developed according to your state's technical standards probably meets the NPDES permit requirement for a nutrient management plan as well.

You can find USDA's CNMP Technical Guidance on the Internet at http://policy.nrcs.usda.gov/scripts/lpsiis.dll/H/H_180_600_E_5.htm. Contact your permitting authority, state agricultural agency, conservation district, or Extension Service to find information on your state's technical standards for nutrient management.

How often should I update my nutrient management plan?

You must update your nutrient management plan at least once every 5 years when you reapply for your NPDES permit, but you might need to update your plan more often. Your nutrient management plan should always reflect the current situation at your operation. So, if something changes at your operation that is addressed by your nutrient management plan, you should update your plan to reflect the change. For example, you should update your plan if you increase the number of confined animals or if you change the types of crops you grow or where you apply manure.

Who can write my nutrient management plan?

The federal NPDES regulation doesn't require you to use a certified planner for your nutrient management plan, but EPA does encourage you to work with experts, who can help make sure that your nutrient management plan meets all regulatory requirements and promotes sustainable agriculture. You can work with USDA's NRCS and Cooperative Extension, your state agriculture department, and your permitting authority to find certified specialists to assist with your nutrient management plan. A well-designed nutrient management plan will help you achieve goals and avoid compliance concerns.

Preamble: IV.C.5 [68 FR 7228]

Second special condition for all CAFOs: Duty to maintain permit coverage

Every CAFO operator must maintain coverage under an NPDES permit until the CAFO is properly closed. In general, an operation is considered properly closed based on showing that there is no remaining potential for a discharge of the manure, litter, or process wastewater that was generated while the operation was a CAFO. This condition applies to CAFOs that are closing down and to CAFOs that are downsizing or making other changes so that they will no longer meet the CAFO definition. If you're closing or downsizing your CAFO and your NPDES permit expires before the facility is properly closed or while the facility might still discharge CAFO-generated manure or wastewater, you must reapply for an NPDES permit. Talk to your permitting authority to find out how to comply with this special condition.

Regulation: 40 CFR 122.23(h) [68 FR 7268]
Preamble: IV.C.6 [68 FR 7229]

Additional special condition for Large CAFOs: Transfer of manure, litter, and process wastewater to other persons

If you own or operate a Large CAFO, your NPDES permit will have a special condition for transfers of manure, litter, or process wastewater to other persons.

If you own or operate a Large CAFO and you transfer manure, litter, or process wastewater to other persons, you must

- Give nutrient content information to the recipient.
 If you give away or sell manure, litter, or process wastewater from your Large CAFO, before the transfer you must give the results of your most recent representative nutrient analysis to the person who takes it away.
- Keep records of your transfers. (See "What records do I have to keep?" on page 37 of this guide.)

These requirements apply no matter how much manure you sell or give away or who takes it.

Regulation: 40 CFR 122.42(e)(3) [68 FR 7268]
Preamble: IV.D [68 FR 7230]

What other special conditions might be in my NPDES permit?

Your permitting authority may include special conditions in addition to those described in this guide. Your permitting authority might include special conditions that

- Restrict the application of manure, litter, and process wastewater on frozen, snow-covered, or saturated ground.
- Control discharges to groundwater that is directly connected to surface water.
- Require specific application methods, such as injection of liquid manure.

Always read your NPDES permit to find out exactly what you have to do, and contact your permitting authority if you don't understand something in your permit.

Preamble: IV.C.6 [68 FR 7229]

What are the standard conditions of all NPDES permits?

All NPDES permits contain standard conditions, which include definitions, testing procedures, requirements for keeping records and notifying the permitting authority, penalties for noncompliance, and your responsibilities as an NPDES permitholder. These responsibilities include complying with your permit, meeting deadlines for reapplying when your permit is due to expire, and letting the permitting authority inspect your operation. The standard conditions also require you to notify your permitting authority if certain things happen at your operation. (See "What do I have to report to the permitting authority?" on page 38 of this guide.) Carefully read the standard conditions section of your NPDES permit, and contact your permitting authority if you have any questions.

Regulation: 40 CFR 122.41 [64 FR 68847] (12/8/1999)
Preamble: IV.C.7 [68 FR 7229]

What records do I have to keep?

Your NPDES permit will require you to keep certain records to show that you're complying with the terms of the permit. You must keep all the records on-site at your operation for 5 years, and you must provide them to the permitting authority upon request.



Records must be kept on-site at the CAFO for at least 5 years after they were created.

What are the record-keeping requirements for all CAFOs?

If you own or operate a CAFO of any size, you have to keep at least the following records, as appropriate:

- A copy of your nutrient management plan.
- The results of your manure, litter, and process wastewater sampling and analysis.
- The results of your soil sampling and analysis.
- Records that show how you're implementing your nutrient management plan.

Regulation: 40 CFR 122.42(e)(2) [68 FR 7268]
Preamble: IV.D [68 FR 7230]

EPA recommends that you keep a copy of your permit on-site.

What are the additional record-keeping requirements for all Large CAFOs (including horse, sheep, and duck CAFOs)?

If you own or operate a Large CAFO, you must keep at least the following records of transfers of manure, litter, and process wastewater to other persons:⁶

- The amount of manure, litter, and process wastewater you transferred to other persons (estimated in tons or gallons).
- The date of each transfer.
- The name and address of the recipient(s) of each transfer.

⁶ Remember that in addition to keeping records of manure, litter, and process wastewater transferred to other persons, owners or operators of Large CAFOs must also provide the recipient with information about the nutrient content of the manure, litter, and process wastewater transferred. (See "Additional special condition for Large CAFOs: Transfer of manure, litter, and process wastewater to other persons" on page 36 of this guide.)

What are the additional record-keeping requirements for Large beef, dairy, veal calf, swine, and poultry CAFOs?

If you're the owner or operator of a Large beef, dairy, veal calf, swine, or poultry CAFO, you must also keep records that show that you're complying with the ELG requirements for your production and land application areas, as follows:

- For production areas:
 - ✓ Records of inspections. You must inspect water lines, including drinking water or cooling water lines, once per day, and you must also document these inspections. EPA recommends that CAFOs should be required to document these inspections once per week and also on any day on which they discover a problem. Your permitting authority, however, will make the final decision on how often you must document these inspections.
 - ✓ Weekly records of the depth marker reading for manure and process wastewater in any open liquid storage structures.
 - ✓ Records of anything you do to correct problems that you find. If it takes you longer than 30 days to correct a problem after you find it, you must also keep records of why you could not correct the problem right away.
 - ✓ Records of how you handle and dispose of dead animals.
 - ✓ Records of the design of your manure and litter storage structures. You must include records of
 - Volume for solids accumulation
 - Approximate number of days' worth of storage capacity.
 - Design treatment volume
 - Total design volume.

Your permitting authority may also require you to keep records of the data and information that you used to calculate the total design volume for your storage structures.

- ✓ Records of overflows from your production areas, including the date and time and an estimate of the volume.
- For land application areas:
 - ✓ Your expected crop yields.
 - ✓ The date(s) you applied manure, litter, or process wastewater to each field.

- ✓ What the weather was like from 24 hours before through 24 hours after each time you land applied manure, litter, or process wastewater.
- ✓ How you sampled and analyzed manure, litter, process wastewater, and soil.
- ✓ The results of the manure, litter, process wastewater, and soil analyses.
- ✓ How you calculated your manure, litter, and process wastewater application rates.
- ✓ The calculations you used to decide how much nitrogen and phosphorus to apply to each field.
- ✓ Calculations that show the total amount of nitrogen and phosphorus you actually applied to each field.
- ✓ How you applied manure, litter, and process wastewater to your land.
- ✓ The dates on which you inspected your application equipment.

These are the minimum record-keeping requirements of the federal CAFO regulations. Your permitting authority may require any CAFO (including horse, sheep, and duck CAFOs) to keep additional records based on state regulations or BPJ permit conditions.

Regulation: 40 CFR 412.37 and 412.47 [68 FR 7272 and

Preamble: Sections IV.C.2, IV.C.6, and IV.D [68 FR 7207, 7229, and 72301

What do I have to report to the permitting authority?

Your permit will require you to submit certain reports to your permitting authority, including an annual report and special reports of discharges, changes to your operation, and other information. Read your permit carefully, and contact your permitting authority to find out exactly what you must report.

What do I have to include in my annual report?

Once a year operators of all permitted CAFOs have to send a report to the permitting authority. Your NPDES permit will tell you when the annual report is due and what it must contain. Your annual report must include at least

• The number of animals of each type confined at your operation.

- An estimate of the total amount of manure, litter, and process wastewater that your CAFO generated in the past 12 months.
- An estimate of the total amount of manure, litter, and process wastewater that you transferred to other persons in the past 12 months.
- The total number of land application acres covered by your nutrient management plan.
- The total number of acres that you used for land application of manure, litter, and process wastewater in the past 12 months.
- The dates and times and your estimate of the volumes of all discharges from your production areas in the past 12 months.
- A statement of whether a certified nutrient management planner developed or approved your nutrient management plan. You don't have to use a certified nutrient management planner to develop or approve your plan, but EPA recommends that you do.

Regulation: 40 CFR 122.42(e)(4) [68 FR 7268]
Preamble: IV.D [68 FR 7230]

What else do I have to report?

The standard conditions that apply to all NPDES permits (see "What are the standard conditions of all NPDES permits?" on page 37 of this guide) also include the following reporting requirements:

- Duty to provide information. You must provide any information your permitting authority needs to find out if you are complying with your NPDES permit or to make changes to your permit.
- Signatory and certification requirements. Any applications, reports, or information you submit must be signed and certified. The certification must state that all the information you submit is true and complete to the best of your knowledge. There might be penalties if you knowingly submit false information.
- Planned changes. If you plan to make any changes to your CAFO that will affect your ability to comply with your NPDES permit, you have to notify your permitting authority as soon as possible.
- Anticipated noncompliance. You must notify your permitting authority if you know that something is going to happen at your facility that would cause you to be out of compliance with

- your NPDES permit. Failing to do so could result in penalties.
- Twenty-four-hour reporting. If you have a discharge (or other noncompliance event) at your CAFO that could endanger human health or the environment, you must report it verbally within 24 hours. Within 5 days, you must submit a written statement describing the discharge or noncompliance. Your description must include what caused the discharge, when it started, how long it lasted, what you did to stop the discharge, and how you'll prevent the problem in the future.
- Other noncompliance. You must report all instances of noncompliance that you do not otherwise report. Each report must contain the information described above for twenty-four hour reporting.
- Other information. If you find out that you failed to submit any important facts in your application, or that you submitted incorrect information in your application or other reports, you must submit the correct information right away.

Regulation: 40 CFR 122.41 (h), (k), and (l)(1), (2), (6), (7), and (8)



Terraces, conservation tillage, and conservation buffers save soil and improve water quality.