

**DRAFT
IMPLEMENTATION GUIDANCE
FOR NPDES CAFO PERMITS AND WATER QUALITY
MANAGEMENT PERMITS FOR MANURE STORAGE
FACILITIES**

390-2100-001

Bureau of Watershed Management



COMMONWEALTH OF PENNSYLVANIA

Department of Environmental Protection

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Watershed Management

DOCUMENT NUMBER: 390-2100-001

TITLE: Implementation Guidance for NPDES Concentrated Animal Feeding Operation (CAFO) Permits and Water Quality Management Permits for Manure Storage Facilities

EFFECTIVE DATE: Upon publication of notice as final in the *Pennsylvania Bulletin*.

AUTHORITY: 25 Pa. Code Chapters 91.36 and 92.5a

POLICY: This guidance will be used by Department of Environmental Protection (DEP) regional permitting staff in the review of applications for NPDES CAFO permits and for Water Quality Management permits for manure storage facilities.

PURPOSE: This guidance has been developed to clarify the intent of the October 2005 changes to Chapters 91 and 92 of DEP's regulations regarding agricultural operations that generate or apply manure. The document is intended for use by permit applicants as well as by DEP permit review staff in preparing and reviewing, respectively, NPDES CAFO permits and Water Quality Management permits for manure storage facilities. This guidance, if followed, should improve the completeness of applications and the consistency among permit reviewers in different regions of the Commonwealth.

APPLICABILITY: This guidance applies to agricultural operations that are required to obtain CAFO or Water Quality Management permits.

DISCLAIMER: The policies and procedures outlined in this guidance are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements.

The policies and procedures herein are not an adjudication or a regulation. There is no intent on the part of DEP to give the rules in these policies that weight or deference. This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant.

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Introduction

This implementation guidance has been developed to clarify the intent of the October 2005 changes to Chapters 91 and 92 of DEP's regulations regarding agricultural operations that generate or apply manure. The document is intended for use by permit applicants as well as by DEP permit review staff in preparing and reviewing, respectively, National Pollutant Discharge Elimination System (NPDES) Concentrated Animal Feeding Operation (CAFO) permits and Water Quality Management Permits for manure storage facilities. Use of this guidance should result in more complete applications and more consistent reviews by DEP staff.

The guidance is laid out in four sections. The first section covers changes in the Chapter 91 regulations pertaining to manure storage facilities and land application. The second section covers changes in the Chapter 92 regulations pertaining to CAFOs. The third section provides details on what specifically must be submitted to meet CAFO application requirements. The final section describes additional recommended procedures associated with CAFO and Water Quality Management permits.

I. Significant Changes to Chapter 91 (Manure Management; effective October 22, 2005)

A. Definitions (§91.1)

New definition for “agricultural process wastewater”, including (but not limited to), cleaning wastewaters, milkhhouse wastewaters, overflows from watering systems, and egg wash water. This definition does not include food processing waste such as milk processing wastewater, or slaughterhouse wastes.

Implementation: For the purpose of storage, agricultural process wastewater is now regulated under the Chapter 91 regulations as manure. Agricultural process wastewater can be mixed with manure. Land application of mixtures of manure and process wastewater can be done as manure, provided that the volume and nutrient content of process wastewater is adequately taken into account. Land application of egg wash water will be included in the Nutrient Management Plan (NMP), with the application rates based on nutrient needs of the crops and expressed in gallons per acre.

In addition, the county conservation districts will contact the DEP regional office when an NMP is submitted for an operation that is a CAFO (see page 8, below), and that will give the DEP regional office the opportunity to evaluate other pollutants such as egg wash water or food processing wastes, and the consequent hydraulic loading rates. The DEP regional office should suggest any appropriate additional Best Management Practices (BMPs) to the district for consideration. In the event that these additional BMPs are not incorporated into the approved NMP, special conditions covering these BMPs will typically be included in the DEP permit/approval.

B. Manure Storage Facilities (§91.36(a))

1. Professional Engineer (PE) Certification Requirement (§91.36(a)(2))

All new or expanded manure storage facilities containing liquid or semisolid manure, at all farms must obtain a Water Quality Management (WQM) permit unless the design and construction are certified by a PE as conforming to the “Manure Management Manual” and PA Technical Guide. The owner shall retain a copy of the engineer’s certification. (See Appendix B.)

Implementation: This provision is not new to the program, but is new to the regulations (previously contained in the Manure Management Manual). Consultants should continue to provide copies of engineer’s certifications to farm owners and advise them to retain a copy at the farm in the event that DEP staff requests it.

2. Permit Requirements for Liquid/Semi-Solid Storages (§91.36(a)(4))

From this point forward, any new or expanded liquid or semi-solid manure storage facility (pond or structure) with a capacity of equal to or greater than 2.5 million gallons must be permitted (WQM permit) prior to construction. Any liquid or semi-solid manure storage pond (lined or unlined) with a capacity between 1 and 2.5 million gallons must be permitted prior to construction if

(1) the nearest downgradient stream is High Quality (HQ) or Exceptional Value (EV) under Chapter 93 or (2) the nearest downgradient stream is impaired due to nutrients from agricultural activities. (See Appendix B.)

Implementation: A “manure storage facility” is defined in Chapter 91.1 as “A permanent structure or pond, a portion of a structure or pond, or a group of structures or ponds at one agricultural operation, utilized for the purpose of containing manure or agricultural process wastewater. This includes concrete, metal or other fabricated tanks and underbuilding structures, as well as earthen and synthetically-lined manure storage ponds.”

DEP interprets this definition as any facility that is not conveyance and will store manure (or agricultural process wastewater) for any period of time. Gravity reception pits, lanes, and transfer pipes do not require a WQM permit (although any changes at CAFOs > 1,000 AEUs should be documented through a letter to DEP). This includes “flush systems” in which water is pumped into pits, lanes, or pipes to facilitate gravity conveyance.

However, structures such as a “pull-plug” shallow pit or a pit that receives manure, which is then pumped to a larger storage facility, are considered to be manure storage facilities. As such, the storage volume is to be included when computing the operation’s manure storage capacity. Also, these structures are subject to the requirement to be designed, overseen, and certified by a registered Professional Engineer, regardless of whether or not they require a permit. There are many other possible scenarios regarding storage that cannot be fully accounted for in this guidance. It is best to request a permit determination from DEP prior to beginning work.

For evaluating capacity permitting triggers under Chapter 91, the minimum regulatory required freeboard (6”, 12”, or 24”) is not included for capacity calculations. Regardless of whether or not the farm is a CAFO, a WQM permit is required under the regulations if the manure storage capacity of the proposed storage facility (including the capacity of existing on-site storage facilities) will be at least 2.5 million gallons.

For operations that plan to build a new storage unit, if the total manure storage capacity of the operation (including the capacity of proposed and existing on-site storage units) will be at least 1 million gallons but not more than 2.5 million gallons, consultants should submit a letter requesting a determination on the need for a permit. DEP will make the official interpretation as to whether a proposed storage facility is or is not located in a special protection watershed or in an agricultural-impaired watershed. While all of the information needed to make this determination is generally available to consultants, there are a number of factors that need to be evaluated in tandem. For example, even though a watershed may be designated for Cold Water Fishery in Chapter 93, it may still be considered a special protection watershed if the PA Fish and Boat Commission has designated the watershed as Wild Trout Waters or if DEP has determined that the existing use of the stream (as opposed to the designated use) warrants special protection.

WQM permits continue to be required for liquid or semi-solid manure storage facilities at any CAFO with greater than 1,000 AEUs.

3. Design Criteria for Swine, Poultry, or Veal Calves Storages (§91.36(a)(5))

For new or expanded CAFOs (after April 14, 2003) that house swine, poultry, or veal calves, the manure storage facilities that contain manure from those animal groups must be designed to prevent surface water discharges at the 100-year, 24-hour storm event.

Implementation: At these new or expanded CAFOs, a manure storage facility that receives precipitation and/or runoff will need to be sized for this larger storm event, under the new regulations. If the operation has animal groups other than swine, poultry, or veal calves, and stores that manure separately, the regulations say that that storage unit must be designed for at least the 25-year, 24-hour storm.

4. Freeboard Requirements for Storages (§91.36(a)(6))

If a liquid or semi-solid manure storage facility is exposed to precipitation, it needs to have a minimum of 2 feet of freeboard at CAFOs with greater than 1,000 AEUs. For liquid or semi-solid manure storage facilities that are not exposed to precipitation, a 6-inch minimum freeboard is acceptable. All other liquid or semi-solid manure storage ponds must have a minimum freeboard of 12" and all other liquid or semi-solid storage structures must have a minimum freeboard of 6".

Implementation: The applicant should provide schedules and maximum manure levels in the storage facility to assure adequate freeboard throughout the year will be calculated and provided by the applicant. These schedules and levels are to be consistent with the NMP and the Plan of Operation for the manure storage system.

The applicant's NMP will identify under what conditions and where land application is acceptable in the winter. DEP will use the detailed manure application provisions of the NMP to evaluate winter manure storage capacity. Where appropriate, DEP may include limits on the maximum level of manure in the manure storage facility going into the winter as a special condition in the permit/approval of coverage.

C. Land Application of Manure (§91.36(b))

1. Basic Requirement for All Farms (§91.36(b)(1))

All land application must be conducted in accordance with a plan that includes manure and soil testing and calculation of proper levels of nitrogen and phosphorus, or a WQM permit or DEP approval is required.

Implementation: This regulation is similar to the previous language, except that clarification is provided on the minimum requirements for an acceptable "manure management plan". This basic requirement applies to all farms that land apply

manure. Guidance is contained in the Manure Management Manual (MMM). An approved Nutrient Management Plan (NMP) is one method to comply with this regulation.

2. Setback/Buffer Requirements for CAOs and Importers (§91.36(b)(2))

For all Concentrated Animal Operations (CAOs) and importers of CAO or CAFO manure (including farms receiving brokered manure from CAOs or CAFOs), there shall be no mechanical land application within 100 feet of surface waters, or within 35 feet of surface waters if there is a vegetated buffer.

For these setbacks/buffers, “surface waters” are defined as a perennial or intermittent stream with defined bed and bank, a lake, or a pond, for the purposes of §91.36(b)(2) only. “Vegetated buffers” are defined as permanent strips of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for purposes that include slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential pollutants from leaving the field and reaching surface waters.

Implementation: This subsection helps distinguish between two types of setback/buffer requirements – one for CAOs and importers (from CAOs or CAFOs), and one just for CAFOs. The two types differ in the type of water body that the setback/buffer applies to. Setbacks/buffers for land application at CAFOs apply to “surface waters” as defined in Chapter 92. Setbacks/buffers for CAOs and importers of either CAO or CAFO manure apply to “perennial or intermittent stream with defined bed and bank, a lake, or a pond,” which is a narrower scope than the CAFO home-farm setback/buffer.

The setback/buffer requirement for CAOs and their importers in §91.36(b)(2)(i)-(ii) is a requirement that is administered by the State Conservation Commission (SCC) under the Act 38 program, and found in 25 PA. Code Chapter 83, Subchapter D. §83.301(b) of the Nutrient and Odor Management Regulation which became effective on October 1, 2006, replaced these subsections of the DEP regulations, as specified by the Environmental Quality Board (EQB) when our new regulations were published.

However, DEP will be responsible for setbacks/buffers at CAFO home farms, as described below, and for CAFO importer sites.

3. Setback/Buffer Requirements for CAFOs (§91.36(b)(3))

Setbacks/buffers for CAFOs are specified in §92.5a(e)(1)(i).

Implementation: This is simply a cross-reference to §92.5a(e)(1)(i), and reinforces the distinction in the two types of setbacks/buffers described above. The EQB wanted to have all of the setbacks shown in one place in the regulations, as part of the Agricultural, Communities and Rural Environment (ACRE) negotiations, so they are all listed in §91.36(b). These CAFO setbacks/buffers apply to the home farm only.

II. Significant Changes to Chapter 92 (CAFOs; effective October 22, 2005)

A. CAFO Definition (§92.1)

In addition to the existing criteria of > 1,000 AEUs and CAO > 300 AEUs, the definition of a CAFO includes a new criterion: any agricultural operation defined as a large CAFO under the federal regulations at 40 CFR 122.23. The previous category of operations that have discharges to surface waters in an event less than the 25-year, 24-hour storm has been deleted.

Implementation: Large CAFO thresholds under the federal regulations include: 700 mature dairy cows, whether milked or dry; 1,000 veal calves; 1,000 cattle other than mature dairy cows or veal calves; 2,500 swine each weighing 55 pounds or more; 10,000 swine each weighing less than 55 pounds; 500 horses; 10,000 sheep or lambs; 55,000 turkeys; 30,000 laying hens or broilers, if using a liquid manure handling system; 125,000 chickens (other than laying hens) if using a dry handling system; 82,000 laying hens if using a dry handling system; 30,000 ducks, if using a dry manure handling system; or 5,000 ducks, if using a liquid manure handling system.

B. Other Definitions (§92.1)

New definitions include agricultural process wastewater and vegetated buffer, both identical to Chapter 91.1. In addition, setback is defined as “A specified distance from the top of the bank of surface waters, or potential conduits to surface waters, where manure and agricultural process wastewater may not be land applied. Examples of conduits to surface waters include, but are not limited to: (i) Open tile line intake structures, (ii) Sinkholes, and (iii) Agricultural wellheads.”

Implementation: Setbacks and vegetated buffers are to be identified in the NMP or nutrient balance sheet. The difference between the scope of setbacks/buffers at CAFOs and setbacks/buffers at CAFO importer sites is described above.

Determining setbacks and buffers is not an office exercise. DEP expects that planners will visit all fields anticipated for manure application, not only on the CAFO, but also at any farm importing manure from the CAFO. DEP staff may also visit the farm to evaluate setbacks and buffers during the permit application review.

Buffer and setback areas can continue to be used for crop production and pasturing animals. Under the setback option, nutrients, if needed, will have to be provided by sources other than mechanically applied manure. Pasturing in the setback areas is to be done under a managed system that minimizes stream and stream bank damage and avoids over-grazing of the vegetative cover, under the Chapter 83 program.

If buffer areas are used for crop production or pasturing animals, the farming practices implemented in those areas must meet appropriate specifications and criteria depending on the intended use of the area, under the Chapter 83 program. Under the buffer option, management plans are used for crop and pasture uses in these areas to assure that the

buffer's design capacity to remove sediments and nutrients is maintained. Buffer areas are managed in such a way as to control invasive and noxious plant species.

C. Application Deadlines for Newly Regulated Operations (§92.5a(b), (d))

Dry poultry CAFO operations with more than 500 AEUs were required to apply for a NPDES permit by April 24, 2006. Dry poultry CAFO operations with less than 500 AEUs must apply by January 22, 2007. Other newly regulated CAFO operations, such as horses, or other existing operations that exceed one of the federal threshold numbers, were required to apply by April 24, 2006.

Implementation: DEP expected these **newly regulated** CAFOs to submit their current NMP with their Notice of Intent (NOI) or individual permit application. Unless they have been developed in recent months, these plans will not meet DEP's new regulations, which require setbacks and buffers and phosphorus based plans.

DEP is allowing these operations until April 2007 to comply with the new regulations. For newly regulated facilities, coverage under the general permit or issuance of an individual permit will not be authorized until the buffer/setback and phosphorus based planning requirements have been met.

D. New CAFOs (§92.5a(c))

New operations and existing operations that will become CAFOs due to changes in their operations must apply for an NPDES permit at least 180 days prior to the anticipated commencement of operations or changes to operations, and must obtain the permit prior to actual commencement of operations or changes to operations. New CAFOs, and existing operations that will become CAFOs, must meet the new NMP requirements when they apply for permit/coverage.

Implementation: Self-explanatory.

E. Permit Application/NOI Requirements (§92.5a(e))

CAFO permit applications (including NOIs) must include (1) an NMP for the CAFO which satisfies Chapter 83 and which contains setbacks/buffers for the CAFO and a statement that manure that is stockpiled on-site at the CAFO for 15 days or more will be covered or stored to prevent discharges at the design storm event, (2) an Erosion and Sediment (E&S) Control Plan for the CAFO which meets §102.4, and (3) a preparedness, prevention, and contingency (PPC) plan. Applications must also address how discharges will be prevented from the storage of raw materials such as feed, and any applicable wastewater treatment systems such as those for alternative manure utilization systems.

Implementation: The Chapter 83 regulations were recently revised (see the June 3, 2006 *PA Bulletin*). The SCC is allowing existing CAOs to continue with their current plan until their first three-year review after October 1, 2006. During this review, the plans must be updated to meet the requirements in the revised Chapter 83 regulations.

DEP will allow a somewhat similar transition period for existing CAFOs to meet both the new Chapters 83 and 92 requirements. The current NMP remains acceptable until the earliest of these three events occurs:

- (1) the expiration date is reached for the permit or permit coverage;
- (2) the Act 38 NMP comes up for its three-year review, or
- (3) there is a change to the operation that requires an amendment to the NMP.

When one of these events occurs, the NMP must be updated to comply with the new regulations and a new Notice of Intent for Coverage or Application for an Individual Permit must be submitted to DEP.

Under the new Chapter 83 regulations, new, revised or updated plans accepted as complete by the SCC or conservation districts on or after October 1, 2006 must meet the revised Chapter 83 regulations. Plans developed, updated or revised since May 2004 must be phosphorus-based, based on SCC policy. And, under the revisions to Chapter 91 described above, although plans may not require revision, all CAFOs and their import sites must implement the ACRE setback or buffer requirement beginning January 1, 2006.

DEP expects that E&S/Conservation plans will be submitted for the home CAFO in all cases and for all its importing farms located in EV, HQ and impaired watersheds. The SCC will revise the NMP format to require the watershed designation/classification for all farms importing CAFO manure.

DEP's interpretation of raw material storage includes stockpiles of silage and other feed materials including food waste piles used to feed livestock. Therefore, DEP expects a demonstration as part of the application (for new and existing facilities) that leachate will not enter surface waters at conditions less than the design storm event (25-year or 100-year, 24-hour storm). DEP expects that many Natural Resources Conservation Service (NRCS)-designed leachate "high flow" systems will need to be evaluated at existing farms, and it is possible that more leachate than originally designed must be collected and conveyed to storage facilities or other management practices such as appropriately-sized vegetated filter areas. Engineers should evaluate the appropriateness of existing leachate pump systems to handle peak leachate flows.

III. General and Individual NPDES CAFO Permit Application/NOI Guidance

A. Definition of a CAFO When There Is a Home Farm With Satellite Farms

Often NMPs are prepared for a farm that may have satellite farms a significant distance away from the "home farm", as animals under the same ownership are combined and one integrated NMP is developed. While DEP generally accepts NMPs that have been approved by the SCC and/or delegated districts under the Chapter 83 regulations, certain factors should be considered when preparing the NPDES permit application. If the home farm and satellite farms under similar ownership are on the same or contiguous property, then there is no question that all animals and facilities should be covered under one permit. If the home farm and satellite farms are not on contiguous property, but if manure is managed in an integrated manner (e.g., manure is transferred to a central site or

manure from one farm is land applied on another farm under the same ownership), then the farms can be covered under one permit. If the farms are not contiguous, and if manure is not managed in an integrated manner, then for NPDES permitting purposes, the farms should be treated separately. For questions on the application of this guidance, contact DEP.

B. Requirement to Submit NMP for Individual Permits and General Permits

The application/NOI is incomplete without it and we cannot issue the permit. An incompleteness letter will be sent if the NMP for the home farm is not included with the application.

C. CAFO NMP Coordination Between DEP Permitting Staff and the Conservation District

The SCC and staff have been directed to confer with the regions when reviewing NMPs for CAFOs. This should help get DEP concerns addressed in the NMP before the district approves it. Districts will start publishing receipt of CAFO NMPs and approval of CAFO NMPs in the *PA Bulletin*.

D. Public Notice Procedure

DEP will publish in the *PA Bulletin*, all permits, applications, and NOIs on receipt and when a final determination is made. Newspaper and Act 14 notice will be required for new and expanded operations. Acts 67 and 68 land use reviews will also be required for new CAFOs that require an Individual Permit. (See Appendix A.) The SCC will publish receipt and final action of NMPs for CAFOs in the *PA Bulletin*. (See Appendix A.)

E. Submission Requirements Regarding E&S Plans for Plowing and Tilling

E&S/Conservation plans must be submitted for the home CAFO. DEP expects to receive them also for all its importing farms located in EV, HQ, and impaired watersheds. The standard NMP format will be revised (for CAFO NMPs) to require the watershed designation/classification for all importing farms.

F. Submission Requirements for CAFO With Liquid/Semi-Solid Manure Storage Facility

Constructed after January 29, 2000: Any CAFO (regardless of number of AEUs) with a manure storage facility constructed after January 29, 2000 containing liquid or semi-solid manure must submit a PE certification or copy of a previously submitted PE certification for design and construction as part of the NOI/permit application. Where a manure storage facility built after January 29, 2000 does not have a PE certification for design and construction, the Regional Office can resolve these matters by obtaining a PE certification of structural integrity and, where appropriate, assessing a civil penalty. Note: the new Chapter 83 regulations will not allow for NMP approval without a PE certification for these facilities. (See Appendix B.)

Constructed before January 29, 2000: Any CAFO with more than 1,000 AEUs that has a manure storage facility constructed before 2000 must submit a PE certification for structural integrity. A Department form "Engineer Certification Report for Existing

Manure Storage Facilities” can be used. In addition, any CAFO with more than 1,000 AEUs that has a manure storage facility containing liquid or semi-solid manure must submit a PE certification for structural integrity every five years (usually as part of the CAFO permit renewal). (See Appendix B.)

Any CAFO that has a manure storage facility where evidence of concern exists will usually be asked to submit an acceptable corrective action plan. Evidence of concern includes obvious leaks, discolored seepage, discolored discharge from the leak detection systems, or improper maintenance.

G. Photograph Requirements

Photos are not required, but it is very helpful to include photographs of existing CAFOs with NPDES permit applications. Ideally, photographs should be taken of all facilities and a narrative description included.

IV. Other CAFO and Water Quality Management Permit Guidance

A. Site Investigations

When evaluating locations for manure storage facilities, barns, and other structures, the engineer should examine the “Open File Reports” available through the PA Geological Survey for the presence of known hazardous geologic features. Those features, if present, should be transferred to a site layout plan to demonstrate to DEP that the structures will be located away from the features. It is noted that even if setbacks from hazardous geology are provided, if DEP determines that there is a significant risk to public health or the environment, a detailed subsurface investigation may be required.

B. Pre-Application Site Meetings

DEP encourages CAFO applicants and their consultants to arrange for a pre-application meeting whenever a new or expanded CAFO is proposed. Such meetings allow for a more thorough understanding of the facility on the part of DEP staff, and may expedite the review period in some cases.

C. CAFO Permit Amendments

DEP interprets “changes” to operations as meaning any proposed activity that would trigger an amendment or modification to the NMP, per Chapter 83. For example, a 10% increase in the AEUs per acre value for the operation would trigger the need to amend the NMP and apply for an NPDES permit amendment or submit an NOI for General Permit coverage. Changes that may not involve amending the NMP should nonetheless be discussed with DEP, as DEP may determine that the changes are significant and warrant a permit amendment.

We encourage farms to make contact with DEP well in advance of any proposed modifications to the operation to determine permitting requirements. In general, DEP recommends that letters be submitted that outline the operator’s plans, so that a record

can be placed in the operation's file. DEP will then respond with the permit determination.

D. Manure Treatment Facilities

Proposals to treat manure through a biological or chemical process will be included in the NMP and should be discussed with DEP in the planning stages. Treatment facilities designed to produce an effluent and discharge to surface waters may or may not be approved, depending on a variety of factors. It is therefore important to discuss potential projects in advance before significant investments are made. DEP encourages alternative manure utilization approaches and will seek to expedite the approval process by including effluent limits and other conditions related to the facility in the CAFO permit.

E. Post-Construction Certification Reports

Any time new or expanded manure storage facilities (including pump reception pits, shallow pit facilities, etc.) are constructed at a CAFO, DEP requests that the engineer's post-construction certification report be submitted for the file – regardless of whether a WQM permit was issued for the project or not. Post-construction certifications are not necessary for conveyance systems unless specifically required by DEP.

F. Manure Storage Facilities Expansions That Trigger WQM Permit Requirement

When an agricultural operation (CAFO or non-CAFO) expands the manure storage facility such that it exceeds the regulatory threshold for a WQM permit, the permit application should, and may be required to, include a PE's certification report for any existing unit of the manure storage facility at the operation.

The standard certification form does not specifically require that the engineer certify that the units meet NRCS standards, but rather that they are structurally sound. Nonetheless, in certifying structures that were constructed in 2000 or later, the engineer must consider conformance to NRCS standards as part of the certification.

Engineering reviews of existing structures should involve a full inspection of the interior of pits, tanks, and ponds to check for cracks, seeps, tears, etc. to the maximum extent possible. Therefore, inspections should be coordinated with the farm to take place during periods when facilities are as empty as possible (it is acceptable to submit the permit application prior to completion of the engineer's inspection or certification report, as long as the report is submitted prior to permit issuance). Permits may include requirements for corrective action or maintenance activities for manure storage units.

APPENDIX A

Public Participation Requirements for CAFO NPDES and WQM Permit Applications

| Documentation Type ⁽¹⁾ | General NPDES Permits | | | Individual NPDES Permits ⁽²⁾ | | | WQM Permits ⁽³⁾ |
|--|---|----------------------------------|-------------------------------------|---|----------------------------------|-------------------------------------|----------------------------|
| | New or Expanded Operation | Existing Operation, First Permit | Existing Operation, Permit Renewals | New or Expanded Operation | Existing Operation, First Permit | Existing Operation, Permit Renewals | |
| Act 14 Notifications With Proof of Receipt | √ | √ | | √ | √ | √ | √ |
| Acts 67/68 Land Use Questionnaire ⁽⁴⁾ | | | | √ | | | √ |
| Newspaper Publication (4 Consecutive Weeks) | √ | | | √ | | | √ |
| PA Bulletin Notice – Application Receipt | √ | √ | √ | | | | √ |
| PA Bulletin Notice – Draft Permit | | | | √ | √ | √ | |
| PA Bulletin Notice – Final Action | √ | √ | √ | √ | √ | √ | √ |
| Public Hearing or Meeting | <i>May be held at the public's request for any application and is required by policy for new CAFOs in EV watersheds</i> | | | | | | |

- (1) The permittee is responsible for Act 14 Notifications, Land Use Questionnaire, and Newspaper Publication. DEP is responsible for PA Bulletin Notices and Public Hearings or Meetings.
- (2) EPA does not waive review of individual CAFO permits. EPA must receive a copy of the application, supporting documentation, "fact sheet" and draft permit. EPA has 45 days to comment on draft permits unless it requests a full 90-day review period. PA Bulletin Notices MUST appear in the "New, Expanded, and Non-Waived" section of the publication in descriptive format (not table format).
- (3) If DEP determines that rehabilitation of an existing manure storage facility warrants submission of a WQM Permit application, Act 14 Notifications are required, but the permittee does not need to complete the Land Use Questionnaire or the Newspaper Publication. DEP will issue PA Bulletin Notices upon receipt and after making a final decision.
- (4) The Land Use Questionnaire is contained within the General Information Form (GIF). The Questionnaire should be completed and sent to the municipality where the project is located for the permits identified in the table. Proof of receipt is required.

APPENDIX B

PE Certification and Permit Requirements for Liquid and Semi-Solid Manure Storage Facilities ⁽¹⁾

New Manure Storage Facilities

| Farm Type | Facility Type | PE Certification Requirements | WQM Permit Requirements |
|---------------------|--|--|--|
| Farms > 1,000 AEUs, | All, built after 1/29/2000 | PE must design and certify conformance to plans for WQM Permit (Post-Construction Certification) | WQM Permit required prior to construction |
| All Farms having → | Facility ≥ 2.5 mil. Gal.; or Pond with 1 to 2.5 mil. Gal. if in HQ/EV or Ag-Impaired Watershed ⁽²⁾ , built after 10/22/2005 | | |
| Farms < 1,000 AEUs | All, except those identified immediately above | PE must design and certify conformance to NRCS standards (Post-Construction Certification) | WQM Permit required only where design does not conform to NRCS standards |

CAFO NPDES Permit Application Requirements

| Farm Type | Facility Type | NPDES Permit Application Requirements |
|--------------------|---------------|---|
| CAFOs < 1,000 AEUs | All | PE Post-Construction Certification for facilities constructed after January 29, 2000 A Corrective Action Plan may be required on a site-specific basis ⁽³⁾ |
| CAFOs > 1,000 AEUs | All | PE Post-Construction Certification for facilities constructed after January 29, 2000 PE Certification of Structural Integrity for facilities constructed before January 29, 2000 A Corrective Action Plan may be required on a site-specific basis ⁽³⁾ |

(1) Manure storage facility is defined in Chapter 91.1 as “a permanent structure or pond, a portion of a structure or pond, or a group of structures or ponds at one agricultural operation, utilized for the purpose of containing manure or agricultural process wastewater. This includes concrete, metal or other fabricated tanks and underbuilding structures, as well as earthen and synthetically-lined manure storage ponds.” Runoff collection impoundments and shallow pit concrete structures that are operated as a “pull-plug” system are considered to be part of the manure storage facility.

(2) The volume thresholds include the effective storage capacity (total storage capacity minus required freeboard) of all storage components at the operation. For example, if the operation has 2 million gallons of existing effective storage capacity and proposes a new 0.5 million gallon tank, the tank will require a permit prior to construction. “Ag-Impaired Watershed” means the nearest downstream waters to the proposed manure storage pond that is reported on official listings or by DEP biologists to be impaired due to nutrients related to agricultural activities. For official determinations on permitting requirements, contact DEP.

(3) A Corrective Action Plan (CAP) may be required for any operation if DEP has reason to believe that the manure storage facility is currently causing pollution to waters of the Commonwealth. A PE is not required to prepare the CAP unless DEP requires a WQM Permit for rehabilitation of the facility.