

PART 651 - AGRICULTURAL WASTE MANAGEMENT FIELD HANDBOOK

Chapter 2 – Planning Considerations

PURPOSE

The purpose of this amendment is to establish recommendations and rationale for planning on Animal Feeding Operations (AFOs).

BACKGROUND

NRCS provides financial and technical assistance for AFOs through the Food, Conservation, and Energy Act of 2008 (PL 11-246) to assist farmers and ranchers in complying with regulatory requirements. One of the objectives of the Farm Bill programs is to avoid, to the maximum extent possible, the need for regulatory programs by assisting producers in meeting environmental quality criteria.

Although NRCS has no enforcement or regulatory authority for AFOs, the agency must ensure that the installation of conservation practices is lawful so they can be operated and maintained for the intended purpose through the practice lifespan. A basic understanding of laws and regulations for Confined Animal Feeding Operations (CAFOs) is necessary to provide clarity to the regulated community and achieve consistency in conservation planning.

When Congress passed the Clean Water Act (CWA) in 1972, it introduced the National Pollutant Discharge Elimination System (NPDES) and specifically included CAFOs in the definition of point source pollution. Point sources may not discharge pollutants to surface waters without a NPDES permit.

The NPDES is administered by the Environmental Protection Agency (EPA) in partnership with state environmental agencies and tribes. On June 10, 1974, the EPA delegated authority for the Montana Pollutant Discharge Elimination System (MPDES). MPDES permits are administered by the Department of Environmental Quality (DEQ) to control point source pollution from CAFOs and protect groundwater. No tribes have been authorized to administer the NPDES in Montana.

The State Legislature passed the Montana Water Quality Act in 1975 (MCA Title 75, Chapter 5) and authorized the DEQ to publish the administrative rules for CAFOs (ARM 17.30.1301-1387). Montana Code Annotated (MCA) 75-5-802 adopted the EPA policies, procedures, and definitions published in the Code of Federal Regulations (CFR) Title 40, Parts 122, 123, and 412. The terms “final rule” or “CAFO Final Rule” are often used to reflect EPA regulations in the CFR.

MCA 75-5-802 prevents state CAFO regulations from being more restrictive than the federal regulations. As a result, state regulations can change with court rulings that vacate or change portions of the CFR.

On November 20, 2008, the EPA published a final rule that revised the NPDES permitting requirements and Effluent Limitation Guidelines and Standards for CAFO’s in response to an order issued by the U.S. Court of Appeals for the Second Circuit in *Waterkeeper Alliance et al. v. EPA*.

The 2008 CAFO Rule stated that all CAFO owners or operators that discharge or propose to discharge pollutants had a “duty to apply” for NPDES permit coverage. The final rule called for a case-by-case evaluation by the CAFO operator as to whether the CAFO discharges or proposes to

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discharge from its production area or land application area. 40 CFR 122.23(d)(1) clarified that a CAFO “proposes to discharge” if, based on an objective assessment, it is designed, constructed, operated, or maintained such that a discharge will occur, not simply such that it might occur. The EPA contemplated that the CAFO owner or operator would objectively assess whether a discharge is occurring or will occur for the purpose of seeking permit coverage.

On March 15, 2011, the U.S. Court of Appeals for the Fifth Circuit in *National Pork Producers Council v. EPA* vacated those portions of the 2008 CAFO Rule requiring CAFOs to apply for an NPDES permit if they propose to discharge. The Appeals Court said, “(Previous) cases leave no doubt that there must be an actual discharge into navigable waters to trigger the CWA’s requirements and EPA’s authority.” This decision effectively removed the specific “propose to discharge” requirement in 40 CFR 122.23(d). The EPA’s 2012 CAFO Rule simply states that a CAFO operator has a “duty to apply” for a permit at the time it discharges. The rule became effective on July 30, 2012.

As a result of the 2012 CAFO Rule, regulatory enforcement cannot be based on the speculative risk of discharge, but solely on a discharge or direct evidence of a discharge. The decision to obtain permit coverage prior to a discharge lies squarely on the operator. The rule imposes a “duty to apply” on CAFOs that are discharging, but the Fifth Circuit vacated provisions in the rule that create liability for failing to apply for a permit before the discharge occurs.

NRCS recognizes that some AFO operators still need assistance with discharge risk assessments in order to make good, long-term business decisions with regard to capital investment and financing, particularly as they relate to waste management improvements and permit coverage. Future risk of discharge can be difficult to assess without the application of scientific principles in hydrology, hydraulics, and soils. In some cases, actual discharges can be difficult to recognize without technical assistance. When in doubt, operators may be inclined to avoid costly waste management systems and permit coverage until a discharge actually occurs or is recognized by regulatory authorities.

SCOPE

The scope of NRCS planning is based on a collaborative effort with the DEQ so that NRCS remains in compliance with state laws and within its statutory and administrative authorities. Planning for AFOs is premised on the 9-Step Conservation Planning Process used for other natural resource management systems. However, the quality criteria in this process are established by State and Federal laws and regulations. The NRCS-DEQ collaboration addressed some challenging questions that were used to establish the scope of AFO planning.

- (1) Should NRCS help producers identify AFOs and determine which AFO’s are CAFOs?
- (2) Should NRCS help producers objectively assess their risk of discharge to State waters?
- (3) Should NRCS require NPDES permit coverage for CAFOs as a condition for financial assistance.
- (4) Should NRCS provide financial assistance for waste management systems on new AFOs when laws and regulations for managing point source discharges have been established since 1972?
- (5) Should NRCS determine the size of an AFO?
- (6) Should NRCS provide assistance on partial waste management systems?
- (7) Should NRCS offer a basic interpretation of CAFO laws and regulations to producers?

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RECOMMENDATIONS

The following recommendations were prepared to provide clarity to the regulated community and achieve consistency in AFO planning.

(1) NRCS should help producers identify AFOs and determine which AFOs are CAFOs.

Step (1) in the conservation planning process is to identify problems and opportunities. NRCS should help operators identify whether a facility meets the definition of an AFO and whether the AFO is a CAFO.

Step (2) of the conservation process allows the operator to identify the objectives if a facility meets the definition of an AFO or CAFO. These objectives might seek to limit liability, qualify for operating loans, increase land value, reduce waste management costs, offset nutrient/fertilizer costs, etc. NRCS guides the process so it includes both the operator's needs and the conservation practices that should be applied to meet water quality criteria (established by state and federal regulations) and prevent a discharge of pollutants to State waters.

An AFO is a CAFO if it meets the regulatory definition of a Large or Medium CAFO, 40 CFR Parts 122.23(b)(4) or (6), or has been “designated” as a Small or Medium CAFO by the DEQ or EPA, 40 CFR Part 122.23(c). Guidance for identifying AFOs, and distinguishing AFOs from CAFOs, can be found in the NPDES Permit Writers' Manual for CAFOs, Chapter 2, “AFOs and CAFOs,” February 2012.

(2) NRCS should help producers objectively assess their risk of discharge to State waters. NRCS shall provide producers with a quantitative (model outputs) and qualitative (high, medium, low) recommendation for the risk of discharge both in formal correspondence and on plan drawings.

Steps (3) and (4) of the conservation planning process allows the NRCS to inventory and analyze resource data to further define the operator's problems and opportunities. These steps include an objective risk assessment for discharge to surface and groundwater from production and land application areas using tools such as MontFARM, Montana Environment Technical Note MT-3, and Manure Management Planner (MMP). A comprehensive risk assessment becomes the basis for identifying point source and groundwater pollution, and selecting conservation practices that protect water resources in Steps (5) through (7) of the planning process.

The EPA contemplates that operators will objectively assess their discharge risk from production and land application areas for the purpose of deciding whether to seek NPDES permit coverage. NRCS has the technical capacity to assist operators with this assessment. Discharge risk can be difficult to determine based on waste production, climatic region, precipitation patterns, watershed delineation, runoff computations, vegetative cover, soil infiltration, floodplain delineation, water table fluctuations, facility management, etc. Operators may need a scientific and quantitative risk assessment in order to obtain the degree of certainty necessary to make good business decisions.

The EPA establishes national quality criteria for point source pollution, so the NRCS defers to their guidance. Guidance for inventory and evaluation of feedlots can be found in EPA-833-R-10-006, “Implementation Guidance on CAFO Regulations-CAFOs that Discharge or are Proposing to

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Discharge,” May 28, 2010. The DEQ established state quality criteria for groundwater pollution, so the NRCS defers to their guidance in the ARM and Circular DEQ-9.

(3) NRCS shall not require MPDES permit coverage for CAFOs as a condition for financial assistance.

Exception: MPDES permit coverage shall be required for a proposed waste management system if a variance is warranted under the ARM or Circular-DEQ 9. For example: The DEQ variance process would affect the lawful design of a waste storage facility if it fails to meet the separation distance to bedrock, water table, or well.

NRCS does not have regulatory or enforcement authority to require operators to apply and maintain MPDES permit coverage as a requirement for USDA programs. Issues related to permits, land rights, water rights, and easements are the responsibility of the landowner.

Step (8) of the conservation planning process allows NRCS to provide assistance in implementing a plan to protect State waters. NRCS also provides assistance with the technical descriptions necessary for the operator to secure permits, water/land rights, and easements.

Technical and financial assistance should not be used to leverage operators to seek and maintain MPDES permit coverage because this policy could discourage operators from (a) participating in voluntary USDA programs or (b) taking ownership of environmental quality improvements.

Operators who should apply and maintain permit coverage for a discharge and fail to do so may be subject to enforcement for discharging without a permit. NRCS concludes that this enforcement would not jeopardize the Federal investment in conservation practices that were properly designed and constructed under State/Federal standards to reduce the chance of a discharge to state waters.

(4) Financial assistance should be a low priority for waste management systems on new AFOs established after 2012.

Financial assistance for AFOs should be ranked and prioritized based on an approximation of the operation's size and animal numbers reported or identified on or before 2012. An approximation of animal numbers that existed on or before 2012 may become increasingly difficult to determine. In such cases, NRCS may approximate the animal numbers using 2012 aerial imagery of the feedlot and building areas and a reasonable estimate of stocking density.

If the operator would like to incorporate a livestock or feedlot expansion into the waste management system or relocation for an existing AFO, financial assistance will not be provided on the expanded portion. (Note: This policy allows the full cost of technical assistance, but eliminates financial assistance for expansions that dwarf the identity of the existing operation.)

As time allows, the NRCS should assist operators with the tools available to properly site new AFOs. The NRCS should recommend that operators engage a private consultant to assist with the final site location, layout, and waste management systems because the cost and analysis could be substantial.

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Operators of AFOs constructed after 2012 should be aware of the long-standing laws and regulations established to protect State, Federal, and Tribal waters. The cost and commitment for a waste management system should be part of a new business plan.

NRCS financial assistance should not be used to subsidize the business capital for new operations to meet existing laws and regulations, or provide a safety net for owners and operators who construct new facilities with disregard for existing laws and regulations.

NRCS financial assistance should help producers with waste management systems that bring existing operations into compliance with environmental regulations. Emphasis should be placed on DEQ reports of existing, large operations that do not have adequate waste management systems to meet the basic eligibility criteria for an MPDES General Permit and are in violation of the Montana Water Quality Act. NRCS should prioritize existing operations, many of which are constrained by geographic location and infrastructure where the cost of environmental quality improvements can be prohibitive without Federal assistance.

(5) The scope and size of an AFO shall be determined as follows:

Two or more facilities under the same ownership will be evaluated and treated as one operation unless the facilities;

- 1) use separate and distinct waste handling systems, where
- 2) waste is not co-mingled during application, and
- 3) the facilities are separated by a piece of land under different ownership.

Two facilities separated by a public road are considered adjoined as one operation.

These criteria avoid the subjectivity and inconsistency associated with defining the size of an operation by separation distance and land use.

NRCS defines an operation based on the NPDES Permit Writers' Manual for CAFOs, Chapter 2, "AFOs and CAFOs," February 2012. The scope and size of an AFO must be defined in Step (1) of the planning process in order to (a) conduct CNMP planning on the full scope and extent of the operation, (b) determine program ranking and eligibility, and (c) classify the operation according to the regulatory definitions for Small, Medium, or Large AFO/CAFO's.

(6) The NRCS shall not provide assistance on partial waste management systems, e.g., store or treat waste from a portion of an AFO.

Exception: Installation of a single practice, like a pond cover or an animal mortality composter, would not necessarily constitute a partial system for a water resource concern if these practices are used to address air quality or bio-security. Air quality and bio-security are not required to be addressed in a CNMP.

If a conservation plan includes animal waste storage, treatment, or management, the participant must develop and implement as scheduled, a comprehensive nutrient management plan (CNMP). All associated practices of a CNMP must be implemented to address the resource concerns and insure the system will function properly. Partial systems do not fully address the resource concern and are not defensible in terms of the agency's goals and the public investment.

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For MPDES permit coverage, the CAFO must meet the basic eligibility requirements by providing adequate waste storage/handling/treatment from ALL aspects of the operation. Partial systems are still subject to enforcement, in which case, NRCS may be held accountable by the operator for the cost and prioritization of partial systems.

(7) NRCS planners should have a basic understanding of the laws and regulations that apply to CAFOs and provide clarity to the regulated community and improve consistency in conservation planning. The following interpretations should be adopted by NRCS planners:

Large CAFOs

AFOs are defined as Large CAFOs solely based on the number of confined animals. NRCS recommends that the operators of Large CAFOs apply for MPDES permit coverage on their production and land application areas, regardless of whether conservation practices are installed. NRCS supports permit coverage for Large CAFOs because they have significant potential for environmental harm when manure is not managed properly.

According to 40 CFR 122.23(d), the duty to apply for NDPEs permit coverage is required of all CAFO operators that discharge regardless of the volume or duration of the discharge. The quantity, quality, and significance of the pollutant discharge are not mitigating factors or an exemption for permit coverage.

From a hydrologic perspective, NRCS concedes that all CAFOs with open lots and land application areas will contribute runoff to State waters. Large storms and chronic rainfalls will eventually exceed the initial surface abstraction and soil infiltration rates within a watershed and the resulting runoff will flow into State waters. These conditions can be further exacerbated by factors such as poor vegetative cover, frozen soil conditions, or water table fluctuations. Intermittent, sporadic, even occasional flows to State waters may in fact be the norm for many CAFOs, but they are nonetheless discharges prohibited under the CWA.

NRCS recognizes that not all discharges to State waters are discernible in the ambient runoff from a watershed. In some cases, the source of the discharge may be difficult or impossible to identify by direct or indirect evidence. However, the dilution of pollutants should not be a factor in the objective risk assessment and technical recommendation for permit coverage.

Under the final rule, a Large CAFO with a liquid storage structure or treatment area designed for a 25-year, 24-hour storm is not exempted from permit coverage based on this design standard. This design standard is an eligibility criterion for an MPDES General Permit. Larger storms and chronic rainfall events do occur, and production areas built to the 25-year, 24-hour storm design standard can and do discharge during such precipitation events. A permit is required to authorize a discharge under these circumstances.

Proper operation and maintenance of structures should also be considered as part of the objective assessment of whether to seek permit coverage. Leaks or other system failures unrelated to storm events also require a permit.

Waste management systems for Large CAFOs shall have adequate provisions for storage and transfer such that all waste stream volumes from the facility can be measured, quantified, and

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accounted for in the Nutrient Management Plan. Waste streams include manure, bedding, litter, wash water, stormwater runoff, silage leachate, etc.

Medium AFOs

Operators of medium AFOs are encouraged to take advantage of available technical and financial assistance and eliminate the regulatory conditions that cause their operation to be defined as a CAFO, thus eliminating the need for permit coverage.

As part of the conservation planning process, the NRCS should conduct and document an objective risk assessment for surface water (e.g., MontFARM, MMP) and groundwater (e.g., Environment Technical Note MT-3), including a floodplain analysis. This assessment will be used to evaluate whether a medium AFO is a “significant” contributor of pollutants to State waters. The NRCS believes that the DEQ would support an objective, technical assessment to determine if a significant contribution of pollutants to State waters would occur since this assessment would consider the factors specified in 40 CFR Part 122.23(c)(2).

Examples found in the EPA-NPDES Permit Writers’ Manual for CAFOs (February 2012), Chapter 2, suggest that the EPA does not designate a Medium AFO with open lots as Medium CAFO based solely on the fact that all open lots will contribute runoff to State waters under an inevitable set of hydrologic conditions. These examples show that soil infiltration and distance could prevent a discharge to State waters.

A Vegetated Treatment Area (VTA), designed and constructed to prevent a significant contribution of pollutants to State waters, would not be considered a man-made conveyance that meets the Medium CAFO discharge criteria. A VTA, properly designed and maintained, is a land application area for animal waste. Precipitation-related discharges from land application areas are exempt from permit coverage under 40 CFR Part 122.23(e) and MCA 75-5-317. In addition, Practice Standard 635 “Vegetated Treatment Area” has provisions for controlled “sunny day” releases and end blocks to prevent VTA runoff during winter applications.

A Waste Storage Facility, e.g., pond or tank, is often planned to eliminate the conditions that would cause a Medium AFO to be defined as a Medium CAFO. The buffer area between the storage facility and State waters must be carefully assessed to determine if a “significant” contribution of pollutants to State waters would occur when the storage facility overtops. This assessment might include many of the factors used to decide if a storage facility was necessary, such as runoff rate and volume, proximity to State waters, means of conveyance, topographic storage, soil infiltration rates, etc. In contrast, a storage facility could be considered a man-made device through which a discharge enters State waters if it overtops in close proximity to State waters or into effective conveyance to State waters, thereby requiring a NPDES permit.

Small CAFOs

A Small AFO must be “designated” as a Small CAFO by the DEQ or EPA after an on-site inspection. A Small AFO will be designated as a CAFO if it meets the Small AFO discharge criteria in 40 CFR Part 122, and it is determined to be a significant contributor of pollution to State or Federal waters. On November 12, 2003, a joint meeting was held between the NRCS and DEQ to discuss the definition of “a significant contributor” of pollution. Results of this meeting are

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presented in the National Engineering Handbook (NEH), Part 651, Agricultural Waste Management Field Handbook, Amendment MT-30 (March 2004). The outcome of this meeting was the basis for Level I criteria in Practice Standard 635, Vegetated Treatment Area. NRCS concludes that Small AFOs do not require permit coverage as a significant contributor of pollutants if site conditions meet the Level I criteria in Practice Standard 635 “Vegetated Treatment Area.”

Groundwater Protection

One interpretation of MCA 75-5-605 (below) suggests that an MPDES permit is required if an operator constructs a pond or tank because all storage facilities that meet DEQ-Circular 9 or NRCS standards will discharge (leak) into groundwater. These standards do not specify zero discharge criteria because of the practical limitations in available construction materials. Furthermore, the MPDES General Permit was established to monitor these facilities.

“MCA 75-5-605. Prohibited activity—exemption. (2) Except for the permit exclusions identified in 75-5-401(5), it is unlawful to carry on any of the following activities without a current permit from the department: (a) construct, modify, or operate a disposal system that discharges into any State waters, and (b) construct or use any outlet for the discharge of sewage, industrial waste, or other wastes into any State waters.”

NRCS concedes that Waste Storage Facilities, e.g., ponds and tanks, constructed to DEQ-Circular 9 or NRCS standards should be considered part of a disposal system with a designed leakage rate that could discharge to groundwater. However, NRCS concludes that these discharges do not require groundwater permit coverage if records show that the facilities were designed to State/Federal standards and properly maintained, i.e., maintained within the designed leakage rate and operational controls and do not cause a water quality violation.

This NRCS position is further supported by MCA 75-5-317(j) which states that incidental leakage from a public sewage system that was constructed according to State/Federal guidelines utilizing the best practicable control technology would be considered an insignificant activity.

NRCS does not recognize a “grandfather” provision that would exempt a pond or tank from meeting DEQ-Circular 9 or NRCS standards because the original construction pre-dates those standards. A pond or tank which lacks proper documentation in meeting State/Federal standards should be upgraded, closed, or monitored by permit, to comply with USDA programs.

Land Application Areas

Agricultural stormwater discharges from land application areas can be excluded from the definition of “point source” in Section 504(14) of the CWA. According to 40 CFR 122.23(e), an AFO with no discharges other than precipitation-related runoff from its land application areas would not be considered to “discharge” if it applies waste in accordance with site-specific practices that ensure appropriate agronomic utilization of nutrients. In order for the agricultural stormwater exemption to apply, AFOs must have nutrient management planning documentation on site, at a nearby office, or otherwise make it readily available upon request by DEQ or EPA to support assertions that waste was applied at agronomic rates. If an operator fails to keep these records, the AFO may be defined or designated as a CAFO by the DEQ or EPA.

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REFERENCES

- Clean Water Act of 1972, 33 U.S.C. 1251
- 2012 Final CAFO Rule, 40 CFR Part 122, July 30, 2012
- 2008 Final CAFO Rule, 40 CFR Parts 9, 122, and 412, November 20, 2008
- MCA Title 75, Chapter 5 – Clean Water Act
- ARM 17.30.1304-1330
- NPDES Permit Writers' Manual for CAFOs, Chapter 2, "AFOs and CAFOs," February 2012
- EPA-833-R-10-006, "Implementation Guidance on CAFO Regulations – CAFOs that Discharge or are Proposing to Discharge," May 28, 2010
- Montana Technical Standards for CAFOs – DEQ Circular 9
- NEH, Part 651, AWMFH, Amendment MT-30, March 2004.