

EPA Proposes Revisions to the 2003 CAFO Rule in light of *Waterkeeper*.

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The Second Circuit's decision in ***Waterkeeper v. EPA*, 399 F.3d 486 (2005)** upheld certain challenged provisions of the 2003 rule¹ and vacated or remanded others. EPA's proposed revision responds to the provisions vacated and remanded.

1. Issues Vacated by the Court

(a) Duty to Apply

The court found that the duty to apply, which the Agency had based on a presumption that most CAFOs have at least a potential to **discharge**, was invalid, because the CWA subjects only actual discharges to permitting requirements rather than potential discharges. The CAFO industry organizations argued that the EPA exceeded its statutory authority by requiring all CAFOs to either apply for NPDES permits or demonstrate that they have no potential to **discharge**. The court agreed with the CAFO industry petitioners on this issue and therefore vacated the ``duty to apply'' provision of the 2003 CAFO rule. The court acknowledged EPA's policy considerations for seeking to impose a duty to apply but found that the Agency lacked statutory authority to do so.

(b) Nutrient Management Plans

The environmental organizations argued that the 2003 CAFO rule was unlawful because: (1) The rule empowered permitting authorities to issue permits without any meaningful review of a CAFO's NMP, (2) the rule failed to require that the terms of the nutrient management plan be included in the NPDES permit, and (3) the permitting approach established by the rule violated the Clean Water Act's public participation requirements. The court agreed with the environmental petitioners on these three issues.

The court relied on provisions of the Act that authorize point source discharges only where NPDES permits ``ensure that every **discharge** of pollutants will comply with all applicable effluent limitations and standards,'' citing CWA sections 402(a)(1), (a)(2), and (b). Because the 2003 CAFO rule did not provide for permitting authority review of a CAFO's nutrient management plan before the permit was issued, the court found that the rule did not ensure that each large CAFO's discharges comply with these CWA provisions. In addition, the court found that by not making the NMPs part of the permit and available to the public for review, the 2003 CAFO rule violated public participation requirements in sections 101(e) and 402 of the Act. The court also found that the terms of the NMPs themselves are ``effluent limitations'' as that term is defined in the Act and therefore must be made part of the permit and enforceable as required under CWA sections 301 and 402.

2. Issues Remanded by the Court

The **Waterkeeper** court also remanded other aspects of the CAFO rule to EPA ``for further clarification and analysis,''' as follows:

(a) Water Quality-Based Effluent Limits

The court directed EPA to ``clarify the statutory and evidentiary basis for failing to promulgate water quality-based effluent limitations for discharges other than agricultural stormwater discharges² as that term is defined in 40 CFR 122.23(e),''' and to ``clarify whether States may develop water quality-based effluent limitations on their own.''

(b) New Source Performance Standards--100-Year Storm Standard

The 2003 CAFO rule set the new source performance standards (NSPS) for swine, poultry, and veal CAFOs at a level of zero **discharge**. A CAFO in these categories could fulfill this requirement by showing that either (1) its production area was designed to contain all manure, litter, process wastewater, and precipitation from the 100-year, 24-hour storm, or (2) it would comply with ``voluntary superior environmental performance standards'' based on innovative technologies, under which a **discharge** from the production area would be allowed if it was accompanied by an equivalent or greater reduction in the quantity of pollutants released to other media (e.g., air emissions). The court found that EPA had neither justified in the record nor provided an adequate opportunity for public comment with respect to either of these provisions. As a result, the court remanded these provisions to EPA to clarify, via a process that adequately involves the public, the statutory and evidentiary basis for them.

(c) BCT Effluent Guidelines for Pathogens

The court held that in the 2003 rule EPA had not made an affirmative finding that the BCT-based Effluent Limitations Guidelines (ELGs)--i.e., the ``best conventional technology'' guidelines for conventional pollutants such as fecal coliform--do in fact represent BCT technology. The court remanded this issue to EPA to make such a finding based on the BAT/BPT technologies EPA studied or to establish specific BCT limitations for pathogens based on some other technology.

3. EPA's Response to the Vacated and Remanded Issues:

(a). Duty To Apply for a Permit

To address the court's decision on the duty to apply, EPA is proposing changes to the 2003 CAFO rule in two areas:

Revising the requirement that all CAFOs apply for an NPDES permit; and

Eliminating the procedures for a no potential to **discharge** determination.

EPA also seeks to clarify how unpermitted CAFOs may meet the agricultural stormwater exemption when they land apply manure, litter,

or process wastewater.

The June, 2006 proposed rule would replace the ``duty to apply'' requirement of the 2003 rule with a requirement that all CAFOs that ``**discharge** or propose to **discharge**'' must seek coverage under an NPDES permit. This proposed change would hold CAFO owners and operators to the same ``duty to apply'' requirement as already exists for point sources under 40 CFR 122.21(a)(1).

(b) Producer Considerations

The result of this proposed revision is that only owners and operators of those CAFOs that **discharge** or propose to **discharge** regardless of the volume or duration of the **discharge** except for discharges of agricultural stormwater (see below).

A facility may seek permit coverage by submitting an application for an individual permit or by submitting a notice of intent to be covered by a general permit that has been issued by the permitting authority. Generally, under this proposal, it would be the CAFO's responsibility to decide whether or not to seek permit coverage based on whether they **discharge** or propose to **discharge**. Any CAFO that discharged or proposed to **discharge** and failed to obtain an NPDES permit would be in violation of the NPDES regulatory requirement to seek coverage under an NPDES permit. A facility with an actual **discharge** would also be in violation of the CWA prohibition against discharging without an NPDES permit (33 U.S.C. 1311(a)).

Any **discharge** from a CAFO, even one that is unplanned or accidental, is illegal unless it is authorized by the terms of a permit. Many CAFOs have conditions that may result in a **discharge**. For example, manure structures that are improperly designed or, for other reasons, have insufficient capacity (e.g., due to facility expansion) may **discharge**. In addition, discharges can occur from a properly designed containment structure that is improperly operated and maintained or as a result of precipitation that exceeds the operating capacity of the structure. In the absence of an actual **discharge** or proposed **discharge**, CAFOs with such conditions are not required under the terms of today's proposed rule to obtain an NPDES permit. However, the owner or operator of a CAFO that fails to obtain an NPDES permit and has a **discharge** is subject to State or federal enforcement, as well as liability from citizen suits under CWA Section 505(a).

NPDES permit coverage reduces CAFO operator risk and provides certainty to CAFO operators regarding activities and actions that are necessary to comply with the Clean Water Act. Compliance with the permit acts as a shield against EPA enforcement or citizen suits under CWA Section 402(k). Furthermore, under the 2003 rule, most CAFO NPDES permits will incorporate ELG provisions that allow for **discharge** when precipitation causes an overflow from a structure that is properly designed, constructed, operated, and maintained, in accordance with the applicable design standards. Finally, upset provisions can protect permittees from legal liability when emergencies or natural disasters cause discharges beyond the permittee's reasonable control, as provided in Sec. 122.41(n). This protection is not available to unpermitted CAFOs.

There are many factors a CAFO owner or operator should consider in determining whether to seek permit coverage. For example, if the CAFO is in a flood plain, subject to high annual precipitation, or subject to lengthy rainy seasons, it is likely to have a **discharge** if the CAFO drains to a water of the United States. Other factors likely to result in a **discharge** include runoff from open feed bunkers, field storage, or other stockpiles exposed to precipitation; lagoons that are not sufficiently pumped down for the upcoming winter season; holding of process wastewater for summer irrigation that precludes adequate capacity for chronic rainfalls; and inadequate containment due to unavailability of land for manure, litter, or process wastewater application due to timing constraints associated with, for example, saturated ground or imminent rain. In addition, a **discharge** may occur from land application due to improper maintenance or operation of manure handling equipment that may lead to spills, and application of manure, litter or process wastewater to land in such a way that it does not qualify for the agricultural stormwater exemption.³

*(c) The ``No Potential to **Discharge**'' Determination*

EPA is proposing to delete the regulatory provisions adopted in the 2003 CAFO rule allowing CAFOs to demonstrate that they have no potential to **discharge** and authorizing the Director to make such a determination. 40 CFR 122.23(d)(2) and 122.23(f).

(d) Agricultural Storm Water

The **discharge** of manure, litter, or process wastewater from a land application area under the control of a CAFO is a **discharge** subject to NPDES permit requirements, unless the **discharge** is agricultural stormwater, which is excluded from the meaning of the term ``point source'' under 33 U.S.C. 1362(14). As described in the preamble to the 2003 rule, EPA recognized that manure, litter, or process wastewater applied in accordance with practices designed to ensure appropriate agricultural utilization of nutrients fulfills an important agricultural purpose, namely the fertilization of crops, while reducing the potential for a subsequent **discharge** of pollutants to waters of the U.S. However, EPA also recognized that some runoff may occur during rainfall events even when a CAFO applies manure, litter, or process wastewater in accordance with practices designed to ensure appropriate agricultural utilization of nutrients. EPA believed that the potential for runoff and water quality impairments would be minimized where a CAFO implemented a site-specific NMP in conformance with 40 CFR 122.42(e)(1)(vi)-(ix) and, for Large CAFOs, the additional management practices required in 40 CFR 412.4(c).

In the 2003 rule, EPA promulgated a definition of agricultural stormwater that included compliance with 40 CFR 122.42(e)(1)(vi-ix). The referenced regulatory text includes requirements for edge-of-field buffers, testing of manure and soil, land application at agronomic rates, and record keeping. While not explicitly included in the definition, Large CAFOs were also required under the effluent guidelines to comply with technical standards established by the Director, in accordance with 40 CFR 412.4(c).⁴

EPA is not proposing to change the definition at this time, or requesting comment on such a change. However, EPA is considering requiring explicitly that Large CAFOs that are not permitted because they do not **discharge** or propose to **discharge** comply with the technical standards for land application established by the Director (in addition to meeting the requirements of 40 CFR 122.42(e)(1)(vi-ix)) in order for runoff from their fields to be considered agricultural stormwater (which is exempt from permitting requirements). Even if EPA does not adopt this requirement explicitly, EPA believes that unpermitted Large CAFOs should incorporate the technical standards established by the Director into their NMPs.

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also recommends that small or medium AFOs use nutrient management practices consistent with 40 CFR 122.42(e)(1)(vi-ix) and comply with the applicable technical standards in their land application of manure, litter, or process wastewater. EPA requests comment on this issue.

In EPA's view unpermitted CAFOs that land apply manure, litter, or process wastewater must **document** that they are land applying in accordance with the requirements described above in order to qualify for the statutory exclusion for agricultural stormwater. (See 40 CFR 122.42(e)(1)(ix).) The documentation required includes both the nutrient planning and the additional recordkeeping necessary to demonstrate that the CAFO properly land applied manure, litter, or process wastewater in accordance with 40 CFR 122.42(e)(1)(vi)-(ix), including the technical standards used to translate these requirements into specific land application rates and practices.. Whatever form the **documentation** takes, it **must be maintained on site**. This documentation is crucial in determining whether the CAFO is land applying manure, litter, or process wastewater in a manner that ensures the appropriate agricultural utilization of nutrients and, as a result, is not illegally discharging pollutants from land application areas.

(e) Nutrient Management Plans

(1). Provisions in the 2003 CAFO Rule Affected by the Court Decision

(A) Requirement to Develop and Implement a Nutrient Management Plan

NPDES permits for all CAFOs must include a requirement for the permittee to develop and implement a nutrient management plan. At a minimum, the NMP must include BMPs and procedures necessary to achieve effluent limitations and standards. The plan must, to the extent applicable, include the minimum elements established at 40 CFR 122.42(e)(1)(i)-(ix). For Large CAFOs in the cattle, swine, poultry, and veal subcategories, the NMP must also meet the more detailed requirements in the Part 412 effluent limitations guidelines. For Small and Medium CAFOs, or other operations not otherwise subject to Part 412 requirements for land application, the required elements of a nutrient management plan would be further specified in the permit based on the best professional judgment (BPJ) of the permitting

authority.⁵

In this Proposal

EPA is proposing regulatory revisions to the 2003 CAFO rule and other provisions of the NPDES regulations to provide for:

1) Receipt and review of the nutrient management plan by the permitting authority prior to issuing an individual permit or granting coverage under a general permit;

2) Procedures to provide opportunity for adequate public participation prior to issuing an individual permit or granting coverage under a general permit; and

3) Incorporation of the terms of the nutrient management plan into the NPDES permit.

EPA devoted particular attention to the process for issuance of general permits, because most CAFOs are expected to be covered by general permits and the individual permitting process

already allows for review of NMPs by the permitting authority, public review of an NMP as part of the individual permit application process, and incorporation of the terms of the NMP into the individual permit consistent with the CWA.

EPA also proposes a process to address changes to the NMP once permit coverage is granted, for both individual and general permits. To effectuate these changes, EPA is proposing regulatory revisions to 40 CFR 122.21, 122.23, 122.28, 122.42, 122.62, and 122.63.

EPA's discussion is divided into six sections to separately address each of the following issues:

- i) CAFO permit application and notice of intent requirements;
- ii) Procedures for permitting authority review;
- iii) Procedures for public review and comment;
- iv) Incorporation of nutrient management plan terms in NPDES permits;
- v) Changes to nutrient management plans; and

(i) CAFO Permit Application or Notice of Intent Requirements for Nutrient Management Plans

EPA is proposing to revise 40 CFR 122.21(i)(1)(x) to require the applicant to submit, as part of its permit application or notice of intent (NOI), a nutrient management plan developed in accordance with the provisions of 40 CFR 122.42(e)(1) and 40 CFR 412.4(c)(1), as applicable. This proposed change would be codified in the section of the regulations applicable to individual permit applications (40 CFR 122.21(i)(1)), and would also apply to notices of intent to be covered by a general permit, because 40 CFR 122.28(b)(2)(ii), the regulation governing notices of intent for general permits, incorporates the requirements of 40 CFR 122.21(i)(1) by reference.

The proposed revisions would not change the required contents of the NMP, but would now require CAFOs to submit the plan with the application or the notice of intent rather than only at the request of the Director. The permitting authority would then make the nutrient management plan available for review prior to developing an individual permit or providing coverage under an NPDES general permit.

(ii) Procedures for Permitting Authority Review

Once the permitting authority receives an application or an NOI from a CAFO seeking permit coverage, it would be the responsibility of the permitting authority to review the application or NOI to ensure that the nutrient management plan meets the requirements of 40 CFR 122.42(e)(1) and, for Large CAFOs, the applicable requirements of 40 CFR 412.4(c). As part of that process, the Director would review the NMP for completeness and sufficiency.

For individual permits, the NMP would be submitted and reviewed as part of the permit application. The decision-making procedures in 40 CFR Part 124 continue to apply to the Director's review of the application, which now would include the NMP. Part 124 requires review of the completeness and sufficiency of the permit, includes an opportunity for the CAFO to modify the plan or provide additional information to the permitting authority, and provides for a final decision by the Director after an opportunity for public comment and a public hearing.

EPA is proposing new regulatory provisions to establish permitting authority review of NMPs for CAFO general permits. These procedures are in the proposed new Paragraph (d) to be added to 40 CFR 122.28.

Proposed 40 CFR 122.28(d) would require the Director to review the NMP submitted with the NOI and to take appropriate steps to ensure that the NMP meets the requirements of the regulations. If upon review the permitting authority determines that additional information is necessary to complete the notice of intent or clarify, modify, or supplement previously submitted material, the Director would notify the CAFO owner or operator and request the appropriate information be provided. When the NOI is complete the permitting authority would notify the public of its receipt and of the terms of the nutrient management plan proposed to be incorporated into the existing general permit as terms and conditions applicable to that CAFO. Following an opportunity for public comment and public hearing, the permitting authority would decide whether to authorize coverage under the general permit and incorporate the terms of the NMP into the general permit for that CAFO.⁶

(iii) Procedures for Public Participation Prior to Permit Coverage

Because the NMP would be part of the individual permit application, it would be subject to existing regulations requiring public participation, including the requirement for public notice (40 CFR 124.10) and the opportunity for the public to provide comments and request a public hearing (40 CFR 124.11). Because

of the proposed regulatory change requiring nutrient management plans to be submitted with the permit application (see discussion at II.B.3.i.; 40 CFR 122.21 and 122.28), the public would have access to the nutrient management plan prior to permit issuance and would also have full opportunity to comment on the adequacy of the plan and on the nutrient management terms and conditions of the draft NPDES permit developed for the specific CAFO facility.

The general permit issuance process differs from the individual permitting process discussed above in the way in which a permit is developed and the means by which individual facilities obtain coverage under the permit. A general permit is developed by the permitting authority to cover multiple facilities without the need to receive individual permit applications from facilities in advance of the development of the permit. Once the draft general permit is developed, the public (including potential future permittees) is provided the opportunity to review the permit, submit comments, and request a hearing. After considering any comments submitted, the permitting authority then finalizes the general permit. Once the final general permit is issued, facilities may submit a notice of intent (NOI) seeking coverage under the permit. Typically, the permitting authority then grants coverage, without the need for further public notice and comment, or requires the facility to seek coverage under an individual permit.

(iv.) Incorporation of Nutrient Management plan terms in NPDES permits

Following the **Waterkeeper** decision, general permits for CAFOs must be modified, once issued, to include the terms of an NMP applicable to a specific CAFO. Moreover, **Waterkeeper** requires that the public have an opportunity to comment on the incorporation of NMP requirements into the permit. Thus, a second round of public notice and comment is necessary when providing coverage for CAFOs under a general permit. There is no provision in the existing regulations that explicitly addresses incorporation of site-specific requirements into a general permit when a CAFO seeks coverage or any additional public process for such incorporation.

EPA now proposes to establish new procedures applicable to the general permitting process that would allow the incorporation of the site-specific NMPs into CAFO general permits and provide an opportunity for public review of a CAFO's NOI (including the entire NMP) before the CAFO receives coverage under a general permit. The proposed procedures would also allow the public to review and comment on those terms of the nutrient management plan to be incorporated into the permit, and to request a public hearing before a CAFO receives coverage under a general permit. The discussion that follows describes the process for public participation that EPA is proposing. Further discussion of incorporation of the terms of the NMP into the general permit is provided below in section III.B.3.d of this preamble.

Proposed Sec. 122.28(d) would provide specific procedures for public participation. The proposed rule would require that, for each facility submitting a completed NOI, the permitting authority must notify the public of the following: (1) That it has received a complete NOI; (2) that the permitting authority is proposing to allow coverage

under the general permit; and (3) that the nutrient management plan is available for public review, along with the terms of the nutrient management plan proposed to be incorporated into the permit by the permitting authority.

The permitting authority has discretion as to how best to provide such public notification in the general permit context. For example, public notification could be provided on the permitting authority's web page or through other electronic means. Another alternative would be to use the notice or fact sheet for the general permit to establish a procedure allowing any person to request notice by mail or electronically of the receipt of an NOI, the permitting authority's proposed action, and the terms of the nutrient management plan proposed to be incorporated into the permit. EPA believes that these are appropriate ways to balance the competing concerns of providing adequate notification to the public, providing flexibility to the permitting authority, and ensuring the practicality of general permits. The

permitting authority should describe the process to be used to give the public notice of and comment opportunities on site-specific NMPs in the draft and final general permit to ensure meaningful public participation.

The Director would also have discretion to establish an appropriate period of time for public review of the NOI and proposed permit conditions incorporating the terms of the NMP into the permit. Factors to consider might include the number of NOIs being publicly noticed at any one time, the complexity of the material made available for public review, expected level of public interest based on prior notices of CAFOs seeking coverage, the relative availability of NOIs to the public (e.g., on the internet), the opportunity for the public to extend the comment period for one or more facilities, and whether individuals can request and receive individual notification of CAFOs seeking coverage in a timely fashion. Because this proposal would not mandate a 30-day public notice period as currently required in 40 CFR 124.10, EPA would require that the Director establish a time frame for public review by regulation or propose the time frame for public notice in the draft general permit and include it as a provision in the final permit. This would allow the public and other interested parties an opportunity to comment on the sufficiency of the time allotted for public notice. EPA solicits comment on this approach, as well as on fixed minimum time frames for public review, such as 7 days, 15 days, 21 days, and 30 days.

The Director would also have to provide an opportunity for the public to request a hearing. EPA further proposes that the procedures for requesting and holding a hearing on the terms of the NMP to be incorporated into the general permit would be the same as those for draft individual permits, which are provided in Sec. Sec. 124.11 through 124.13. When granting permit coverage, the permitting authority would be required to respond to all significant public comments.

Under this proposal, incorporation of the terms of a particular CAFO's NMP into a general permit would not be a permit modification subject to 40 CFR 122.62. Rather, EPA views this as an extension of the

CAFO general permitting process itself.

EPA seeks comment on today's proposed process for incorporation of the terms of a CAFO's NMP into NPDES permits. EPA specifically seeks comment from States on the workload implications of requiring the permitting authority to respond to all significant comments on each individual CAFO's NOI (including the NMP) and the terms of the NMP to be incorporated into the permit.

(v.) Changes to Nutrient Management Plans

Agricultural operations sometimes modify their nutrient management and farming practices as a normal part of their operations, and because such alterations may require changes to NMPs after a permit is issued, EPA is proposing a permit revision process to specifically address these circumstances.

The Agency does not, however, believe that such a process is necessary for all operating changes at a CAFO. Routine changes at a facility should not require changes to the NMP itself because of the way NMPs are developed. Nutrient management plans are dynamic documents and are developed to accommodate routine variations, for example changes resulting from anticipated crop rotation or climatic variability inherent in agricultural operations, as well as changes in numbers of animals and volume of manure, litter or process wastewater resulting from normal fluctuations or a facility's planned expansion.

EPA encourages CAFO operators to develop, at the outset, NMPs that thoughtfully anticipate, to the extent feasible, all contingencies and changes in operations that may occur over the term of the permit.

EPA is proposing formal public notice and comment procedures that the permitting authority would be required to follow for permit modification when a CAFO is seeking to make substantial changes to its NMP. EPA is proposing that **substantial** changes would include, but are not limited to: (1) Changes that could result in an increase in runoff of manure, litter, or process wastewater from the facility; (2) an increase in the rate of nutrients from manure, litter, or process wastewater applied to the land application area that is *significant* in relation to technical standards established by the Director; (3) a *significant* change in the nutrient balance at the CAFO caused by: (i) An increase in the ratio of animals, manure, litter, or process wastewater to the available land application acreage or storage capacity; (ii) changes in the CAFO's procedures for handling, storage, treatment, or land application of manure, litter, or process wastewater; (iii) a *significant* increase in the number of animals; or (iv) a *significant* reduction of manure, litter, or process wastewater hauled off site when there is no equivalent decrease in the amount of manure, litter, or process wastewater produced; and (4) the addition of land application areas not previously included in the nutrient management plan.⁷

For these types of changes, EPA is proposing to create new procedures in 40 CFR 122.42(e)(5) to allow CAFOs to change their nutrient management plans after the Director has incorporated the terms of the NMP into the permit. These procedures, which would be available to CAFOs operating under both individual and general permits, would be nearly identical to those for CAFOs seeking coverage in the first

place. The Agency believes that such a process satisfies the need for the permitting authority and the public to have ample opportunity to review and comment on changes to a facility's NMP, while allowing the CAFO the flexibility it needs.

The June, 2006 proposal (see proposed 40 CFR 122.42(e)(5)) would require that, whenever a CAFO makes any change to its NMP, the owner or operator would provide the Director with the revised NMP and identify the changes from the previous version submitted to the permitting authority. The Director would then review the changes to ensure that the NMP still meets the requirements of 40 CFR 122.42(e)(1)(i) through (x) and, for Large CAFOs, 40 CFR 412.4(c) and technical standards developed by the Director. If the changes are not substantial, the Director would simply modify the permit as necessary and notify the public of such modification (and not seek public comment). If the changes are substantial, the nutrient management plan would be revised using procedures similar to those proposed for the initial incorporation of an NMP into a general permit. Thus, today's proposed rule would require the Director to notify the public of substantial changes, and provide an opportunity for public notice and comment. Moreover, the appeals process would be the same as that for incorporation of NMPs into a general permit. EPA solicits comment on the approach proposed to deal with NMP revisions, as well as on the conditions concerning what constitutes a substantial change to an NMP.

Because the process in 40 CFR 122.42(e)(5) would allow for public review of changes to the terms of nutrient management plans and the underlying data and calculations, EPA proposes that the incorporation of changes to the permit through this process would be treated as a minor permit modification, under Sec. 122.63(h), and not require additional review.

For substantial changes, the Agency also proposes to expressly allow the facility, at the Director's discretion, to proceed in implementing the change for up to 180 days before completion of public review and permitting authority approval, so long as the change is not likely to result in increased runoff of manure, litter or process wastewater from the facility. Given the importance of timing in farming, EPA recognizes that CAFOs may be unable to delay the implementation of a substantial change to their nutrient management plan to allow for public review and still implement the change in a timely fashion.

EPA believes that it would be reasonable to allow the Director to temporarily allow substantial changes so long as certain conditions are met. First, the approval would be temporary, allowing the CAFO to implement the changes for only 180 days. Second, the facility would need to provide to the Director documentation to demonstrate that the change would not result in increased runoff of manure, litter, or process wastewater from the facility. Third, the Director would have to review the documentation and conclude that the changes would not result in increased runoff of manure, litter, or process wastewater from the facility. Finally, the Director would have to include such expedited

decisions with the permit in the public record and notify the public of its decision. Moreover, by the end of the 180 day

period, these changes would need to undergo the public review procedures required for all substantial changes and be incorporated into the CAFO's permit by the Director. Changes EPA intends to encompass within this provision include the addition of new fields for land application where the Director determines that such additional or replacement fields have equivalent phosphorous ratings (based on the Phosphorous Index, for example) for nutrient uptake as the fields they are supplementing or replacing, whichever may be the case. EPA is interested in commenters' views concerning this proposed provision. EPA specifically solicits comment on whether a change that would result in increased rates of land application of manure, litter, or process wastewater in addition to those changes likely to result in increased runoff, should also be precluded from expedited implementation during the 180 day period.

(f) Remand Issues: Water Quality Based Effluent Limitations

Water quality-based effluent limitations (WQBELs) are one of two fundamental types of limitations imposed in NPDES permits. The other is technology-based limitations. Technology-based limitations are required in all NPDES permits, unless the permit writer imposes more stringent WQBELs in the permit where necessary to ensure that water quality standards are attained in the receiving waters. (See CWA Section 301(b)(1)(c), 33 U.S.C. 1311(b)(1)(c), and 40 CFR 122.44(d).) Where WQBELs are necessary, the permit writer establishes them without consideration of the availability or effectiveness of treatment technologies or the costs that dischargers would incur to meet those water quality-based limits. (See *Arkansas v. Oklahoma*, 112 S.Ct. 1046, 1054 (1992); *Westvaco v. EPA*, 899 F.2d 1383 (4th Cir. 1990).)

The environmental petitioners claimed that the 2003 CAFO rule violated both the Clean Water Act and the Administrative Procedure Act because it failed to promulgate WQBELs for CAFO discharges and also barred States from doing so. The Second Circuit agreed in part with this claim, as described in Section II.D.3 above, and remanded this issue to EPA for further clarification.

(1). *The Application of WQBELs to CAFO Discharges Under the 2003 CAFO Rule.*

How WQBELs apply to a CAFO's land application runoff is different from how they apply to discharges from a CAFO's production areas, as explained below.

(A) *Land Application Discharges*

In the 2003 CAFO rule, EPA found that where a CAFO applies manure, litter, or process wastewater to its fields, the resulting discharges from those fields are regulated by the Clean Water Act as point source discharges except where they qualify as agricultural stormwater. EPA determined that land application discharges qualify as agricultural

stormwater only where manure, litter, or process wastewater has been applied in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater, as specified in Sec. 122.42 (e)(1)(vi)-(ix). (See 40 CFR 122.23(e).) Where a CAFO has not followed such practices, EPA concluded that any resulting precipitation-related **discharge** was not intended by Congress to be excluded from the Act as agricultural stormwater and is therefore subject to NPDES requirements.

A CAFO that follows the requirements in the 2003 rule eliminates all precipitation-related point source discharges from its land application fields. While physically there may still be some runoff from the fields related to precipitation, the CAFO has no **discharge** of regulated precipitation-related runoff, since any remaining precipitation runoff is agricultural stormwater.

Because the CAFO effluent guidelines--the technology-based regulations--already prohibit all precipitation-related land application discharges that are subject to regulation, EPA noted in the 2003 rule that it is not possible for a CAFO permit writer to add any other permit limitations on these discharges that are more stringent than the CAFO effluent guidelines, including any water quality-based limitations. (See 68 FR at 7198.) Only discharges of agricultural stormwater, which are nonpoint source discharges, remain.⁸

(B) Production Area Discharges

In contrast to precipitation-related land application discharges, under the 2003 rule, WQBELs can be applied by permit writers in appropriate cases to further limit discharges from CAFO production areas (except for new source CAFOs in the swine and poultry sector). WQBELs can be imposed on these production area discharges, where appropriate, because the effluent guidelines do not, by themselves, prohibit all ``regulatable'' discharges from the production area. The effluent guidelines allow occasional overflow discharges from properly designed, operated, and maintained lagoons and storage ponds. It is possible that WQBELs might be necessary in a particular permit to further limit these discharges beyond the levels that are authorized under the CAFO effluent guidelines. It should also be noted that the exclusion for agricultural stormwater does not apply to discharges from the CAFO production area, as EPA stated in the 2003 rule. (See 40 CFR 122.23(e) and 68 FR 7198). Thus, the agricultural stormwater exclusion does not serve to limit how WQBELs may be imposed to control production area discharges.

For new source CAFOs in the swine and poultry sectors, however, no WQBELs can be imposed in permits for the production areas. This is because the effluent guidelines already prohibit all production area discharges from these new sources. (See 40 CFR 412.46(a).)

(g). Remand Issue: New Source Performance Standard for Swine, Poultry, and Veal calf Operations.

After considering the Court's position EPA proposes to delete section 412.46(a)(1) thereby eliminating the opportunity for CAFO's to meet the no discharge requirement through the use of a 100 year, 24 hour containment structure. All discharges of manure, litter, and process wastewater would be prohibited from the production area for such enterprises. The land application requirements would remain unchanged.

(h). Remand Issues: Pathogens for BCT

(1). The BCT Provisions in the 2003 CAFO Rule?

The CWA requires compliance with progressively more stringent technology-based limitations. The Act requires existing point sources to comply with limitations achievable by application of the **``best practicable control technology presently available''** or **``BPT.''** These limitations control conventional, priority, and/or non-conventional pollutants, and are typically based on the average pollutant removal performance of the best facilities examined by EPA. EPA also bases limitations on the **discharge** of toxic or non-conventional pollutants on the **``best available technology economically achievable,''** or **``BAT.''** The 1977 amendments to the CWA required EPA to identify effluent reduction levels for conventional pollutants associated with **``best conventional pollutant control technology''** or **``BCT''** for discharges from existing industrial point sources. BCT is not an additional limitation, but replaces BAT for control of conventional pollutants. Effluent limitations based on BCT may not be less stringent than the limitations based on BPT. Thus, BPT effluent limitations are a **``floor''** below which BCT effluent limitations cannot be established. Section 304(a)(4) designates the following as conventional pollutants: biochemical oxygen demand (BOD), total suspended solids (TSS), fecal coliform (FC), pH, and any additional pollutants defined by the Administrator as conventional. The Administrator designated oil and grease as an additional conventional pollutant, on July 30, 1979 (44 FR 44501).

The Clean Water Act Amendments that created BCT specify that the cost associated with BCT effluent limitations be **``reasonable''** with respect to the effluent reductions. Accordingly, a **``BCT Methodology''** was developed to answer the question of whether it is **``cost-reasonable''** for industry to control conventional pollutants at a level more stringent than already required by BPT effluent limitations.

The crux of the methodology was a comparison of the costs of removing conventional pollutants for a candidate BCT technology within a particular industry segment, to the costs of removal for an average-sized publicly owned treatment works (POTW). EPA proposed a revised BCT methodology in 1982 (47 FR 49176) that addressed the industry cost-effectiveness test (the **``second''** test). EPA proposed to base the POTW benchmark on model plant costs in a 1984 notice (49 FR 37046). The final BCT methodology was published on July 9, 1986 (51 FR 24974), maintaining the basic approach of the 1982 proposed BCT methodology and adopting the use of the new POTW data.

In the 2003 CAFO rule, EPA established BPT-based effluent

limitation guidelines or ``ELGs'' for large beef, dairy, veal, swine, and poultry CAFOs. These effluent limitation guidelines prohibit the **discharge** of manure, litter, or process wastewater into waters of the U.S. from the production areas at the CAFOs. (40 CFR 412.31(a).) However, when precipitation causes a **discharge** of manure, litter, or process wastewater, this may be allowed provided certain conditions are met. (40 CFR 412.31(a)(1).) In order to qualify for this allowance, the CAFO must have a properly designed and constructed storage structure with the capacity to contain all manure, litter, and process wastewater and the runoff and direct precipitation from a 25-year, 24-hour rainfall event. (40 CFR 412.31(a)(1)(i).) In addition, the CAFO's production area must be operated in accordance with specified best management practices (BMPs). (40 CFR 412.31(a)(1)(ii).) The rule also established other BMPs governing CAFO wastes applied to land under the control of the CAFO. (40 CFR 412.4.) EPA estimated that the ELGs will achieve significant reductions in the annual water pollutant load from Large CAFOs nationwide, including 155 million pounds of nutrients (e.g., nitrogen and phosphorus), over two billion pounds of sediments, and a 46 percent reduction in discharges of pathogens including fecal coliform. (68 FR 7239, Table 7.2.)

In establishing the ELGs in the 2003 rulemaking, EPA also considered reductions in conventional pollutants, including BOD, fecal coliform, and TSS. However, it was difficult for EPA to assess fecal coliform loadings and reductions because they vary greatly depending on site characteristics.⁹

The Second Circuit Court of Appeals view, the 2003 CAFO rule violated the Clean Water Act because EPA did not make an affirmative finding that the BCT-based ELGs adopted in the CAFO rule do in fact represent the best conventional pollutant control technology for reducing pathogens--specifically, fecal coliform. The court noted that EPA may well determine that the ELGs otherwise adopted by the CAFO rule do in fact represent the best conventional pollutant control technology for reducing pathogens. The court further noted that EPA may determine, after considering all the relevant factors, that the ELGs otherwise adopted by the 2003 CAFO rule will directly--not just incidentally--reduce pathogens and do so better than any other pollutant control technology.

In the June, 2006 proposed revision, EPA finds that the BCT-based ELGs adopted in the 2003 CAFO rule do in fact represent the best conventional pollutant control technology for removal of pathogens, including fecal coliform.

First, EPA discusses its evaluation of various candidate technologies to assess whether they are technologically feasible for facilities in a subcategory and would achieve greater reductions of fecal coliform than the technologies selected as the basis for BPT limitations in the 2003 rule. Specifically, EPA presents pathogen reductions associated with technology Options 3, 5, 6 and 7 described in endnote 9, below. EPA notes that these regulatory options are discussed here even though EPA has already determined these options are either not technologically feasible or not economically achievable, because these options may provide more reductions of pathogens than the option

selected for the final 2003 CAFO ELGs. EPA did not consider Options 1 and 4 because they do not provide any further pollutant reductions over the final selected Option 2.

Today, EPA also presents additional candidate technologies for pathogen reductions: Fluidized bed incinerators; composting for poultry; chemical addition for disinfection; and additional storage to comply with a national prohibition of land application to frozen, saturated, or snow-covered ground (Option 7) for the swine industry (Option 7 for the beef and dairy industries was already presented in 2003).

Second, today's proposal provides results of the BCT cost-reasonableness test for the candidate technology options. *EPA finds that none of these candidate technologies would pass either part of the BCT cost test.* Therefore, EPA has concluded that any combination of these technologies developed into a regulatory option for a subcategory would also not pass the BCT cost test. Finally, because the traditional BCT cost test has been based on pollutants other than fecal coliform, today's proposal presents an approach to conducting the POTW cost test for CAFOs that explicitly addresses fecal coliform. Today's notice presents the results of applying this cost test to the candidate BCT technology options considered for CAFOs. *None of the candidate technology options would pass the alternative BCT cost test.*

(2) What BCT Limitations Are Proposed Today?

EPA found that the primary sources of discharges from CAFOs were production area overflows due to inadequate operation and maintenance of the infrastructure for containing and transporting liquid manure and wastewater, and discharges from the application area due to agriculturally improper application of manure, litter, and process wastewater. EPA previously concluded that the BPT standards requiring operation, maintenance, and record-keeping BMPs along with no **discharge** from the production area, and land application BMPs that require appropriate agricultural utilization of manure, litter, and process wastewater, significantly reduce water pollutant discharges, including pathogen loads.

The technologies already evaluated by EPA generally show high removals (99 percent) of conventional pollutants. In order to pass the cost-reasonableness test, EPA believes any additional candidate technologies would need to show similar pollutant removals and significantly lower costs. EPA is also aware of technologies that may, on a site-specific basis, be used to provide further reductions of conventional pollutants. However, EPA's record shows these other technologies are not available engineering alternatives for most CAFOs, and they are therefore not technologically feasible candidates. (See Chapter 8 of the TDD and the docket accompanying today's proposal for descriptions of these additional technologies.) EPA further assumes variations of the technologies evaluated today (for example, plug-flow or complete mix anaerobic digesters versus activated sludge systems) will have comparable or higher costs and comparable pollutant reductions. Therefore, EPA concludes that variations of the candidate technologies evaluated today will not pass the cost

In summary, if any candidate technologies are feasible and pass both the POTW and the industry cost test, then the most stringent technology option among them becomes the basis for setting BCT effluent limitations. Alternatively, if no candidate technology more stringent than BPT passes, then BCT effluent limitations are set equal to BPT effluent limitations. Today EPA finds that all candidate technologies fail the cost-reasonableness test. EPA also finds that all candidate technologies fail the alternative cost-reasonableness test that is based on fecal coliform. Accordingly, EPA proposes BCT effluent limitations equal to the 2003 CAFO rule BPT limitations, and affirms that the 2003 CAFO rule BPT limitations do in fact represent the best conventional pollutant control technology.

ENDNOTES

¹ Issues Upheld by the Court

(a) Land Application Regulatory Framework and Interpretation of ``Agricultural Storm Water''

The **Waterkeeper** court upheld EPA's authority to regulate, through NPDES permits, the **discharge** of manure, litter, and process wastewater that CAFOs apply to crop or forage land. The court rejected the industry petitioners' claim that land application runoff must be channelized before it can be considered to be a point source **discharge** subject to permitting. The court noted that the CWA expressly defines the term ``point source'' to include ``any * * * concentrated animal feeding operation * * * from which pollutants are or may be discharged,'' and found that the Act ``not only permits, but demands'' that land application discharges be construed as discharges ``from'' a CAFO. **Waterkeeper** Alliance et al. v. EPA, 399 F.3d at 510.

The **Waterkeeper** court also upheld EPA's determination in the 2003 CAFO rule that precipitation-related discharges of manure, litter, or process wastewater from land application areas under the control of a CAFO qualify as ``agricultural stormwater'' only where the CAFO has applied the manure in accordance with nutrient management practices that ensure ``appropriate agricultural utilization'' of the manure, litter, and process wastewater nutrients. EPA's interpretation of the Act in this regard was reasonable, the court found, in light of Congressional intent in excluding agricultural stormwater from the meaning of the term ``point source'' and given the precedent set in an earlier Second Circuit case, Concerned Area Residents for the Environment v. Southview Farm, 34 F.3d 114 (2d Cir. 1994). **Waterkeeper** Alliance et al. v. EPA, 399 F.3d at 508-09.

(b) Effluent Guidelines

--Identification of best available technologies. The court rejected the environmental organizations' claim that when EPA chose the **pollution** control technologies on which to base effluent guidelines for CAFOs, the Agency did not meet its duty to identify the single CAFO with the best-performing technology. The court found that EPA had collected extensive data on the waste management systems at CAFOs and had

considered approximately 11,000 public comments on the proposed CAFO rule, and on those bases, EPA had adequately justified its selection of ``best available technologies'' on which to base the regulations.

--Groundwater controls. The court upheld EPA's decision in the 2003 rule relating to groundwater controls. In the 2003 rule EPA stated that the Agency believed that requirements limiting the **discharge** of pollutants to surface water via groundwater that has a direct hydrologic connection to surface water were beyond the scope of the ELGs promulgated in the rule. The Agency also stated that nothing in the 2003 rule was to be construed to expand, diminish, or otherwise affect the jurisdiction of the CWA over discharges to surface water via groundwater that has a direct hydrologic connection to surface water.

--Economic methodologies. The court upheld the analytic methodologies that EPA used for determining whether the technology-based permit requirements for CAFOs set in the 2003 rule would be economically achievable by the industry as a whole.

² The court agreed with EPA that agricultural stormwater is excluded from the meaning of the term "point source" and, therefore, is not subject to water quality-based effluent limits in permits.

³ CAFOs have a higher likelihood of actually discharging due to certain geographic and physiographic conditions. In order to guide CAFOs in making a decision on whether or not to seek permit coverage, EPA suggests that Large CAFOs falling into one or more of these categories should consider seeking permit coverage (this list is not intended to be exhaustive):

1. Where a CAFO is located in close proximity to waters of the United States with land classified in USDA Land Use Capability Classes III through VIII

2. Where the CAFO's production area is not designed and operated for zero **discharge**, including where the containment structure is not designed or maintained to contain all manure, litter, process wastewater, precipitation and runoff that may accumulate during periods when the facility is unable to land apply in accordance with a nutrient management plan;

3. Where a CAFO that land applies does not have or is not implementing nutrient management planning that is designed to ensure that any land application runoff qualifies for the agricultural stormwater exemption; and

4. Where the CAFO has had a **discharge** in the past and has not corrected the factors that caused the **discharge** to occur.

EPA seeks comment on the completeness and accuracy of the above list of situations where a **discharge** may occur to further assist CAFOs in their decisions regarding whether or not to seek permit coverage.

EPA also solicits comment on its proposal to replace the duty to apply provision promulgated in the 2003 CAFO rule with the narrower duty to apply provision described above.

⁴ Under the June, 2006 proposed rulemaking, Large CAFOs that have only agricultural stormwater discharges from their land application area, and no other discharges or proposed discharges from their production or land application areas, would no longer be required to seek permit coverage. (See 40 CFR 122.23(e).) However, precipitation-related

discharges from CAFO land application areas would be considered agricultural stormwater only where the CAFO land applies in accordance with nutrient management practices that meet the requirements of 40 CFR 122.42(e)(1)(vi)-(ix). EPA believes that, in order for the owner or operator of a CAFO to qualify for the statutory agricultural stormwater exemption, manure, litter, and process wastewater must be applied in compliance with technical standards that are, in significant part, intended to ensure the appropriate agricultural utilization of the nutrients contained in the manure, litter, and process wastewater.

⁵ Due Dates for Developing and Implementing Nutrient Management Plans: The 2003 CAFO rule required all CAFOs to develop and implement a NMP by December 31, 2006, except that CAFOs seeking to obtain coverage under a permit subsequent to that date were required to have an NMP developed and implemented upon the date of permit coverage. This timing was consistent with the dates for the implementation of the ELG, which required existing Large CAFOs to implement the land application requirements at 40 CFR 412.4(c) by December 31, 2006. (Following the court decision these dates were extended to July 31, 2007, to give EPA time to complete the current rulemaking (see Section II.E).)

As discussed in the preamble to the 2003 CAFO rule, EPA believed that these dates were reasonable given that operations would have had three and a half years from the time the 2003 rule was issued to conduct the necessary planning and construction to implement an NMP. For Large CAFOs that are new sources (i.e., those commencing construction after the effective date of the 2003 CAFO rule), the land application requirements at 40 CFR 412.4(c) apply immediately.

⁶ EPA is considering the use of a template which could be used as a voluntary tool to facilitate completion of the NMP by CAFO applicants, as well as to facilitate review by the permitting authority. Such a template would help to systematically organize the information necessary to satisfy the NMP requirements in the regulation. The template could, for example, be used as a form, that when completed by the operator, and approved by the permitting authority, could suffice as the NMP itself. Alternatively, it could also be used as a checklist that the operator and/or permitting authority could use to organize the information in the NMP and to assist in assessing its adequacy. It would be up to the permitting authority's discretion as to how to incorporate the terms of the NMP into the permit and permitting authorities might need to tailor any template to their permit process and technical requirements, including the technical standards established by the Director.

EPA has developed a draft template for public review that is intended to be user friendly. It follows the requirements for an NMP identified in 40 CFR 122.42(e) relating to: manure storage; management of animal mortalities; diversion of clean water; prevention of direct contact of animals with waters of the US; chemical handling; site-specific conservation practices; protocols for testing manure, litter, process wastewater and soil; protocols for land application; and recordkeeping. This draft template is in the public record for this rulemaking at <http://www.regulations.gov> under docket EPA-HQ-OW-

2005-0037 and is also available on the EPA Web site at <http://www.epa.gov>.

⁷ Specific examples of such changes would include changes to the method of land application from injection to surface application, changes in timing from spring to late fall or winter application, and installation of new drainage systems that would increase runoff from land application fields. The proposed new paragraph 40 CFR 122.42(e)(5)(iv) identifies what would constitute substantial changes to the facility's NMP that would trigger this process for permit revisions.

⁸ It should be noted that the key point of this discussion--that water quality-based effluent limits are not available to limit land application discharges that are agricultural stormwater--involves, in the first instance, only precipitation-related land application discharges, since only precipitation-related discharges can be agricultural stormwater. Water quality-based effluent limits are available to the permit writer to limit any non-precipitation related (i.e., dry-weather) discharges that occur at land application areas to levels that are more stringent than the technology-based limitations (effluent guidelines), and EPA never intended to indicate otherwise. As EPA stated in the 2003 rule, ``any dry weather **discharge** of manure or process wastewater resulting from its application to land area under the control of a CAFO would not be considered an agricultural stormwater **discharge** and would thus be subject to Clean Water Act requirements.'' 68 FR 7198. To be sure, in most instances, a CAFO's requirement to meet technology-based permit limits that require manure to be applied at appropriate agronomic rates should itself eliminate all or most dry weather discharges. Nevertheless, if such discharges remain, the need for additional water quality-based effluent limits to control them will be determined by the permit writer based on the circumstances of each particular case.

⁹ Quantifying discharges of conventional pollutants from land application areas is difficult due to the challenges of: Distinguishing between CAFO sources of pollutants and non-CAFO sources of pollutants; determining what share of pollutants reaching the edge of field reach surface waters; and quantifying the potential for re-growth of fecal coliform both after treatment and after land application of manure. Despite these challenges, EPA estimated approximate reductions of fecal coliform associated with the following technology options considered in the 2003 rule: Option 1 (nitrogen-based land application rates and zero **discharge** from the production area with an overflow allowance under specified conditions); Option 2, the final option selected (limiting nutrient-based land application rates and zero **discharge** from the production area with an overflow allowance under specified conditions); Option 3 (Option 2 plus permeability limitations on lagoons and ponds for protection of ground water based on synthetic lagoon liners); Option 5 (Option two except no overflow allowance for swine and poultry); Option 5a (Option 5 plus drier manure management such as composting for beef and dairy operations); and Option 6 (Option 2 plus anaerobic digestion with energy recovery for large swine and dairy operations). Pollutant reduction estimates for these options were provided in the final rule. For beef and dairy operations (subcategory C facilities), EPA also evaluated BOD and TSS reduction associated with Option 7 (Option 2 plus

a national prohibition on land application of manure to frozen, snow-covered, or saturated ground), but did not present the pollutant removal estimates for this option.

Because of the difficulties associated with quantifying reductions of conventional pollutant discharges, EPA relied primarily on sediment discharges (as a surrogate for TSS) in establishing BCT requirements. Following this approach, EPA identified no BCT technology option that achieves significantly greater TSS removals than the BPT requirements eventually promulgated in 2003 except for Option 5. EPA determined Option 5 was not economically achievable for subcategory D (68 FR 7218). EPA therefore concluded that there were no available BCT technologies on which to base limits for conventional pollutants that were more stringent than BPT, and established BCT requirements equal to BPT in the 2003 CAFO rule (see 40 CFR 412.33 and 412.44). If EPA had identified available technology options that achieve greater reductions of conventional pollutants than are achieved by BPT, then EPA would have performed the two-part BCT cost test required by CWA section 304(b)(4)(B). (68 FR 7224).