

For the reasons detailed below, EPA has concluded that there are certain constraints, including currently insufficient infrastructure capacity, that prevent Large CAFOs (except new sources) from being able to develop and implement the land application BMPs, including the nutrient management plan, by the date they will need to seek permit coverage under the requirements of this rule. Therefore, the ELGs promulgated today require Large CAFOs that are existing sources to implement the land application requirements at 40 CFR 412.3(c) by December 31, 2006 because that is the date when EPA is assured that the required planning is in fact available to the large number of regulated sources and, therefore, becomes BPT/BCT/BAT. (EPA has similarly concluded that Small and Medium CAFOs subject to the NPDES provisions for nutrient management plans also will be unable to develop and implement a nutrient management plan by the date they will need to seek NPDES permit coverage under the requirements of this rule, for reasons of insufficient infrastructure. Therefore, EPA is requiring Small and Medium CAFOs that are existing sources to develop and implement nutrient management plans by December 31, 2006.) For all CAFOs that are new sources (*i.e.*, Large CAFOs constructed after the effective date of this rule), the land application requirements at 40 CFR 412.4(c) apply immediately, as discussed further below.

Nutrient management plans are complex documents and their preparation requires knowledge in a number of areas. To adequately address the requirements established by today's rule, the nutrient management plan should be prepared by individuals (either CAFO owners and operators, or their technical consultants) who are competent in or have an understanding of a number of technical areas, including soil science and soil fertility, nutrient application and management, crop production, soil and manure testing and results interpretation, fertilizer materials and their characteristics, BMPs for the management of nutrients and water, and applicable laws and regulations. Because of this, EPA believes it is reasonable to anticipate that many CAFOs will choose to acquire the services of consultants with the technical expertise to prepare nutrient management plans and make recommendations regarding the implementation of the land application BMPs (*e.g.*, whether to use one of the authorized compliance alternatives in

lieu of the setback requirements; options for reducing the nutrient content of manure, such as treatment or alternative feeding strategies; modifications to cropping strategies and land application practices).

Further, while the provisions of 122.42(e)(1) and 412.4(c)(1) do not specifically require nutrient management plans to be prepared or reviewed by certified experts, EPA recognizes that USDA, and other organizations such as the American Society of Agronomy, Crop Science Society of America, Soil Science Society of America, and a number of land grant universities, recommend that nutrient management plans be prepared by trained and certified specialists. USDA has published technical guidance that calls for the development of CNMPs and details the specific components and considerations that should be addressed during CNMP development. The Unified AFO Strategy, developed jointly by USDA and EPA, defines a national objective for all AFOs to develop CNMPs to ensure appropriate agricultural utilization of nutrients. (The vast majority of these CNMPs will be developed under voluntary programs.) EPA is not requiring CAFOs to use certified experts in preparing the nutrient management plans and is not requiring CAFOs to develop CNMPs, but the regulatory requirements for nutrient management plans are designed to dovetail with USDA standards for CNMPs so that CAFOs can meet EPA's nutrient management plan requirements and USDA's CNMP objectives in a single undertaking. It is therefore reasonable to expect that many CAFOs will opt to have their nutrient management plans prepared by certified specialists, an outcome that EPA encourages.

As discussed in more detail below, EPA interprets Section 301(b)(2) of the CWA to require that, for any effluent guideline promulgated, or any technology-based limitation established on a BPJ basis, after March 31, 1989, a discharger must achieve immediate compliance with the BPT/BCT/BAT effluent limitations upon issuance of the discharger's NPDES permit. With imposition of the nutrient management plan requirement, there may be a large number of CAFOs that are all trying to develop plans at the same time. Yet, there is a limited pool of certified preparers and other technical experts that are available nationwide to develop nutrient management plans and CNMPs. It is reasonable to recognize that Large CAFOs (and Small and Medium CAFOs), along with AFOs, could be competing for the services of the

certified preparers and other technical experts. EPA estimates there are approximately 15,500 CAFOs, including 11,000 Large CAFOs, and 222,000 AFOs. AFOs are not required to prepare CNMPs, but their access to sources of public funds, such as EQIP, may be contingent on their adherence to NRCS technical standards, including preparation of a CNMP. Thus, additional time is needed for development and implementation of the plan.

Another aspect that prevents CAFOs from immediately complying with the land application BMPs is the need for States to ensure that they have established appropriate technical standards that CAFOs will use to determine the appropriate application rates for their fields. These standards must be a part of the State NPDES permitting program revisions discussed in Section V.C of this preamble. In addition, CAFOs will need some time to determine whether they have sufficient cropland for applying all of the nutrients contained in the manure, litter, and other process wastewaters that they generate. If they determine that they have excess nutrients, the CAFOs will need to identify alternatives for reducing the nutrient content, or seek markets for the excess nutrients such as off-site cropland, centralized processing facilities (*e.g.*, pelletizing plants, centralized anaerobic digester-based power generation facilities), or other solutions. These activities cannot logically commence until the CAFO has developed the plan and knows what its allowable manure application rate is.

EPA considered whether CAFOs should be required to implement certain elements of the land application BMPs in advance of preparing a nutrient management plan, but rejected doing so because the elements of the land application BMPs are inseparably linked together. The nutrient management plan is the tool CAFOs must use to assess soil and other field conditions at their operation, in conjunction with manure characterization data and crop rotations and yield projections, to determine the site-specific nitrogen or phosphorus-based rate at which manure, litter, and other process wastewaters are to be applied. The proper application rate can not be reasonably determined without first preparing the nutrient management plan. CAFOs will also use their nutrient management plan to inform their decision making on whether to comply with the provisions at 412.4(c)(5) by establishing the 100-foot setback on their fields or to instead select one of the compliance alternatives authorized by those provisions. EPA has also