

numeric effluent limitations or in the form of specific BMPs or other non-numeric effluent limitations and standards. In addition, NPDES permits normally include reporting, record-keeping, and other requirements and standard conditions (conditions that apply to all NPDES permits, such as the duty to properly operate and maintain equipment and treatment systems).

NPDES permits may be issued by EPA or a State, Territory, or Tribe authorized by EPA to implement the NPDES program. Currently, 45 States and the Virgin Islands are authorized to administer the NPDES program. This means that most CAFOs will obtain NPDES permits from State governments, not from EPA. Alaska, Arizona, the District of Columbia, Idaho, Massachusetts, New Hampshire, New Mexico, and Puerto Rico and other territories are not currently authorized to implement the NPDES program. In addition, Oklahoma, although authorized to administer the NPDES program, does not have CAFO regulatory authority. No Tribe is currently authorized to implement the NPDES program. This means that CAFOs located in the above-named jurisdictions or in Indian Country will obtain their NPDES permits from EPA.

An NPDES permit may be either an individual permit tailored for a single facility or a general permit applicable to multiple facilities. Before an individual permit is issued, the owner or operator must submit a permit application with facility-specific information to the permitting authority, which reviews the information and prepares a draft permit. The permitting authority prepares a fact sheet explaining the draft permit and publishes the draft permit and fact sheet for public review and comment. Following the permitting authority's consideration of public comments, a final permit is issued. Specific procedural requirements apply to the modification, revocation and reissuance, and termination of an NPDES permit. NPDES permits are subject to a maximum 5-year term and may be renewed when their term expires.

General NPDES permits are available to address categories of discharges that involve similar operations with similar wastes. Once a general permit is drafted, it is published for public review and comment accompanied by a fact sheet that explains the permit. Following EPA's or the State permitting authority's consideration of public comments, a final general permit is issued. The general permit specifies the type or category of facilities that may obtain coverage under the permit. To gain permit coverage, facilities generally

must submit a "notice of intent" (NOI) to be covered under the general permit. Both general permits and individual permits are used to implement the same pollution control standards.

2. Effluent Limitations Guidelines and Standards

Effluent limitations guidelines and standards ("effluent guidelines" or "ELGs") are national regulations that establish limitations on the discharge of pollutants by industrial category and subcategory. For each category and subcategory guidelines address three classes of pollutants: (1) Conventional pollutants (*i.e.*, total suspended solids (TSS), oil and grease, biochemical oxygen demand (BOD), fecal coliform bacteria, and pH); (2) toxic pollutants (*e.g.*, toxic metals such as lead and zinc; toxic organic pollutants such as benzene); and (3) non-conventional pollutants (*e.g.*, phosphorus). These technology-based requirements are subsequently incorporated into NPDES permits. The Clean Water Act provides that effluent guidelines may include numeric or non-numeric limitations. Non-numeric limitations are usually in the form of BMPs. The effluent guidelines are based on the degree of control that can be achieved using various levels of pollution control technology, as outlined below.

a. Best Practicable Control Technology Currently Available (BPT)—Section 304(b)(1) of the Clean Water Act. In the guidelines for an industry category, EPA defines BPT effluent limits for conventional, toxic, and non-conventional pollutants. Traditionally, EPA establishes BPT effluent limitations based on the average of the best performances of facilities within the industry of various ages, sizes, processes or other common characteristics. Where existing performance is uniformly inadequate, EPA may require higher levels of control than those currently in place in an industrial category if the Agency determines that the technology can be practically applied. In specifying BPT, EPA looks at a number of factors. EPA first considers the cost of achieving effluent reductions in relation to the effluent reduction benefits. The Agency also considers the age of the equipment and facilities, the processes employed and any required process changes, engineering aspects of the control technologies, non-water quality environmental impacts (including energy requirements), and such other factors as the Agency deems appropriate (33 U.S.C. 304(b)(1)(B)).

b. Best Available Technology Economically Achievable (BAT)—Section 304(b)(2) of the Clean Water

Act. In general, BAT represents the best existing economically achievable performance of direct discharging facilities in the industrial category or subcategory. The factors considered in assessing BAT are the cost of achieving BAT effluent reductions, the age of equipment and facilities involved, the processes employed, engineering aspects of the control technology, potential process changes, non-water quality environmental impacts (including energy requirements), and such factors as the Administrator deems appropriate. The Agency retains considerable discretion in assigning the weight to be accorded to these factors. An additional statutory factor considered in setting BAT is economic achievability. Generally, the achievability is determined on the basis of the total cost to the industrial subcategory and the overall effect of the rule on the industry's financial health. BAT requirements may be based on effluent reductions attainable through changes in a facility's processes and operations. As with BPT, where existing performance is uniformly inadequate, BAT may be based on technology transferred from a different subcategory within an industry or from another industrial category. BAT may be based on process changes or internal controls, even when these technologies are not common industry practice.

c. Best Conventional Pollutant Control Technology (BCT)—Section 304(b)(4) of the Clean Water Act. The 1977 amendments to the Clean Water Act required EPA to identify effluent reduction levels for conventional pollutants associated with BCT technology for discharges from existing industrial point sources. In addition to other factors specified in Section 304(b)(4)(B), the Clean Water Act requires that EPA establish BCT requirements after considering a two-part "cost-reasonableness" test. EPA explained its methodology for the development of BCT limitations in July 1986 (51 FR 24974). Section 304(a)(4) designates the following as conventional pollutants: BOD, TSS, fecal coliform bacteria, 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).

d. New Source Performance Standards (NSPS)—Section 306 of the Clean Water Act. New Source Performance Standards (NSPS) reflect effluent reductions that are achievable based on the best available demonstrated control technology. New facilities have the opportunity to install