

A. Best Practicable Control Technology Currently Available (BPT)—Section 304(b)(1) of the CWA

EPA defines Best Practicable Control Technology Currently Available (BPT) effluent limitations for conventional, toxic, and non-conventional pollutants. Section 304(a)(4) designates the following as conventional pollutants: biochemical oxygen demand (BOD₅), total suspended solids, fecal coliform, 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 (see 44 FR 44501). EPA has identified 65 pollutants and classes of pollutants as toxic pollutants, of which 126 specific substances have been designated priority toxic pollutants (see Appendix A to part 403, reprinted after 40 CFR 423.17). All other pollutants are considered to be non-conventional.

In specifying BPT, EPA looks at a number of factors. EPA first considers the total cost of applying the control technology 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 EPA Administrator deems appropriate. See CWA section 304(b)(1)(B). 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, BPT may reflect higher levels of control than currently in place in an industrial category if the Agency determines that the technology can be practically applied.

B. Best Conventional Pollutant Control Technology (BCT)—Section 304(b)(4) of the CWA

The 1977 amendments to the CWA required EPA to identify effluent reduction levels for conventional pollutants associated with Best Conventional Pollutant Control Technology (BCT) for discharges from existing industrial point sources. In addition to the other factors specified in section 304(b)(4)(B), the CWA requires that EPA establish BCT limitations after consideration of a two part "cost-reasonableness" test. EPA explained its methodology for the development of

BCT limitations in July 9, 1986 (51 FR 24974).

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

In general, Best Available Technology Economically Achievable (BAT) effluent limitations guidelines represent the best available economically achievable performance of plants in the industrial subcategory or category. The factors considered in assessing BAT include the cost of achieving BAT effluent reductions, the age of equipment and facilities involved, the process employed, potential process changes, non-water quality environmental impacts, including energy requirements, and other such factors as the EPA Administrator deems appropriate. The Agency retains considerable discretion in assigning the weight EPA accords to these factors. BAT limitations may be based on effluent reductions attainable through changes in a facility's processes and operations. Where existing performance is uniformly inadequate, BAT may reflect a higher level of performance than is currently being achieved within a particular subcategory based on technology transferred from a different subcategory or category. BAT may be based upon process changes or internal controls, even when these technologies are not common industry practice.

D. New Source Performance Standards (NSPS)—Section 306 of the CWA

New Source Performance Standards (NSPS) reflect effluent reductions that are achievable based on the best available demonstrated control technology. New sources have the opportunity to install the best and most efficient production processes and wastewater treatment technologies. As a result, NSPS should represent the most stringent controls attainable through the application of the best available demonstrated control technology for all pollutants (*i.e.*, conventional, non-conventional, and priority pollutants). In establishing NSPS, EPA is directed to take into consideration the cost of achieving the effluent reduction and any non-water quality environmental impacts and energy requirements.

E. Pretreatment Standards for Existing Sources (PSES)—Section 307(b) of the CWA

Pretreatment Standards for Existing Sources (PSES) are designed to prevent the discharge of pollutants that pass through, interfere with, or are otherwise incompatible with the operation of publicly-owned treatment works

(POTWs), including sludge disposal methods at POTWs. Pretreatment standards for existing sources are technology-based and are analogous to BAT effluent limitations guidelines.

The General Pretreatment Regulations, which set forth the framework for the implementation of national pretreatment standards, are found at 40 CFR part 403.

F. Pretreatment Standards for New Sources (PSNS)—Section 307(c) of the CWA

Like PSES, Pretreatment Standards for New Sources (PSNS) are designed to prevent the discharges of pollutants that pass through, interfere with, or are otherwise incompatible with the operation of POTWs. PSNS are to be issued at the same time as NSPS. New indirect dischargers have the opportunity to incorporate into their plants the best available demonstrated technologies. The Agency considers the same factors in promulgating PSNS as it considers in promulgating NSPS.

IV. What Requirements Apply to This Effluent Guidelines Program Plan Effort?

Section 304(m) requires EPA to publish a plan every two years containing three elements. First, EPA must establish a schedule for the annual review and revision of existing effluent guidelines in accordance with section 304(b). See CWA section 304(m)(1)(A). Section 304(b) specifies factors that EPA must consider when deciding whether to establish or revise effluent guidelines for existing direct dischargers and requires EPA to revise such regulations as appropriate. Second, EPA must identify categories of sources discharging toxic or non-conventional pollutants for which EPA has not published effluent limitations guidelines under section 304(b)(2) or NSPS under section 306. See CWA section 304(m)(1)(B). Finally, EPA must establish a schedule for promulgating effluent guidelines for industrial categories for which it has not already established such guidelines. The statute requires final action on such rulemaking not later than three years after the industrial category is identified in the Effluent Guidelines Program Plan. See CWA section 304(m)(1)(C). EPA is required to publish its Effluent Guidelines Program Plan for public comment prior to taking final action on the plan. See CWA section 304(m)(2).

The Effluent Guidelines Program Plan for 2004/2005 is intended to implement these statutory requirements. As part of the Effluent Guidelines Program Plan under CWA section 304(m), EPA