5. Pretreatment Standards for Existing Sources (PSES)

For pollutants that pass-through or otherwise interfere with POTWs, EPA is proposing to set PSES equivalent to the proposed BAT effluent limitations for all subcategories of the Centralized Waste Treatment Industry. PSES are further discussed in Section V.

6. Pretreatment Standards for New Sources (PSNS)

For pollutants that pass-through or otherwise interfere with POTWs, EPA is proposing to set PSNS equivalent to the proposed NSPS effluent limitations for all subcategories of the Centralized Waste Treatment Industry. PSNS are further discussed in Section V.

II. Background

A. Clean Water Act

1. Statutory Requirements of Regulation

As previously discussed, Section 301(a) of the CWA prohibits discharges of pollutants to navigable waters except in compliance with the statute. 33 U.S.C. 1311(a). Section 301(b) requires that direct dischargers comply with effluent limitations established by EPA for categories of industrial dischargers or in the case of certain categories of new dischargers, new source performance standards.

Section 307 requires indirect dischargers to comply with pretreatment standards and Section 306 requires compliance with new source performance standards.

These guidelines and standards are summarized below:

a. Best practicable control technology currently available (BPT)—Sec. 304(b)(1) of the CWA. In the guidelines, EPA defines BPT effluent limits for conventional, priority,¹ and non-conventional pollutants. 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 next 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. CWA § 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 characteristic. Where, however, existing performance is uniformly inadequate, EPA may require 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)—Sec. 304(b)(4) of the CWA. The 1977 amendments to the CWA 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 CWA requires that EPA establish BCT limitations after consideration of a two part "costreasonableness" 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: biochemical oxygen demand (BOD $_5$), total suspended solids (TSS), 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 (44 FR 44501).

c. Best available technology economically achievable (BAT)—Sec. 304(b)(2) of the CWA. In general, BAT effluent limitations guidelines represent the best 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, and non-water quality environmental impacts, including energy requirements. The Agency retains considerable discretion in assigning the weight to be accorded these factors. Unlike BPT limitations, BAT limitations 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 require a higher level of performance than is currently being achieved 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)—Sec. 306 of the CWA. NSPS reflect effluent reductions that are achievable based on the best available demonstrated treatment technology. New facilities 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 control technology for all pollutants (i.e., conventional, nonconventional, 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)—Sec. 307(b) of the CWA. 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 (POTW). The CWA authorizes EPA to establish pretreatment standards for pollutants that pass-through POTWs or interfere with treatment processes or sludge disposal methods at POTWs. Pretreatment standards are technology-based and analogous to BAT effluent limitations guidelines.

The General Pretreatment Regulations, which set forth the framework for the implementation of categorical pretreatment standards, are found at 40 CFR Part 403. Those regulations contain a definition of pass-through that addresses localized rather than national instances of pass-through and establish pretreatment standards that apply to all non-domestic dischargers. See 52 FR 1586, January 14, 1987.

f. Pretreatment standards for new sources (PSNS)—Sec. 307(b) of the CWA. Like PSES, 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.

2. Section 304(m) Consent Decree

Section 304(m) of the Act, added by the Water Quality Act of 1987, requires EPA, before February 4, 1988, to

¹In the initial stages of EPA CWA regulation, EPA efforts emphasized the achievement of BPT limitations for control of the "classical" pollutants (e.g., TSS, pH, BOB₅). However, nothing on the face of the statute explicitly restricted BPT limitation to such pollutants. Following passage of the Clean Water Act of 1977 with its requirement for points sources to achieve best available technology limitations to control discharges of toxic pollutants, EPA shifted its focus to address the listed priority pollutants under the guidelines program. BPT guidelines continue to include limitations to address all pollutants.