

specific list of proposed parameters for each subcategory; 67 FR 8657).

EPA proposed adding COD to the BPT limitations for non-small facilities (*i.e.*, based on subcategory-specific production thresholds) in Subcategories A–D and F–J to better reflect the design and operation of the existing BPT treatment technology (67 FR 8630). Commenters stated that biological treatment systems in place at meat products facilities are not designed or operated based upon COD removal and that doing so would be financially burdensome. In addition, commenters state that BOD or CBOD (carbonaceous BOD) would be a more appropriate measure for monitoring biological treatment system performance. EPA agrees that COD may not be an appropriate indicator of biological treatment technology performance at MPP facilities. Based on EPA's analysis of new data and the complete survey information, EPA is more likely to retain the current limits for BOD (and other conventional pollutants) and add total nitrogen to the BPT limitations for Subcategories A–D and F–J to reflect the partial denitrification currently occurring at many of these facilities (*see* Section IX for a discussion of options EPA is considering for BPT for the final rule). In this case, EPA would not regulate COD or CBOD in the final rule, because COD would not provide much useful information and CBOD would be somewhat redundant with the current BOD limitations and standards.

For BAT limitations, EPA is still considering the regulation of ammonia (as nitrogen) for small facilities (below the subcategory-specific production thresholds) in Subcategories A–D, F–I, and K–L and all of the facilities in Subcategory J, as proposed. Also, depending on the option EPA selects for the final rule, EPA is considering the regulation of ammonia (as nitrogen), total nitrogen, and/or total phosphorus for non-small facilities (above the production thresholds) in Subcategories A–D, F–I, and K–L, as proposed. Note that if EPA does not select a model technology for the BAT level of control that includes phosphorus removal, EPA would not regulate total phosphorus at BAT. The same holds true for the new source performance standards (NSPS).

### *C. Concerns Regarding Fecal Coliforms Limitations and Standards*

For the proposal, EPA retained the existing limitation/standard of “Maximum of 400 MPN per 100 ml at any time” of fecal coliforms for BPT and NSPS for Subparts A through I (*i.e.*, red meat subcategories) and Subpart J (*i.e.*, independent rendering). In addition,

EPA proposed the same fecal coliforms values for the BPT limitations and NSPS for Subparts K and L (proposed poultry subcategories). Based on analysis conducted for the proposal, EPA tentatively determined that this level was achievable by poultry facilities. As a result of the proposal, EPA received comment on several issues regarding the proposed and existing limitations and standards for fecal coliforms. This section addresses the major comments that the Agency received.

#### 1. Reporting Units

Commenters requested EPA to allow for monitoring of fecal coliforms to be reported in units of colony forming units (CFU) per 100 milliliters (mL) in addition to the units of most probable numbers (MPN) per 100 mL specified in the existing regulations. To obtain results in units of MPN per 100 mL, the laboratory uses the multiple-tube fermentation technique. To obtain results in units of CFU per 100 mL, the laboratory uses a membrane filtration which is a direct plating method in which samples are filtered through 0.45µm membrane filters that are subsequently transferred to petri dishes containing a selective or differential agar medium. Based on the research of Thomas and Woodward in “Estimation of Coliforms Density by the Membrane Filter and the Fermentation Tube Methods” (DCN 165320), results from either technique can be considered comparable, so long as the volume analyzed is equivalent. This finding of comparability is consistent with documentation for the existing fecal coliforms limitations and standards (*see*, for example, page 154 of the 1974 development document for the renderer segment (EPA 440/1–74/031–a) where EPA states “This method [membrane filter procedure] and the multiple-tube technique which results in a MPN (most probable number) value, yield comparable results.”). Therefore, EPA is considering revising the limitations and standards to allow for results to be reported in either MPN units or CFU units per 100 mL. EPA solicits comment on this possible revision.

#### 2. Impact of UV Technology

Several commenters were concerned with the industry's ability to consistently achieve the existing and proposed fecal coliforms limitation/standard of 400 MPN/100 mL at “any time” with the use of ultraviolet radiation (UV) technology. Some facilities are using this technology as an alternative to treatment using chlorination which is itself associated with some environmental concerns. As

discussed in Section III.B, for the proposal, EPA estimated compliance costs for disinfection based on UV technology. However, for today's notice, EPA is not including costs for facilities that have any type of disinfection technology in place and is costing chlorination for the three facilities that do not currently have any type of disinfection. The model technology does not include a dechlorination step. For the final rule, EPA intends to evaluate the achievability of the fecal coliforms limitation/standard using UV treatment. In its preliminary review, EPA is investigating whether the samples are likely to be extremely turbid for which UV treatment would not sufficiently kill fecal coliforms without agitation during the treatment step. As part of its preliminary review, EPA considered its sampling episode data from the facility with UV technology (episode 6486). This review showed that discharges of fecal coliforms are well below the current limitation/standard, because the concentrations ranged from non-detected to a measured value of 166 MPN/100 mL. For the final rule, EPA intends to further review these sampling episode data and to consider the self-monitoring data from facilities that use UV technology. EPA solicits comments and data on UV performance and costs for reducing fecal coliforms in MPP wastewaters. EPA also solicits comment on the extent to which water quality standards are driving the MPP industry to shift from chlorination/dechlorination to UV to achieve water quality standards for chlorine and whether this shift necessitates a revised fecal coliforms limit that is consistently achievable with UV technology.

#### 3. Holding Times of EPA Sampling Data

As explained in Section II.A.2, when EPA conducted its own sampling episodes at the facilities, it exceeded the required holding time for some samples for fecal coliforms. DCN 165310 in Section 22.6 of the public record lists the holding times and fecal coliforms measurements from the EPA sampling episodes.

For red meat facilities, where EPA is retaining the previously promulgated limitations and standards, EPA is considering using the fecal coliforms data from the EPA sampling episodes for some analyses such as (1) calculations for loadings and (2) evaluation of treatment performance by comparing influent and effluent data. For the treatment technologies that EPA is currently considering, all of the red meat data from sampling episodes are associated with holding times of about