

more recent evaluation, EPA was left with two groups of PAIs for which insufficient information was available to identify best available control technologies. The two groups are identified as microorganisms and mixtures and are discussed below. In addition, comments were received requesting the exemption of specific low risk pesticides that fall into the "mixtures" grouping.

1. Microorganisms

EPA is considering whether to exclude microorganisms that are registered for pesticidal use, such as *Bacillus thuringiensis*, from these regulations. Although, EPA has little information on the formulation, packaging and repackaging of such pesticides or the generation and characteristics of wastewaters from such operations, EPA believes these "pesticides" are not formulated in a similar fashion as other PAIs covered by the proposed rule. Microorganisms which have registered pesticidal uses are generally created through a fermentation process, similar to those found in some food processing plants. Fermentation is a biological process, where as other pesticides are manufactured and formulated through chemical and physical processes.

In addition, almost all the microorganisms registered as pesticide products are exempt from the requirement of obtaining a (residue) tolerance for pesticide chemicals in or on raw agricultural commodities (40 CFR 180.1001). Under Part 180 Subpart D - Exemptions From Tolerance- it states that "an exemption from a tolerance shall be granted when it appears that the total quantity of the pesticide chemical in or on all raw agricultural commodities for which it is useful under conditions of use currently prevailing or proposed will involve no hazard to the public health." Also, some of these microorganisms will not survive in aquatic environments, and therefore, pose no harm to aquatic life. These microorganisms are listed in Appendix A of this notice. EPA solicits comment on the exemption of these pesticides from the PFPR regulation.

2. Mixtures

EPA had difficulty in finding information on appropriate treatment technology options for a second group of PAIs, which will be referred to as "mixtures." This group of mixtures represents those PAIs that are made up of a number of substances. The molecular weights, solubilities and aromaticity of these pesticides are not easily defined because they are

comprised of a variety of compounds. For example, oil of eucalyptus contains cineole, alpha-pinene, phellandrene, terpineol, citronellal, geranyl acetate, eudesmol, eudesmil acetate, piperitone and volatile aldehydes.

This group of mixtures can be separated into two subgroups. The first subgroup of mixtures was the subject of several comments requesting exemption for these PAIs from the proposed rule. This first subgroup contains active ingredients that are plants, extracts from plants, non-toxic household items, foods or constituents of foods. In addition, many of these pesticides have been determined to be Generally Regarded As Safe (GRAS) under Food and Drug Administration (FDA) regulation (20 CFR 170.1). Examples of these pesticides include: oil of anise, rosemary herbs, thyme herbs, cloves, oil of citronella, lanolin, cottonseed oil, soybean oil, oil of lemongrass, cedarwood oil, soap and sawdust. EPA is considering whether to exclude this subgroup of mixtures from the PFPR effluent guidelines regulation. The list of these mixtures can be found in Appendix A of this notice. EPA solicits comment on the exclusion of these pesticides and requests information on additional pesticides which should be included in this group of mixtures.

The other subgroup of mixtures is not as easily defined. This subgroup also contains mixtures of a number of substances of varying nature whose identifying characteristics are not easily identified. EPA has not been able to identify treatability data for these pesticides in the available literature. Many of these mixtures, such as kerosene, petroleum distillate oils, xylene range aromatic solvent and heavy aromatic naphtha, are typically found in the organic chemicals industry or are used as inert ingredients in the PFPR industry; however, in some instances they have been registered for pesticidal uses. EPA does not believe there is sufficient data to exclude these PAIs from this regulation; therefore, EPA is considering whether to reserve regulation of these types of pesticides and evaluate them at a later time. Specific identification of this subgroup of mixtures is contained in Appendix A of this notice.

3. PAIs That Have Been Determined Not to Pass Through

As discussed in the preamble to the proposed regulation, under the pesticide manufacturing effluent limitations guidelines and pretreatment standards, EPA found that four organic chemicals considered to be priority pollutants did not pass through POTWs (59 FR 17872).

The four chemicals are phenol, 2-chlorophenol, 2,4-dichlorophenol and 2,4-dimethylphenol (58 FR 50649; September 28, 1993). In addition to being a priority pollutant, phenol is considered a PAI under the proposed PFPR effluent guidelines.

EPA did not propose to exempt these four chemicals from the PFPR effluent limitations and categorical pretreatment standards. EPA proposed to establish a categorical pretreatment standard of zero discharge. EPA based this zero discharge standard upon the technology of recycling, reuse, treatment, and/or off-site disposal, which would be most likely shown by "no flow" of a PFPR facility's entire process wastewater stream. EPA found that PFPR facilities do not typically isolate their process wastewater streams; therefore the four "no pass through" pollutants would not be discharged in a separate wastewater stream. The zero discharge standard (premised upon a no flow technology) applied equally to all PAIs and priority pollutants, resulting in the removal of pass through pollutants and the incidental removal of those four pollutants that do not pass through. Thus, the Agency determined that it was unnecessary to exempt any PAI or priority pollutant from the pretreatment standards on the basis that it does not pass through a POTW. (59 FR 17872).

However, EPA is considering whether to add a pollution prevention alternative (see Section III) to the regulation which would provide for an allowable level of discharge where facilities are performing specified pollution prevention practices. With this proposed alternative, EPA believes it would be appropriate to exclude phenol, 2-chlorophenol, 2,4-dichlorophenol and 2,4-dimethylphenol from regulation in these categorical pretreatment standards (PSES and PSNS) for this alternative because they have been found not to pass through and facilities would no longer have to achieve no flow of process wastewater. EPA solicits comments on this determination.

D. Wastewater Sources

Commenters requested exemption of Department of Transportation (DOT) aerosol leak test water, safety equipment cleaning water, laboratory rinsates and storm water from the definition of process wastewater. After reviewing the information and data supplied by commenters and performing additional data gathering, EPA believes that, in certain situations, these wastewaters should be exempted from the rule.

DOT aerosol leak test baths are used by PFPR facilities that package their