

(Zero/P2 Option). Under this Option, all PFPR facilities subject to the final rule would have a choice of either meeting the zero discharge limitation (or pretreatment standard) or employing the P2 practices and discharging the small amount of PAI pollutants that remain in the process wastewater.

EPA believes that this Zero/P2 Option addresses both the economic cost and non-water quality environmental impacts which commenters believed were not adequately considered by the Agency in its proposed zero discharge option. As discussed in more detail in Section V, under the Zero/P2 Option both the costs impacts and the cost effectiveness compare favorably to the proposed Zero Discharge Option alone. Moreover, the Zero/P2 Option will reduce the level of adverse non-water quality environmental impacts which may occur in comparison to those resulting from a Zero Discharge limitation and standard alone by using pollution prevention practices to decrease the use of cross-media transfers (off-site disposal to incineration, deep-well injection, central waste treaters, etc. \* \* \*).

Under the Zero/P2 Option, PFPR facilities would need to agree to implement the listed P2 practices in lieu of complying with the zero discharge limitation or standard and also agree to make compliance with the P2 practices enforceable. For PFPR facilities that directly discharge (only PFPR/Manufacturers) the covered PAIs into navigable waters, EPA believes that the P2 alternative is authorized under the CWA as a system of best management practices ("BMPs") that may be incorporated into any NPDES permit. (CWA section 304(e)). BMPs are defined, in part, to mean "schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of "waters of the United States \* \* \*." 40 CFR 122.2 EPA believes that the list of pollution prevention practices contained in Tables B-1 and B-2 fit within that definition. The NPDES regulations authorize permitting authorities to include BMPs in NPDES permits under a number of conditions. 40 CFR 122.44(k). EPA believes that incorporation of these pollution prevention practices as BMPs into an NPDES permit is authorized because they carry out the purposes and intent of the CWA. 40 CFR 122.44(k)(3).

EPA recognizes that in the proposed rule, the Agency took the position that regulating PFPR facilities on a nationwide basis through the use of BMPs may not be appropriate because

they may not provide the needed flexibility for the many different facilities subject to any final rule (59 FR 17901, April 14, 1994). However, EPA has provided for the needed flexibility in the Zero/P2 Option by making only certain pollution prevention practices mandatory if a facility chooses the P2 alternative, i.e., those practices contained in Table B-1. The other pollution prevention practices (Table B-2) may be modified under a variety of circumstances. In addition, EPA is soliciting comment on a variation of the P2 alternative where only practices which directly reduce pollutant loadings to wastewater are specified in the regulatory text and where water conservation practices are only provided as guidance (see Section III.C for discussion on this variation).

For PFPR facilities that discharge covered PAIs into navigable waters indirectly through a POTW, EPA believes that the Zero/P2 Option is appropriate as an alternative pretreatment standard under CWA section 307(b) and does not conflict with the implementation of the general pretreatment regulations. 40 CFR Part 403. Pretreatment standards for existing and new sources are designed to prevent the discharges of pollutants that pass through, interfere with, or are otherwise incompatible with the operations of POTWs. (CWA 307(b)).

As stated above, in establishing pretreatment standards for existing and new facilities, EPA is authorized to evaluate the same factors that it assesses in establishing BAT limitations. In assessing the removal of pollutants from wastewater, the cost impact, cost effectiveness, and non-water quality impacts of the P2 alternative for both the Zero Discharge proposed PSES and PSNS standards and the P2 alternative, EPA has found that the P2 alternative (as part of the Zero/P2 Option) compares either favorably (cost impact, cost effectiveness, non-water quality impacts) or similarly (pollutant removal) with the Zero Discharge Option. Thus, EPA believes that it is appropriate to consider the P2 alternative as pretreatment standards for existing and new sources.

#### *B. Background*

As discussed in Section I, EPA proposed a zero discharge regulation for wastewaters generated by the formulating, packaging and repackaging of pesticide products, with the exception of exterior wastewaters from facilities formulating, packaging and repackaging certain sanitizer active ingredients. The basis for the proposed zero discharge regulation was pollution

prevention, recycle/reuse and treatment and reuse when necessary. EPA received comment on the technical feasibility and economic achievability of the proposed zero discharge regulation. Many comments focused on circumstances where wastewater was not completely reusable. Commenters requested that EPA reduce both the cross-media and economic impacts associated with the proposed regulation.

One situation where commenters believe complete reuse is not achievable concerns EPA's existing policy on cross-contamination. Currently, EPA sets a standard of zero for cross-contamination. This means that an active ingredient may not be present at any concentration in a FIFRA registered product where it is not listed on the confidential statement of formula (CSF) of that product. During the study phase for the development of the proposal, the industry practice was to triple rinse containers and equipment. Because of recent EPA enforcement actions, industry commented that additional rinsing is being used to comply with the cross-contamination policy. EPA is currently reviewing the pesticide cross-contamination policy.

Commenters believe that more aggressive enforcement of a zero-standard cross-contamination policy would create additional wastewaters that would not be reusable and that were not taken into account when the proposed zero discharge regulation was developed. According to commenters, a facility that performs a triple rinse of the equipment interiors when changing from formulating one product to another, may have to perform additional rinses (e.g., a five times rinse) to ensure a level of zero cross-contamination. Commenters stated that even in cases where the rinsate from the multiple rinse could be stored for use in a future formulation, the additional rinses create more rinsewater than could be reused and that these very dilute wastewaters would have to be contract hauled for off-site disposal to achieve zero discharge. Commenters believe this additional contract hauling of wastewater not only makes the proposed regulation economically unachievable, but increases the opportunity for cross-media impacts.

A second situation described by commenters focuses on the need for periodic blowdown of the treatment system. Commenters believe that even when using an appropriate treatment system, such as the Universal Treatment System (UTS), continuous reuse is not technically feasible (i.e., PFPR wastewater is not reusable indefinitely). Commenters state this is due to a