wash and spill and leak cleanup water versus DOT test bath water or safety equipment cleaning water). Due to the additional pollutant removals afforded by treatment at the POTW, EPA has developed similar but separate definitions for indirect and direct dischargers. In brief, treatment would be required for any waste streams discharged to the nation's waters by direct dischargers. The definition of P2 allowable discharge for direct dischargers will be discussed later in this section. The definition of P2 allowable discharge for indirect dischargers that send wastewater to POTWs is constructed as a two-part definition, which would apply to waste streams of different raw concentrations.

For PFPR process wastewaters, excluding interior equipment cleaning, floor wash and spill and leak cleanup water, EPA believes that (1) many of these sources contain lower concentrations of pollutants prior to pretreatment and (2) the use of the specified pollution practices alone will sufficiently reduce the pollutant loadings in the wastewater when followed by treatment at a POTW. However, based on raw wastewater characterization data collected on sampling visits to PFPR facilities, pretreatment may be necessary for interior equipment cleaning, floor wash and spill and leak cleanup water to reduce the levels of pesticide active ingredients and other pollutants. Thus, EPA is requesting comment on the following two part definition of pollution prevention allowable discharge for indirect dischargers:

Pollution prevention allowable discharge (excluding interior wastewaters, leak/spill cleanup water and floor wash) means: the quantity of/concentrations in PFPR process wastewaters that remain after a facility has demonstrated that it is using the specified practices of the Pollution Prevention Alternative as listed.

Pollution prevention allowable discharge for interior wastewaters, leak/spill cleanup water, and floor wash means: the quantity of/concentrations in PFPR process wastewaters that remain after a facility has demonstrated that it is using the specified practices of the Pollution Prevention Alternative as listed *AND* that have been pretreated using appropriate pollution control technologies which can be used individually or in conjunction with one another as listed in Appendix C, or an equivalent system to achieve a sufficient level of pollutant reduction. Facilities must demonstrate that the appropriate pollution control technology is properly maintained and operated.

Appendix C contains those pollutant control technologies, such as hydrolysis, chemical oxidation, metals precipitation and activated carbon adsorption, which have been used for estimating compliance costs on a PAI specific basis. In general, these treatment technologies have been determined to be effective in treating pesticide containing wastewaters in literature, in bench or pilot scale treatability studies or in the Pesticide Manufacturing effluent guidelines.[2] These are the same technologies that were presented as part of the Universal Treatment System at the time of proposal. However, these technologies are PAI specific and may need to be used in conjunction with one another to provide treatment for all PAIs used at a facility over a period of time. In addition, facilities may experience difficulties treating wastewaters that contain emulsions, therefore, ''appropriate'' treatment for emulsified wastewaters must include an emulsion breaking step.

Note: EPA has costed facilities for these types of dynamic treatment needs.

In the proposed regulation, EPA recognized that although the 1978 regulation for the pesticides industry set a zero direct discharge limitation (BPT) on wastewaters generated from the formulating, packaging and repacking of pesticide products, some facilities were directly discharging PFPR wastewaters. These facilities manufacture pesticide active ingredients, as well as, perform PFPR activities (referred to as PFPR/Manufacturers in the proposed regulation) and were able to comply with zero discharge (BPT) by treating these wastewaters through the same treatment system used for treating their pesticide manufacturing wastewaters without an additional allowance for PFPR wastewater pollutants in the facility's pesticide manufacturing discharge limits. These facilities should be the only PFPR facilities currently discharging directly to the nation's waters.

These direct discharging pesticide manufacturing facilities have treatment systems that are required to meet the BAT pesticide manufacturing limitations (57 FR 50368). However, because these facilities discharge directly into the nation's waters without the removals afforded by secondary treatment at POTWs, EPA believes that, unlike indirect dischargers, these facilities may have to treat all PFPR wastewaters. Therefore, the following definition of pollution prevention allowable discharge would apply to direct dischargers who formulate, package or repackage pesticides and manufacture pesticides.

Pollution prevention allowable discharge (for PFPR/Manufacturers) means: the quantity of/concentrations in all PFPR process wastewaters that remain after a facility has demonstrated that it is using the specified practices of the Pollution Prevention Alternative as listed *AND* that have been treated using appropriate pollution control technologies which can be used individually or in conjunction with Manufacturer's treatment systems or one another as listed in Appendix C, or an equivalent system to achieve a sufficient level of pollutant reduction. Facilities must demonstrate that the appropriate pollution control technology is properly maintained and operated.

By using the above definition, EPA would be including wastewaters into the pollution prevention alternative generated at these facilities by the PFPR of pesticides that are manufactured and formulated, packaged and/or repackaged as well as the wastewaters from the PFPR of those pesticides that are not also manufactured. In the case of these PFPR/Manufacturers, the term ''appropriate'' pollution control technology takes on additional meaning than the one discussed above for indirect dischargers. It also implies that when the pollution control technology in place for treating their manufacturing wastewater is not identified in Appendix C, in literature, or in treatability studies as an effective treatment technology for a PAI that they only use in formulating and packaging operations, they must add to their existing treatment system. EPA is soliciting comment on the above definition.

In the above definitions, for both indirect and direct discharges, EPA makes reference to allowable amounts of pollutants in terms of concentration and quantity.

Note: EPA is considering a variation of the P2 alternative which would specify certain P2 practices while providing water conservation practices solely as guidance.

The main purpose for including volume in the definition of P2 allowable discharge is that in lieu of setting a mass-based definition, the incorporation of volume or flow reduction is meant to discourage the use of dilution of wastewaters to create concentrations that appear to be at an allowable level. In addition, EPA notes that when facilities use water conservation technologies to control the volume of wastewater they generate, they can more easily store and reuse interior rinsates, which may result in additional pollutant removals. Also, the use of flow

[2] EPA is still determining the appropriate treatment technologies for a number of inorganic pesticide chemicals. Activated carbon (AC) adsorption was only used to provide a conservative cost estimate. Therefore, listed technologies for such PAIs are subject to change for final regulation.