treated in the Centralized Waste Treatment Industry have been characterized as concentrated, difficult to treat wastewater, sludges, off-spec products, etc. and are often unlike waste streams found at other categorical industries. Therefore, special attention should be taken when facilities determine which waste streams are accepted for treatment.

If a facility accepts for treatment a mixture of waste types, it is still subject to limitations and standards (and monitoring to demonstrate compliance) that reflect the treatment performance achievable for the unmixed streams. In other words, if a facility accepts for treatment metal-bearing and oily waste, the facility must comply with the limitations and standards based on a treatment system which employs emulsion-breaking, ultrafiltration, and carbon adsorption to "adequately treat" the oily waste for the oils and organics constituents. Similarly, discharges from the metal-bearing stream must comply with the limitations and standards defined by a treatment system employing selective metals precipitation. Compliance with the limitations and standards must be demonstrated following treatment. EPA has concluded that if oily wastes that have not been pretreated are mixed with the metal-bearing waste stream for selective metals precipitation, the unit will not meet the required performance level for metals.

The effluent guideline would be applied by using a flow-weighted combination of BPT/BAT/PSES limitations for the subcategories of concern to derive the facility limit. The permit writer may establish limitations and standards based on separate treatment for each subcategory's operation.

Mixing of dissimilar waste streams may result in dilution of pollutants because the waste streams do not contain the same pollutants or may result in dilution of the stream to the point that pollutants are non-detectible. For waste streams which contain the same pollutants at similar concentration, pretreatment may not be necessary.

The Agency attempted to establish one set of limitations for facilities in all subcategories, but due to the fact that performances levels and the pollutants of concern are not the same for all subcategories, this task could not be done. The Agency solicits comment on its approach to multiple subcategory facilities. EPA is requesting commenters to supply additional data which they may have that would aid in characterizing the efficiency of waste treatment systems for facilities which commingle waste from multiple subcategories prior to treatment.

EPA considered and rejected another approach which did not require monitoring to demonstrate compliance with CWT limitations and standards in the case of facilities which mixed categorical waste streams with CWT wastes. Rather, for such facilities, permit writers would require the facility to identify the sources of the CWT wastestreams and then develop facility limits applying the combined waste stream formula, using the applicable guidelines and limitations for the CWT waste source. If CWT wastes were treated separately at such a facility, then the permit writer would just apply the CWT limitations and standards in developing the limits. EPA is asking for comment on whether to reconsider such an approach.

VI. Costs and Impacts of Regulatory Alternatives

A. Costs

The Agency estimated the cost for CWT facilities to achieve each of the effluent limitations and standards proposed today. These estimated costs are summarized in this section and discussed in more detail in the Technical Development Document. All cost estimates in this section are expressed in terms of 1993 dollars. The cost components reported in this section represent estimates of the investment cost of purchasing and installing equipment, the annual operating and maintenance costs associated with that equipment, additional costs for discharge monitoring, and costs for facilities to modify existing RCRA permits. In Sections VI.B., costs are expressed in terms of a different cost

component, total annualized cost. The total annualized cost, which is used to estimate economic impacts, better describes the actual compliance cost that a company will incur, allowing for interest, depreciation, and taxes. A summary of the economic impact analysis for the proposed regulation is contained in Section VI.B. of today's notice. See also the economic impact analysis.

1. BPT Costs

The Agency estimated the cost of implementing the proposed BPT effluent limitations guidelines and standards by calculating the engineering costs of meeting the required effluent reductions for each direct discharging CWT. This facility-specific engineering cost assessment for BPT began with a review of present waste treatment technologies. For facilities without treatment technology in-place equivalent to the BPT technology, EPA estimated the cost to upgrade its treatment technology, to use additional treatment chemicals to achieve the new discharge standards, and to employ additional personnel, where applicable for the option. The only facilities given no cost for compliance were facilities with the treatment-in-place prescribed for that option. The Agency believes that this approach overestimates the costs to achieve the proposed BPT because many facilities can achieve BPT level discharges without using all of the components of the technology basis described in Section V.E. The Agency solicits comment on these costing assumptions. Table VI.A-1 summarizes, by subcategory, the capital expenditures and annual O&M costs for implementing BPT. Costs are presented for Regulatory Option 1 (the combination of Metals Option 3, Oils Option 2, and Organics Option 1) and Regulatory Option 2 (the combination of Metals Option 3, Oils Option 3, and Organics Option 1). The capital expenditures for the process change component of BPT are estimated to be \$17.7 million with annual O&M costs of \$14.3 million for Regulatory Option 1 and \$20.6 million with annual O&M costs of \$21.7 million for Regulatory Option 2.