collected to provide information about the types of wastes treated and the influent waste characteristics due to the absence of influent wastewater monitoring data. Data were requested from 19 facilities.

V. Development of Effluent Limitations Guidelines and Standards

A. Industry Subcategorization

1. Development of Current Subcategorization Scheme

For today's proposal, EPA considered whether a single set of effluent limitations and standards should be established for this industry or whether different limitations and standards were appropriate for subcategories within the industry. In its preliminary decision that subcategorization is required and in developing the subcategories set forth in this rulemaking, EPA took into account all the information it collected and developed with respect to the following factors: waste type received; treatment process; nature of wastewater generated; facility size, age, and location; nonwater quality impact characteristics; and treatment technologies and costs. In this industry, a wide variety of wastes are treated at a typical facility. Facilities employ different waste treatment technologies tailored to the specific type of waste being treated in a given day.

EPA concluded a number of factors did not provide an appropriate basis for subcategorization. The Agency concluded that the age of a facility should not be a basis for subcategorization because many older facilities have unilaterally improved or modified their treatment process over time. Facility size is also not a useful basis for subcategorization for the Centralized Waste Treatment Industry because wastes can be treated to the same level regardless of the facility size. Likewise, facility location is not a good basis for subcategorization; no consistent differences in wastewater treatment performance or costs exist because of geographical location. Although non-water quality characteristics (solid waste and air emission effects) are of concern to EPA, these characteristics did not constitute a basis for subcategorization. Environmental impacts from solid waste disposal and from the transport of potentially hazardous wastewater are a result of individual facility practices and do not reflect a trend that pertains to different segments of the industry. Treatment costs do not appear to be a basis for subcategorization because costs will vary and are dependent on the following waste stream variables: flow rates, wastewater quality, and pollutant

loadings. Therefore, treatment costs were not used as a factor in determining subcategories.

EPA identified only one factor with primary significance for subcategorizing the Centralized Waste Treatment Industry: the type of waste received for treatment or recovery. This factor encompasses many of the other subcategorization factors. The type of treatment processes used, nature of wastewater generated, solids generated, and potential air emissions directly correlate to the type of wastes received for treatment or recovery. Therefore, EPA has concluded that the type of waste received for treatment or recovery is the appropriate basis for subcategorization of this industry. EPA invites comment on whether the specific subcategories proposed today should be further subdivided into smaller subcategories or whether an alternative basis for categorization should be adopted.

2. Proposed Subcategories

Based on the type of wastes accepted for treatment or recovery, EPA has determined that there are three subcategories appropriate for the Centralized Waste Treatment Industry.

- Subcategory A: Facilities which treat, or treat and recover metal from, metal-bearing waste received from offsite.
- Subcategory B: Facilities which treat, or treat and recover oil from, oily waste received from off-site, and
- Subcategory C: Facilities which treat, or treat and recover organics from, other organic waste received from offsite.
- a. Discharges from metal-bearing waste treatment and recovery operations. Metal-bearing wastes represent the largest volume of wastes treated at the facilities which are the subject of this guidelines development effort. Included within this subcategory are facilities which treat metal-bearing wastes received from off-site as well as facilities which recover metals from offsite metal-bearing waste streams. Currently, EPA has identified 56 facilities as treating metal-bearing wastes. A small percentage of these facilities recover metals from the wastes for sale in commerce or for return to industrial processes. EPA proposes to establish limitations and standards for those conventional, priority, and nonconventional pollutants discharged in this subcategory. Among the metalbearing wastes typically treated at the facilities in this subcategory are, in some cases, highly-concentrated, complex cyanide waste streams. In the case of CWTs that treat complex

cyanides, based on the results of its site visits and data sampling effort, EPA has initially concluded that without first achieving a given level of cyanide reduction prior to metals treatment, the presence of cyanide will interfere with subsequent metals treatment, thus jeopardizing achievement of attainable effluent metals removals.

b. Discharges from oily waste treatment and recovery operations. EPA identified 35 facilities that currently discharge wastewater from treatment and recovery operations for oily wastes. EPA proposes to regulate conventional, priority, and non-conventional pollutants in wastewater discharged

from this subcategory.

c. Discharges from organic waste treatment operations. EPA identified 22 facilities that currently discharge wastewater from the treatment of organic wastes that are received at the facility from off-site for treatment. As explained previously, wastewater discharges from organic recovery process operations, such as solvent recovery, are not included within the scope of this regulation. EPA proposes to regulate the conventional, priority, and non-conventional pollutants wastewater discharges from this subcategory.

B. Characterization of Wastewater

This section describes current water use and wastewater characterization at the 85 centralized waste treatment facilities in the U.S. All waste treatment processes covered by this regulation typically involve the use of water; however, specifics for any facility depend on the facility's waste receipts and treatment processes.

1. Water and Sources of Wastewater

Approximately 2.0 billion gallons of wastewater are generated annually at centralized waste treatment facilities. It is difficult to determine the quantity of wastes attributable to different sources because generally facilities mix the wastewater prior to treatment. EPA has, as a general matter, however, identified the sources described below as contributing to wastewater discharges at centralized waste treatment operations that would be subject to the proposed effluent limitations and standards.

a. Waste receipts. Most of the waste received from customers comes in a liquid form and constitutes a large portion of the wastewater treated at a facility. Other wastewater sources include wastewater from contact with the waste at receipt or during subsequent handling.

b. *Solubilization water*. A portion of waste receipts are in a solid form. Water