TABLE. 1.—SUBCATEGORIZATION OF GROUP I POLYMERS

Source category	Subcategory	Number of sources in subcategory
Butyl Rubber	Butyl Rubber (BR)	1
	Halobutyl Rubber (HBR)	1
Epichlorohydrin Rubber (EPI)	None	1
Ethylene Propylene Rubber (EPR)	None	5
Hypalon® (HYP)	None	1
Neoprene (NEO)	None	3
Nitrile Butadiene Rubber	Nitrile Butadiene Rubber by Emulsion (NBR)	4
	Nitrile Butadiene Latex (NBL)	3
Polysulfide Rubber (PSR)	None	1
Polybutadiene Rubber	Polybutadiene Rubber and Styrene Butadiene Rubber by Solution (PBR/SBRS).	5
Styrene Butadiene Rubber	Styrene Butadiene Rubber by Emulsion (SBRE)	4
	Styrene Butadiene Latex (SBL)	15

Pollutants emitted by Polymer and Resin I sources that are listed in Section 112(b)(1) include n-hexane, styrene, 1,3-butadiene, acrylonitrile, methyl chloride, carbon tetrachloride, chloroprene, and toluene. Some of these pollutants are considered to be probable human carcinogens when inhaled, and all can cause reversible and irreversible toxic effects following exposure. These effects include respiratory and skin irritation, effects upon the eye, various systemic effects including effects upon the liver, kidney, heart and circulatory systems, neurotoxic effects, and in extreme cases, death.

These effects vary in severity based on the level and length of exposure and are influenced by source-specific characteristics such as emission rates and local meteorological conditions. Health impacts are also dependent on multiple factors that affect human variability such as genetics, age, health status (e.g., presence of pre-existing disease) and lifestyle. The EPA does not have sufficient detailed data to conduct an intensive analysis to determine the actual population exposures to the HAP and resulting health effects around these facilities. This rule is technology-based; i.e., based on maximum achievable control technology. In addition, it is not a ''significant'' rule as defined by Executive Order 12866, and a benefits analysis is not required. Considering these factors, the EPA chose not to expend the resources required to collect additional data and conduct an intensive health impacts analysis. Therefore, the EPA does not know the extent to which the adverse health effects described above occur in the populations surrounding these facilities. However, to the extent the adverse effects do occur, the proposed standard will substantially reduce emissions and exposures to the level achievable with MACT.

Due to the volatility and relatively low potential for bioaccumulation of these pollutants, air emissions are not expected to deposit on land or water and cause subsequent adverse health or ecosystem effects.

The alternatives considered in the development of this regulation, including those alternatives selected as standards for new and existing elastomer sources, are based on process and emissions data received from every existing elastomer facility known to be in operation at the time of the initial data collection. The EPA met with industry several times to discuss this data. In addition, facilities and State regulatory authorities had the opportunity to comment on draft versions of the regulation and to provide additional information. Several facilities did provide comments; these comments were considered, and in some cases, today's proposed standards reflect these comments. Of major concern to industry were the reporting and recordkeeping burden and the requirements for wastewater control.

The proposed standards give existing facilities 3 years from the date of promulgation to comply. This is the maximum amount of time allowed under the Clean Air Act. New sources are required to comply with the standard upon start-up. The EPA sees no reason why new facilities would not be able to comply with the requirements of the standards upon startup. The number of existing sources affected by this rule is less than 50; therefore, the EPA does not believe that required retrofits or other actions cannot be achieved in the time frame allotted.

Included in the proposed rule are methods for determining initial compliance as well as monitoring, recordkeeping, and reporting requirements. All of these components are necessary to ensure that sources will comply with the standards both initially and over time. However, the EPA has made every effort to simplify the requirements in the rule. The Agency has also attempted to maintain consistency with existing regulations by either incorporating text from existing regulations or referencing the application sections, depending on which method would be least confusing for a given situation.

As described in the Basis and Purpose document, regulatory alternatives were considered that included a combination of requirements equal to, and above, the MACT floor. Cost-effectiveness was a factor considered in evaluating options above the floor; in cases where options more stringent than the floor were selected, they were judged to have a reasonable cost effectiveness. For EPR, PBR/SBR (by solution), and SBR (by emulsion) the estimated cost effectiveness was found to be relatively high at the MACT floor level due to the requirements for process back-end operations. However, the back-end provisions of the regulation contain several options for compliance that will allow facilities to select the most cost-effective option based on facility-specific considerations.

Representatives from other interested EPA offices and programs, as well as representatives from State regulatory agencies, are included in the regulatory development process as members of the Work Group. The Work Group is involved in the regulatory development process, and must review and concur with the regulation before proposal and promulgation. Therefore, the EPA believes that the implications to other EPA offices and programs have been