document, Assessment of The Potential Costs and Benefits of The Hazardous Waste Identification Rule for Industrial Process Wastes, as Proposed. Additional options are discussed in the supporting Addendum to the Assessment document. These options consider alternative waste management requirements, target risk levels, dilution and attenuation factors (DAFs), and exposure pathways. This Preamble discusses one primary alternative to the preferred option. This alternative is the same as the preferred option but drops land application units from consideration as a management source. Exempt nonwastewater wastestreams could not be land applied. There would be no change for wastewaters.

# 3. Implementation Requirements

Implementation requirements include the steps that generators (or waste managers) must take to achieve exemption of their wastes, regardless of the exit levels selected. These requirements include waste sampling and analysis, and related recordkeeping and reporting. Under the proposed rule, the facility must first perform a comprehensive analysis of the waste, testing for all constituents identified in appendix X to 40 CFR part 261. Reduced initial testing may be possible only if a facility is able to document that such constituents are not present in the waste. The generator must then prepare a notification/certification package and submit it to the EPA Regional Administrator or authorized state agency. The generator must repeat a comprehensive analysis periodically according to the schedule established in the proposed rule, along with more frequent tailored scans that focus on the constituents of concern. Related documentation must be maintained onsite and be available for review.

The Agency has estimated annual sampling, analysis, recordkeeping, and reporting costs (collectively referred to as "implementation costs") that may be required under this rule. These estimates range from approximately \$21,000 for a less complex, solvent wastestream with testing every 12 months, to \$169,000 for a complex high quantity F039 wastestream with testing every three months.

# 4. Analysis and Findings

Under the proposed rule, listed wastes from industrial processes may be eligible for exemption from Subtitle C hazardous waste requirements if they contain low concentrations of contaminants. This exemption may allow generators and waste managers to avoid some or all costs associated with Subtitle C requirements. The most significant cost savings relate to waste treatment and disposal; this rule will allow generators to avoid the costs of treatment required for compliance with the Land Disposal Restrictions as well as the costs of disposing wastes in highly protective Subtitle C facilities.

In addition to assessing these cost savings, the Assessment addresses a number of other potential effects of the regulations. It analyzes the relative effects of the regulatory options on human health and the environment and considers issues related to ensuring environmental justice, eliminating federal mandates, encouraging waste minimization, and providing flexibility for small businesses.

### a. Eligible Waste

The universe of annual listed waste generation, both wastewaters and nonwastewaters, potentially affected by today's proposed rulemaking is estimated to total 303.6 million tons. The universe of potentially affected wastes includes approximately 25,300 wastestreams from 10,700 facilities. Wastewaters account for the vast majority of total waste quantity (99 percent).

To determine whether these wastes are likely to be eligible for exemption, EPA developed the Process Waste Model. This model uses data on the characteristics of individual listed waste-streams first collected in 1986 for EPA's National Survey of Hazardous Waste Generators, which has since been updated, refined, and in some cases, corrected. The model first compares the reported concentrations of constituents in each wastestream to the proposed rule exit levels to determine whether the waste is likely to be eligible for exemption without further treatment. If the waste is not eligible as-reported, the model then considers whether it may be eligible after treatment. In this comparison, the concentration standards established under EPA's Land Disposal Restrictions (which are based on the use of the best demonstrated and available technology) are used as a proxy for the lowest concentrations achievable by treatment. If the waste is not eligible for exemption as-reported or after treatment, EPA assesses whether waste minimization or pollution prevention methods could be used to cost-effectively achieve the exit levels. This model does not address contaminated media.

The analysis indicates that:

• Under the preferred option, total nonwastewater quantity exempted, including BDAT treatment residuals and sludge from wastewater, is estimated at 0.40 million tons. Total wastewater (liquid) quantity exempted is approximately 64 million tons.

• Under the primary alternative option (no land application), approximately 65 million tons of wastewaters, and 0.60 million tons of nonwastewaters, including BDAT treatment residuals and sludge from wastewaters, may be eligible for exemption.

#### b. Cost Savings

The proposed rule will allow waste generators and managers to avoid costs associated with Subtitle C requirements. Specifically, this exemption will allow them to avoid treatment costs and/or costs of disposing wastes in Subtitle C facilities. Wastes which meet exit levels at the point of generation may accrue treatment cost savings because the wastes will not require any treatment that would have been needed to comply with the Subtitle C Land Disposal Restrictions prior to disposal. All exempt wastes are likely to accrue disposal cost savings because the costs of disposing wastes in non-Subtitle C facilities are generally lower than the cost of more protective Subtitle C facilities.

The analysis indicates that: • Under the preferred option, the high-end estimate of annual treatment and disposal cost savings is approximately \$75 million.

 A large portion of these savings are attributable to avoided treatment costs.

• Under the primary alternative, the high-end estimate of cost savings is \$99 million.

The above estimates for quantities exempted and cost savings assume zero implementation costs. The incorporation of implementation costs into the analytical model will have a significant impact on facilities and wastestreams affected, while having only a marginal impact on total quantities exempted.

# c. Affected Wastestreams and Facilities

Under the preferred option (unconditional exemption), as high as 41 percent (10,300) of the potentially affected wastestreams may be eligible for exemption. These eligible wastestreams are generated by 56 percent (6000) of the facilities producing listed waste. Total wastestreams and facilities potentially eligible for exemption under the primary alternative option (no land application) are estimated at 12,200 (48 percent), and 7,000 (65 percent), respectively.