

used in characterizing the waste. When there were several measured values for a constituent, the Agency averaged those values to get a central tendency value for characterizing the waste. It should be noted that the Agency did not characterize the waste streams on a site specific basis but developed generic characterizations for each waste stream based on data from several facilities. The Agency developed generic waste stream characterizations based on data from one or several facilities. These generic waste stream characterizations may not match on a one to one basis the constituents in any specific carbamate manufacturing facility's stream. However, the Agency believes that these generic characterizations provide a meaningful way of representing waste streams across an industry in which the waste will have high variability due to changes in manufacturing processes and products. The Agency believes that it will be infeasible to collect data on every waste stream generated by every carbamate manufacturing facility. Thus, the generic waste stream characterizations were used to capture the range of constituents that could exist in carbamate manufacturing wastes. The Agency also notes that the commenter did not provide any additional waste characterization data.

Another commenter believes that EPA fails to acknowledge the uncertainties associated with its risk conclusions. The Agency believes that it has adequately characterized the uncertainty in the risk analysis. The Agency attempted to characterize uncertainties in its risk assessment by providing both central tendency and a range of high end risk estimates for each pathway and exposure route for each waste group. The parameter uncertainties are presented as a range of values used for all input parameters.

One commenter believes that EPA did not provide sufficient record information to allow meaningful comment on the risk assessment assumptions. The Agency disagrees with the commenter's assertion that adequate documentation on the risk assessment was not available. All information on conducting the risk assessment and its assumptions are either included in the background document itself or in the reference cited, all of which are included in the docket.

#### K. CERCLA RQs

Several commenters believe that the Agency should have proposed adjusted RQs for the substances added to the CERCLA hazardous substances list instead of applying the statutory 1 lb RQ, and that adjusted RQs should be

put in place at the same time that the final rule is promulgated. Commenters believe that the 1 lb RQ would cause unnecessary and expensive reporting requirements and that the Agency should suspend the effective date of this rule until RQs are adjusted. One commenter believed that the Agency should not place carbamate compounds on the U-list as a mechanism to achieve CERCLA listing and to trigger actions by emergency responders under CERCLA.

The Agency plans to propose adjusted RQs of the substances added to the CERCLA hazardous substances list. Section 102(b) of CERCLA requires that a 1 lb RQ be set for these newly identified hazardous substances. Until an adjustment is promulgated, the statutory 1 lb RQ for newly identified hazardous wastes will remain in effect. The Agency disagrees with the commenters assertion that the addition of carbamates to the U-list was designed to achieve CERCLA listing and trigger actions by emergency responders under CERCLA. The addition of substances to the U-list was governed solely by the concentration and toxicity of these materials and the criteria for listing at 40 CFR 261.11. Section 101(14) of CERCLA establishes that all newly identified RCRA hazardous wastes are also CERCLA hazardous substances. The Agency does, however view it as beneficial for emergency first responders to quickly identify the potential hazards of carbamate, carbamoyl oxime, thiocarbamate, and dithiocarbamate products and feels that quick identification of hazards may speed corrective measures to limit environmental damage or risks to human health.

#### L. Regulatory Impact Analysis

There were many commenters who felt that the Economic Impact Analysis (EIA) conducted was inadequate or flawed. In particular, commenters felt that the addition of the Appendix VIII constituents would have a much greater cost impact than shown in the EIA. Other commenters felt that the scope of the EIA underestimated the number of affected facilities in that it did not take into account suppliers, distributors and customers using the P, U and Appendix VIII materials. In addition, commenters felt that it did not account for costs associated with soil and debris remediation, indirect state and federal regulatory impacts and reporting requirements under CERCLA and EPCRA, and costs incurred due to the mixture and derived-from rules. Commenters also believed that the EIA assumed that wastes currently recycled would continue to be recycled. Others

felt that the rules would cause competing non-carbamate chemicals to have a competitive advantage that would cause economic hardship to small carbamate manufacturers. Other commenters believe that the EIA was flawed because the Agency should have prepared an RIA.

In conducting its EIA, EPA examined all data submitted to it under its RCRA section 3007 survey of the carbamate production industry. EPA used this information to create a baseline scenario, or description of the current state of waste management in the industry. More important, EPA maintains that the 24 facilities analyzed for the EIA represents the entire universe of carbamate production facilities, and thus EPA is confident that its analysis is comprehensive. EPA then developed a post-regulatory scenario in which waste generators would comply with the RCRA regulations newly imposed as a result of this rule. In creating this post-regulatory scenario, EPA forecast the plausible, long-term management of the waste, and EPA calculated the waste management costs associated with this post-regulatory scenario. EPA maintains that it has correctly estimated the true, long-term costs associated with the management of carbamate production wastes resulting from the listing of new RCRA hazardous wastes even though compliance costs for any individual entity may be higher or lower than our estimate. The Agency does not consider the rule to have significant impacts and thus it does not require a full regulatory impact analysis.

EPA points out that the EIA was designed to assess the primary cost impacts associated with changes in management practices resulting from the RCRA hazardous listing of carbamate production waste. EPA believes that the addition of compounds to 40 CFR part 261 Appendix VIII will not materially affect the management of such wastes. All carbamate production facilities are currently permitted under RCRA. In addition, RCRA grants the Agency broad authority to respond to any imminent and substantial endangerment to human health and the environment posed by the past or present management of any solid waste (RCRA § 7003). In addition, because no other action has been taken by the Agency there will be no effect on the "mixture and derived from" exemption.

EPA acknowledges that there may be indirect effects as a result of this rulemaking. The EIA accounted for the costs of trial burns, monitoring equipment, personnel for monitoring, and other compliance related costs in incineration costs. In support of the