

is appropriate if that information is available and reliable. In this case, the carbamate manufacturing industry is relatively well defined and stable, and therefore the industry specific inputs are appropriate to use. The use of this information allows the Agency to more accurately characterize risks, since it better describes actual existing and potential conditions.

One commenter stated that the Agency did not adequately address the potential for impacts on endangered species and other terrestrial wildlife.

The Agency did conduct a screening assessment of potential impacts on terrestrial wildlife and concluded that risks were not likely to be significant. This assessment is presented in the risk assessment background document (F-CPLP-S0003). The Agency does recognize that risk assessment methodologies for terrestrial wildlife are still very much under development and that it cannot definitively conclude that risks will not exist.

One commenter believes that EPA should not rely on central tendency or average estimates of risk (as opposed to high end or conservative estimates) in its listing determination. This commenter states that this reliance violates both RCRA and Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations).

The Agency relies primarily on high end risk estimates in its listing determinations. The central tendency estimates are used primarily to project overall population risks in some cases and to provide an indication of the variability in risk estimates.

2. Comments Asserting That the Risk Assessment Overstates Risk

Several commenters believe that the Agency's risk assessment overstated the risks presented by the carbamate waste streams. One commenter believes that EPA's use of a multi-pathway risk assessment methodology is premature.

The Agency believes that a multipathway approach is well established and is appropriate for this rulemaking. The Agency has been using multipathway analyses for a number of years in a number of its programs including the Superfund program, the sewage sludge regulations, pesticide risk assessments, risk assessments for hazardous waste combustion facilities, and previous listing determinations. As a result the Agency believes that the use of a multipathway approach is not premature and is appropriate for this rulemaking.

Another comment was that the Agency misapplied the listing criteria by using inappropriate mismanagement scenarios to evaluate the hazards posed by the carbamate wastes.

The Agency believes it has correctly selected plausible mismanagement scenarios to evaluate the hazards posed by the carbamate waste. Although not all wastes generated by the carbamate manufacturing industry are handled in the same way, by looking across the industry at all plausible management practices, the Agency selected both typical case and plausible mismanagement scenarios to represent possibilities for the management of carbamate wastes. It is possible that specific manufacturing facilities within the industry managed their wastes quite differently than the plausible mismanagement scenarios. However, in selecting the mismanagement scenarios, the Agency looked across the industry and identified practices which would present the highest risk and considered those as the mismanagement scenarios. All mismanagement scenarios used in this analysis are currently in use in the industry by at least one facility although not all.

Another comment was that the Agency used exaggerated or implausible exposure assumptions causing an overly conservative risk estimate which does not represent reality at any facility. The commenters suggest that the Agency should consider site specific risk assessments to support any regulatory action in this area.

The Agency disagrees that the risk assessment is based on inappropriate assumptions and that exposure scenarios are highly exaggerated. Specific parameter criticism are addressed in the comment response document available in the docket for this rule. (See Addresses.) In general, in identifying the location of receptors, the Agency collected land use data and well water use data around 8 carbamate manufacturing facilities believed to represent the range of different types and locations of facilities present in the United States. These data were then used to develop central tendency and high end estimates for where individuals may be exposed to releases of constituents from the waste stream managed. As pointed out in the risk assessment background document, even the high end risk calculations use average values for most parameters.

While the risk assessment results may not specifically apply to any particular facility, the Agency believes they are representative of potential high end risks. The Agency is unable to conduct full site specific risk assessments for all

facilities because of the time and resources which would be required to collect and analyze all of the data which would be needed for each facility.

The Agency believes that the use of a generic risk assessment methodology combined with industry-specific information for parameter values is the best approach for determining whether or not a waste stream should be listed as hazardous. Site-specific assessments may mean that the Agency would list a waste stream as hazardous for one manufacturer while not hazardous for another. Such wastes may not be subject to hazardous waste control. The Agency is generally unable to predict and does not control how a waste will be managed and thus the waste may or may not be disposed at the point of generation and as such the exposure assumption may be very different than those at the specific site. Therefore, EPA currently believes that it is inappropriate to consider extensive site-specific factors when making listing decisions. The Agency's delisting program was developed to provide industry the opportunity to show that, on a waste-specific basis, its waste do not pose a hazard to human health or the environment. The Agency believes that delisting is an adequate mechanism for those who feel that wastes do not meet the hazardous waste criteria and exclude them from the hazardous waste management system.

Another comment is that the proposed rule is based on misclassification/characterization of waste streams because the use of generic composites resulted in overestimation of risk. The commenter also believes that the assessment was based on limited data sometimes using a maximum constituent concentration value to represent both average and worst case scenarios, and that measured values for concentrations of constituents in waste streams at specific sites do not match numbers used in generic risk assessment.

The Agency disagrees with the commenter with regards to the characterization of waste streams. The Agency did not use a maximum constituent concentration value to represent both average and worst case scenarios in its risk assessment. For some constituents, only one measured value existed and this measured value was used in the risk assessment. The labeling of tables in the risk assessment background document (F-CPLP-S0003) shows that this one value was entered in both columns for average and high end values. The concentrations in the waste stream as measured by the Agency or reported by the facility were