form to the toxicity of aqueous ammonia since total ammonia can be derived from the data. It also serves as an alternative to the more burdensome reporting requirement of reporting the amount of un-ionized ammonia in a release along with the pH and temperature of each release or of the receiving stream. EPA does not believe that discounting 99 percent of a release (i.e., reporting only 1 percent total aqueous ammonia) is appropriate given the nature of the toxicity of aqueous ammonia and the pH and temperature data for the Nation's waters.

EPA does not agree that 10 percent total aqueous ammonia represents a ''worst-case scenario.'' EPA believes that a ''worst-case scenario'' would be to report a percentage of total ammonia based on the highest pH and temperatures reported for the Nation's waters. A review of the data indicates that the average of the highest reported pH and temperature conditions for each State would result in aqueous ammonia consisting of approximately 75 percent un-ionized ammonia. Therefore, EPA believes that 10 percent is far from being a ''worst-case'' estimation of the amount of the un-ionized form of ammonia released into the environment. Given the seasonal variations in pH and temperature, it is reasonable to assume that many locations may equal or exceed 10 percent at some point during the year even if the average conditions would produce less than 10 percent un-ionized ammonia. One added complexity is the timing of releases from facilities which may or may not be consistent throughout the year. In fact, higher releases may occur during periods when the pH and temperature of the receiving stream is well above the average conditions resulting in higher concentrations of the un-ionized form of ammonia in the receiving stream than estimated by the average conditions. In addition, there are some other types of releases, such as to deep wells, which may contain aqueous ammonia at pH and temperature conditions that result in much more than 10 percent of the un-ionized form of ammonia being present in the environment. For these releases reporting only 10 percent total aqueous ammonia clearly does not represent a ''worst-case scenario'' and is a significant reduction in reporting burden since a smaller number of facilities will meet reporting thresholds. Again, as stated above, EPA does not believe that reporting 10 percent total aqueous ammonia is overly conservative or misrepresents the potential impact on the environment or the toxicity of such releases.

The SAB letter received by EPA in response to the Agency's requested review contained the following statement: ''For example, if the policy concern is solely for aquatic toxicity, then reporting non-ionized ammonia concentrations at a standard pH and temperature (e.g., pH 7 and 15 °C) would address this endpoint.'' EPA believes that the important part of this statement is that ''a standard pH and temperature'' be used. This is consistent with EPA's position that unless a facility reports total aqueous ammonia, a proportion of total aqueous ammonia, or the amount of the un-ionized form of ammonia along with the pH and temperature of the solution released or of the receiving stream, the toxic chemical is not appropriately reported or characterized. With regards to the parenthetical ''(e.g., pH 7 and 15 °C)'', EPA does not believe that this should be considered as being the recommended pH and temperature to be used. Since ''e.g.'' means ''for example'', EPA believes that the pH and temperature values in the SAB letter were an example, not a recommended best set of conditions. In fact, the SAB letter gave no justification for these conditions, nor did it provide any discussion of the issue of the most appropriate or standard conditions to use. The SAB letter went on to state, ''Thus, the question of whether to list or how to list ammonia or any of its forms is not a scientific issue but strictly a matter of policy for the Agency to decide.'' EPA believes that reporting a proportion of total aqueous ammonia that is based on reported pH and temperature data for the Nation's waters provides the necessary standard conditions and allows for appropriate reporting and characterization of the toxic chemical released.

8. *Releases of aqueous ammonia to Class I wells should be exempt from reporting.* Several commenters stated that since the only identified concerned for aqueous ammonia is aquatic toxicity, then discharges to Class I deep wells should not be reported since they do not represent an aquatic environment and have no potential for release to an aquatic environment.

EPA does not believe that, for reporting purposes under EPCRA section 313, it is appropriate to exempt the reporting of releases to a particular medium. Although the release of a toxic chemical to one type of medium may have a greater or lesser potential for adverse impacts on human health or the environment, there is always the potential for released material to enter into more sensitive environments. In addition, EPA does not believe that all of the release information provided under EPCRA section 313 should be viewed as being negative. The fact that one facility discharges to a medium that may pose less of a direct threat to human health or the environment is useful data for the public to know. In addition, there is some question as to whether EPA would have the statutory authority to provide such an exemption: section 313(g) requires facilities to report on the quantities of a toxic chemical entering each environmental medium and does not explicitly provide any mechanism to exempt releases to individual media.

9. *Aqueous solutions of ammonium salts are not equivalent to aqueous ammonia from anhydrous ammonia.* Some commenters stated that they do not believe that aqueous ammonia from solutions of ammonium salts is equivalent to aqueous ammonia produced from anhydrous ammonia.

EPA does not agree with this comment. As stated in the amended proposed rule, there are differences in the concentrations of the un-ionized form of ammonia between equimolar solutions of aqueous ammonia generated by dissolving dissociable ammonium salts versus anhydrous ammonia. These differences are due to the buffering effects (mainly reflected as pH differences) of the counter ions from the ammonium salts and disappear when both solutions are released to the environment. It is clear that ammonium salt solutions do produce aqueous ammonia since the sources of aqueous ammonia used to test the aquatic toxicity of aqueous ammonia are often ammonium salts (see Ref. 8 and references therein). For example, some of the chemicals that have been used as sources of aqueous ammonia are: Ammonium acetate, ammonium bicarbonate, ammonium carbonate, ammonium chloride, ammonium hydrogen phosphate, and ammonium sulfate. Clearly all of these ammonium salts produce aqueous ammonia that does not significantly differ from that produced from anhydrous ammonia.

B. Conclusion and Rationale for Actions

After reviewing comments received on the original proposal and the amended proposal, EPA has concluded that the four actions proposed in the amended proposal should be adopted as proposed. A brief discussion of the rationale for each action is provided below. A more detailed discussion of the rationales for each of these actions was provided in the amended proposal (60 FR 16830, April 3, 1995).

1. *Deletion of ammonium sulfate (solution).* EPA has concluded that the