April 14, 1999

American Chemical Society Comments In Support of
EPA's Advanced Notice of Proposed Rulemaking:
Approach to Reinventing Regulations of Storing
Mixed Low-Level Radioactive Waste.

Docket Number F-99-MLLP-FFFFF
RCRA Docket Information Center
Office of Solid Waste (5305W)
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, DC 20460

Dear Administrator Browner:

The American Chemical Society (ACS) submits the following comments in support of the U.S. Environmental Protection Agency's (EPA) proposed "Approach to Reinventing Regulations on Storing Mixed Low-Level Radioactive Waste" under 40 CFR Chapter I, published in the March 1, 1999, *Federal Register* (Volume 64, Number 39). The Society agrees that there is a need to make regulations more flexible for generators of mixed low-level radioactive waste (MLLW) and hope that you find these comments valuable to the process.

The ACS is a non-profit scientific organization of nearly 159,000 chemists and chemical engineers. As the largest scientific organization in the world, our members include researchers in industry, academia, and government, some of whom use low-level radioactive materials in their research. The ACS supports the EPA's effort to provide regulatory flexibility in mixed waste management. Allowing a conditional exemption from RCRA hazardous waste requirements for commercial generators of mixed low-level waste (MLLW) who store mixed waste on site will result in increased laboratory productivity and decreased operating costs and will not compromise worker safety or environmental health.

We offer the following general comments in support of EPA efforts to simplify the regulation of mixed low-level radioactive waste.

Conditional Exemption for Storage

The Society is very supportive of the conditional exemption from EPA's hazardous waste regulations for mixed wastes because it would reduce redundant or dual requirements of the current system. Additionally, we strongly believe that medical and research laboratories as well as universities and academic institutions fit squarely into this category, and we urge the EPA to include them in the final rule. The ACS encourages that the agency apply this conditional exemption only to areas where wastes are managed safely and mismanagement is unlikely; appropriate safeguards, record-keeping, and monitoring are in place; and penalties or other consequences may be imposed if the governing regulatory framework is not followed.

Conditional Exemption for Decay-in-Storage

The ACS is very supportive of the proposed conditional exemption for decay-in-storage. Because of the great variety of laboratory mixed waste, it is often difficult to find a facility that can manage both the radioactive and chemical hazard of the waste. On-site decay-in-storage of low-level waste is very efficient and minimizes handling and transportation risks. The need for this exemption has been repeatedly elaborated by several scientific organizations including the Committee on Prudent Practices for Handling, Storage and Disposal of Chemicals in Laboratories, National Research Council; and the Initiative to Reduce Regulatory Burden, National Institutes of Health.

Treatment of Mixed Waste Under a Conditional Exemption

ACS strongly supports efforts to allow for the treatment of mixed wastes under conditional exemptions. The low volume, unusual character, and great variety of laboratory mixed waste combine to discourage the development of commercial markets for mixed waste. Frequently, there are no management options for mixed waste other than indefinite storage on site, or at an approved facility, in the hope that treatment or disposal options such as the ones proposed here are adopted. Treatment of excess or waste chemicals in order to reduce or eliminate their hazardous characteristics is often the most economical method of dealing with these unwanted materials. If the materials can be rendered non-hazardous, the need for storage, packing, and transportation is eliminated. If only a reduction in hazard is accomplished, there still could be reduction in the costs of these disposal steps.

This approach to treatment can also decrease the risks associated with the many steps of the off-site disposal process, as well as the potential for long-term liability. Furthermore, treatment is typically carried out by the person or persons who are most familiar with the characteristics of the wastes that are being generated. This is another factor that promotes good safety practices and can be particularly beneficial in an educational setting. The ACS encourages the EPA to consider expanding the options for on-site treatment of wastes, especially those generated in a laboratory.

The March 1, 1999, notice requests comments on several specific categories of questions. The American Chemical Society is supportive of this reinvention effort and has supplied more comprehensive comments and suggestions in the attached appendix. These comments are designed to mirror EPA's questions and requests for comment outlined in the Advanced Notice of Proposed Rulemaking.

The ACS applauds this effort to provide regulatory flexibility to commercial generators of Mixed Low-Level Radioactive Waste, for storage and treatment. We believe this will have a significantly positive impact on research productivity and regulatory compliance while at the same time ensuring the safety of workers and the environment.

Please contact me if the American Chemical Society can be of any further assistance on this effort.

Sincerely,

Ed Wasserman