

Status Report on Development of a Memorandum of Understanding between
the U.S. Nuclear Regulatory Commission (NRC)
and the Occupational Safety and Health Administration (OSHA)

The Conference Report accompanying the Energy and Water Development Appropriations Act for Fiscal Year 2003 directs the Department of Energy (DOE) to submit a report providing a detailed estimate of the cost of bringing 10 DOE Science laboratories into compliance with the Nuclear Regulatory Commission's (NRC's) and the Occupational Safety and Health Administration's (OSHA's) standards for nuclear safety and worker safety. In support of this report, funds are provided to NRC and OSHA to conduct compliance audits of the laboratories not later than March 31, 2004, with the first four to be completed by September 30, 2003. Both NRC and OSHA have completed the compliance audits for the first four laboratories.

The attached two MOUs govern the interactions of NRC and OSHA under current statutory authority: "Memorandum of Understanding between the Nuclear Regulatory Commission and the Occupational Safety and Health Administration; Worker Protection at NRC-licensed Facilities," 53 FR 43950 (October 31, 1988) and "Memorandum of Understanding With Respect to the Gaseous Diffusion Plants," 61 FR 40249 (August 1, 1996). As stated in the 1988 MOU, "both NRC and OSHA have jurisdiction over occupational safety and health at NRC-licensed facilities. Because it is not always practical to sharply identify boundaries between the nuclear and radiological safety NRC regulates and the industrial safety OSHA regulates, a coordinated interagency effort can ensure against gaps in the protection of workers and at the same time, avoid duplication of effort." In general under these MOUs, NRC applies its standards to working conditions involving radiological hazards, OSHA applies its standards to working conditions involving non-radiological hazards, and both agencies apply their standards to conditions involving a combination of hazards.

Although the two agencies have not completed their audits of the ten science laboratories, the NRC and OSHA staffs have met to discuss the potential need for modifying the existing MOUs or developing a new MOU that would be applicable to the DOE laboratories should current statutory authority be modified. One area of continuing discussion concerns the wide range of radiation-producing machines that are present at the DOE Science laboratories. Some of the small, analytic-type machines represent only a relatively moderate radiological hazard to laboratory staff and visiting researchers, with little or no potential for offsite or environmental impacts. However, DOE's large accelerators and prototype nuclear fusion machines create, or have the potential to create, radiation fields that, if not properly controlled, can be hazardous to workers, the public, and the environment. These public and environmental effects can be caused by both direct radiation from the machines and also through the radiation activation of ground water and solid materials. At the same time, these large machines have significant risks associated with non-radiological hazards, such as high voltage electrical systems and large quantities of oxygen-displacing refrigerants. An additional consideration is that several laboratories have programs involving the medical use of accelerator-produced radiation or radioactive materials. These programs represent both a worker hazard and a risk to patients.

It is premature for the NRC to make recommendations on a division of responsibility between the two agencies until the ten audits are completed. Both agencies are including the radiation-producing machines at the laboratories within the scope of their audits. Following completion of all audits by both NRC and OSHA, the NRC will provide the Senate and House Appropriations Subcommittee on Energy and Water Development our recommendations on how

responsibilities for health and safety, as well as protection of the public and the environment, should be addressed.