DOE Announces Preferred Strategies for Management of Radioactive and Hazardous Wastes

The Department of Energy (DOE) has identified its preferred strategies for treatment, storage, and disposal of five types of radioactive and hazardous wastes. The Final Waste Management Programmatic Environmental Impact Statement (WMPEIS), issued on June 2, evaluates the potential cost and environmental effects of alternatives nationwide for consolidating management of approximately two million cubic meters of waste.

Generally, the department favors decentralized treatment of low-level waste at sites where it is generated and stored. Low-level mixed waste (which is also chemically hazardous) would be treated according to Site Treatment Plans and consent orders which were negotiated with host states under the Federal Facility Compliance Act. The department prefers to dispose of these wastes at two or three regional sites to be selected from among six sites: Idaho National Environmental Engineering Laboratory, Los Alamos National Laboratory, Nevada Test Site, Savannah River Site, Oak Ridge Reservation, or Hanford Site. All are currently conducting disposal operations for mixed or low-level waste.

The department also prefers decentralized treatment and storage of its transuranic waste. Storage of treated high-level waste would occur at the four sites where it was generated. The department prefers to continue to treat its non-wastewater hazardous waste at commercial facilities.

Copies of the WMPEIS document or a summary can be obtained from the Center for Environmental Management Information, P.O. Box 23769, Washington, DC 20026-3769; 202-863-5084 or 1-800-736-3282. Information about the document can be accessed at http://www.em.doe.gov/peisbb/.

NRC Committee Advises Continued U.S. Support for Joint Nonproliferation Programs With Former Soviet Union

Cooperative programs between the United States and the former Soviet Union, created to improve the control of nuclear materials, are beginning to show results, but the United States needs to provide substantial continuing support if the programs are to further reduce proliferation risks, concludes a report from a committee of the National Research Council.

According to the report, funding for cooperative programs to improve the security of plutonium and highly enriched uranium should continue at least at the annual level of $100 million for several more years and should be increased if important new opportunities arise.

Since the collapse of the Soviet Union, concern has grown over the potential dangers posed by its large stocks of nuclear materials. The cooperative programs were initiated in the wake of reported attempts to divert nuclear materials from Russian facilities. Plutonium and highly enriched uranium are located in many types of facilities and institutions in Russia and several other states of the former Soviet Union. The U.S. Department of Energy estimates that tons of the material are contained in internationally acceptable security systems and that tens of tons are in partially acceptable systems; but adequate systems for hundreds of tons still must be installed.

Supporting the overall thrust to make this material more secure, the report recommends that the U.S. effort be sustained until counterpart institutions in Russia, Ukraine, Belarus, and Kazakstan are capable of upgrading and maintaining appropriate systems for securing nuclear materials; the activities be "indigenized" as quickly as possible through greater reliance on local expertise, equipment, and funding; the former Soviet Union consolidate nuclear material at fewer sites and fewer locations within sites; the possible routes to bypassing installed security systems be minimized by ensuring that the systems are comprehensive and through promotion of a culture of integrity among specialists that does not tolerate shortcuts or exceptions to procedures; and greater emphasis be placed on security of material during transport within and between facilities, on involvement of local security agencies in planning physical security upgrades, and on interim approaches that do not necessarily rely on high technology.

Copies of *Proliferation Concerns: Assessing U.S. Efforts to Help Contain Nuclear and Other Dangerous Materials and Technologies in the Former Soviet Union* are available from the National Academy Press, 2101 Constitution Avenue, NW, Washington, DC 20418; 202-334-3313 or 1-800-624-6242.

1998 National Medal of Technology Seeks Nominations

Nominations for a 1998 National Medal of Technology will be accepted for achievements that have strengthened the U.S. economy and standard of living through product and process innovation, technology management, technology transfer, human resource development, and advanced manufacturing technology. Nominations for 1998 must be submitted to the Office of Technology Policy no later than close of business **September 30, 1997.** Nomination packets can be obtained from the National Medal of Technology Program Director, Office of Technology Policy, Room 4226, Technology Administration, U.S. Department of Commerce, 14th & Constitution Avenue, NW, Washington DC 20230; 202-482-5572; e-mail NMT@mail.ta.doc.gov; http://www.nmt.gov/.

NRC Reports that Researchers Must Inform Debate Over Consumption's Role in Environmental Degradation

A report from the National Research Council (NRC) suggests broad strategies that scientists and sponsors of research can follow to help inform the debate over the impact of human consumption on the environment. According to the report, key research questions should include:

- Which human activities are the most disruptive to the environment? How significant is each activity and in what ways is it destructive? What have been the trends of these activities over time, and how are technological changes and other forces likely to affect those trends in the future?
- Who is responsible for environmentally disruptive activities, and which of their actions are the most damaging? Urban air pollution, for example, may be caused by a combination of factors, including motor vehicle emissions and coal combustion from electric utilities. Therefore, many separate policies may be needed to address one problem.
- How can environmentally disruptive behavior be changed? More work is needed to understand the effectiveness of particular interventions and the results that may occur when different types of interventions are brought together.

Copies of *Environmentally Significant Consumption: Research Directions* are available from the National Academy Press, 2101 Constitution Avenue, NW, Washington, DC 20418; 202-334-3313 or 1-800-624-6242. □

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