

properties for molybdenum in sewage sludge. Based on that workshop, EPA intends to assess the need and appropriate level for a numerical standard for molybdenum in sewage sludge using a summary of workshop results and conclusions (O'Connor *et al.*, 2001), supplemented with additional data developed since 2000. EPA expects to complete this assessment in 2005.

Project 14: Improve Stakeholder Involvement and Risk Communication

The NRC recommended that stakeholders should be involved in the risk assessment process and to examine biosolids management practices to ensure that the underlying risk assessment principles are effectively translated into practice. As stated in its preliminary strategy in the April 9, 2003, notice, the Agency's policy is to involve stakeholders at various stages of policy development. The Agency intends to consider how consultation with stakeholders should be included in developing future sewage sludge risk assessments. See 68 FR 17386. EPA received many comments on its preliminary strategy of April 9, 2003, urging the Agency to involve stakeholders more widely in the many aspects of the sewage sludge program.

EPA is committed to working with stakeholders who are concerned with the application or disposal of sewage sludge (the general public, State and local agencies, and private groups). In addition, the Agency will consider how it can implement the NRC's recommendations to involve stakeholders in updating and strengthening the scientific credibility of the sewage sludge regulations.

The Agency's risk communication programs are aimed at improving public awareness of the issues and achieving pollutant exposure reductions. Embodied in all of the projects is not only a need to foster public awareness of the issues surrounding sewage sludge use and exposure, but also a recognition of the advances in problem-solving that can be achieved through collaboration and cooperation.

Through the activities and organizations described in this project, EPA will participate in improving the effectiveness of risk communication methods at national, regional, and local levels. States have their own oversight programs, some of which are quite comprehensive. There is a total of about 150 full time equivalent State employees assigned to their respective biosolids programs. Five States have been authorized by EPA to administer the part 503 program, and 15 additional

States are at various stages in the authorization process. National coordination of State, regional and Headquarters biosolids programs are achieved via an annual State and Regional biosolids coordinators meeting. EPA plans to continue to work closely with State and Regional biosolids coordinators and plans to support the annual workshop for sharing the latest information about biosolids management and oversight. Other organizations and activities that are designed to promote stakeholder involvement include the following:

An *Information-Sharing Group* (ISG) has been established based upon the concepts developed in WERF studies concerning joint fact-finding research. The ISG includes concerned citizens, health scientists, municipal operators, farmer representation, biosolids managers, and input from State and Federal regulatory agencies. The ISG has been established to work jointly with about 25 scientific experts in a large cooperative study of odor, particulates, pathogens, and endotoxins in the air around biosolids and animal manure land application sites. WERF has efforts underway to expand the use of such information-sharing in various research projects.

The *National Biosolids Partnership* (NBP) is an alliance formed in 1997 with the Association of Metropolitan Sewerage Agencies (AMSA), the Water Environment Federation (WEF), and EPA. The goal of the NBP is to advance environmentally sound and accepted sewage sludge management practices through partnerships with producers, service contractors, users, regulatory agencies, universities, the farming community, and environmental organizations.

The NBP is developing a voluntary *Environmental Management System* (EMS) for sewage sludge to help wastewater agencies improve their sewage sludge management programs beyond the regulatory minimums. The EMS involves environmental improvement, public involvement, and independent third party review of the facility applying for EMS status. Fifty-three wastewater agencies in the U.S. are participating in this voluntary program. Several of these municipalities are ready or will be ready for third-party audit of their EMS programs in 2004. Participating municipalities report benefits, such as more efficient operation, reduced odors in sewage sludge, less intrusive transport of the sewage sludge to land application sites, better communication, and meaningful involvement by the public.

In order for a wastewater facility to be admitted and certified to the Partnership EMS program, it must meet five requirements established by the NBP:

1. Document responsibility for the Biosolids Value Chain—pretreatment, treatment, and all biosolids management practices;
2. Commit to 10 principles in the NBP's Code of Good Practice;
3. Meet all NBP requirements;
4. Complete a fully independent third-party audit of its EMS that has been verified by a NBP's accredited audit company; and
5. Demonstrate their commitment to continual improvements in their EMS for environmental performance, regulatory compliance, public participation, and quality biosolids management practices.

Recently, the NBP recognized the Orange County Sanitation District (OCSD) in Fountain Valley, California, as the first wastewater agency in the Nation to be admitted to the Partnership EMS for biosolids programs. The EMS certification signifies that OCSD meets the NBP's requirements for the EMS program and that it supports excellence in sewage sludge management practices, exceeds regulatory compliance obligations, and provides meaningful opportunities for public participation.

The NBP recognized the City of Los Angeles Department of Public Works as the second wastewater agency in the Nation to be admitted to the Partnership EMS for sewage sludge program. A third-party audit of the City's Biosolids EMS program led to certification on September 4, 2003. EPA continues to support the development of EMS programs for wastewater agencies and the goals of improved communication and addressing public concerns in a more timely manner.

The NBP also announced release of its 2003 *Environmental Management System for Biosolids "Self Help" Training Program* intended to help wastewater agencies that are interested in starting their own EMS. The Agency plans to continue supporting NBP activities and to work with municipalities to expand their use of EMS and other programs in biosolids management. Two NBP Web sites present relevant sewage sludge information: <http://www.biosolids.org> and <http://biosolids.policy.net/emsguide/manual/goodpractmanual.vtml>.

In conclusion, EPA believes these 14 projects and associated activities will strengthen the biosolids program by improving our ability to:

- Measure pollutants of interest;