

the importance of the Committee's mission to regulators and the regulated community. The states and the Office of the Inspector General have also identified the Committee's work as a high priority. Public comments also reflected a desire to see the PEC adequately supported by EPA. All stressed the need for the PEC to have the resources it needs to fulfill its mission.

EPA created the PEC in 1985 to make recommendations to EPA management on applications for Processes to Significantly Reduce Pathogens (PSRP) and Processes to Further Reduce Pathogens (PFRP) equivalency under part 257 and later part 503. The PEC also provides guidance to applicants on the data necessary to determine equivalency, and to permitting authorities and members of the regulated community on issues (*e.g.*, sampling and analysis) related to meeting subpart D (pathogen and vector attraction reduction) requirements of part 503. If the PEC recommends that a process is equivalent to PSRP or PFRP, the operating parameters and any other conditions critical to adequate pathogen reduction are specified. The PEC consists of members with expertise in bacteriology, virology, parasitology, environmental engineering, medical and veterinary sciences, statistics, and sewage sludge regulations. It includes representatives from EPA's Offices of Research and Development, Office of Water, and Regional Offices, and the Centers for Disease Control and Prevention.

Project 10: Development and Application of Analytical Methods for Detecting Pharmaceutical and Personal Care Products in Sewage Sludge

The purpose of this project is to develop and apply analytical methodologies for detecting pharmaceutical and personal care products (PPCPs) in sewage sludge. The NRC Report specifically identified PPCPs as one category of diverse compounds that has not been studied in sewage sludge and that is especially likely to be present in domestic sewage sludge. The NRC report indicated that there is a need for a new hazard assessment of sewage sludge to expand the suite of chemicals evaluated.

EPA's preliminary strategy in the April 9, 2003, notice indicated that while study emphasis is being placed on pathogens to address areas of uncertainty and public interest, selected chemicals are also being addressed to help determine significant issues and identify information gaps that remain to be addressed in these areas. *See* 68 FR 17385. Chemical pollutants in

pharmaceutical and personal care products are among those that EPA intends to study.

In FY 2004 through FY 2005, chemical analysis methods developed in-house previously for PPCPs (*e.g.*, antibiotics and musks) would be adapted for sewage sludge. In FY 2006, EPA may finish methods development, convert them to 40 CFR part 136 methodology, and publish methodologies. Subsequently, the methods may be applied to a limited number of real-world samples for a pilot-scale survey of PPCPs in sewage sludge.

Project 11: Publish the Proceedings of USEPA-USDA Workshop on Emerging Infectious Disease Agents and Issues Associated with Animal Manures, Biosolids, and Other Similar By-Products

As mentioned in connection with Project 3 (Methods for Microbial Pollutants), the NRC Report called for more information on the risks of disease associated with pathogens and how to analyze for them. It also called for more information on how to better disinfect sewage sludge.

In June 2001, EPA and USDA sponsored a workshop on "Emerging Pathogen Issues in Biosolids, Animal Manures, and Other Similar By-Products" (USEPA in press). The workshop brought together experts in sewage sludge management and animal wastes to review the state of the science, exchange ideas on how to deal with unresolved issues and suggest areas where the scientific community should focus its efforts. Participants discussed:

- Viruses, bacteria, protozoa, prions, fungi, and helminth ova;
- Migration of pathogens to groundwater and air from recycling and treatment operations;
- Qualitative identification and detection methods for pathogens; the fate of antibiotics in animal and human wastes;
- Pathogen resistance to antibiotics; and
- Susceptibility of people with immuno-suppressed conditions to pathogens.

As stated in Category E (Pathogens) of the preliminary strategy dated April 9, 2003 (68 FR 17389), EPA will make available the information produced at this workshop on pathogens in sewage sludge and animal wastes by publishing the proceedings of the workshop. The proceedings from the workshop have been peer reviewed by national and international experts, and the report will be published in early 2004.

Project 12: Support "Sustainable Land Application Conference"

The purpose of this conference will be to address soil reactions of constituents in treated sewage sludge, manures, and other non-hazardous wastes, and to further environmentally friendly management of wastes in a sustainable manner. This January 2004 conference in Lake Buena Vista, Florida will address soil constituents (chemicals and microorganisms) reactions with constituents in treated sewage sludge, wastewater treatment plant effluents, manures, and other non-hazardous wastes. Further, this international conference is expected to have about 300 participants discussing metals, pathogens, organics, nutrients, and the interface between science and real-world applications by:

- Reviewing fundamental and specific soil reactions of non-hazardous waste constituents (nutrients, organics, metals and pathogens);
- Improving our understanding of contaminant reactions in soils, emphasizing the commonalities of soil reactions among wastes;
- Synthesizing multi-disciplinary information and characterizing the state-of-the-science for land application ("what do we know?");
- Identifying high-priority and critical research needs ("what do we need to know?"); and
- Promoting intra- and inter-disciplinary approaches to solving problems of sustainable waste disposal and utilization.

Papers and presentations will be both invited and volunteered. All papers will be refereed and EPA will use conference findings, as appropriate, in future refinements of part 503.

Project 13: Review Criteria for Molybdenum in Land-applied Treated Sewage Sludge

One of the NRC's recommendations was that EPA should propose molybdenum standards to replace those that EPA rescinded following a legal challenge to numerical limitations promulgated in the Round One rule. Also, some commenters believe that EPA should reassess the molybdenum standard. The preliminary strategy in the April 9, 2003, notice indicated that EPA would determine the applicability of new information as the basis for re-proposing molybdenum standards for land-applied sewage sludge. *See* 68 FR 17391. This activity is included in the Agency's final action plan, as stated below.

In 2000, EPA held a workshop to update toxicity and environmental