

that numerical standards or management practices are not warranted for dioxins in sewage sludge that are disposed of at a surface disposal unit or incinerated in a sewage sludge incinerator. 66 FR 66228 (December 21, 2001). In that notice, EPA also announced that a final action on the proposal to amend the Standards for the Use or Disposal of Sewage Sludge for sewage sludge that is applied to the land would be published at a later date. The consent decree in *Gearhart v. Whitman* was amended to extend the deadline for final action on the land application Round Two rulemaking from the original date of December 15, 2001, to a new date of October 17, 2003.

On June 12, 2002 at 67 FR 40554, EPA published a Notice of Data Availability (NODA) containing new information relating to dioxins in land-applied sewage sludge and requested public comments. Currently, EPA is evaluating the public comments received on the NODA and will consider these comments in formulating a final action on dioxins in land-applied Sewage sludge by October 17, 2003.

II. What Requirements Are Included in the Standards for the Use or Disposal of Sewage Sludge (40 CFR Part 503)?

As noted above, CWA Section 405(d)(2)(A) required the first round of regulation to be based on "available information on [the] toxicity, persistence, concentration, mobility, or potential for exposure" of toxic pollutants in sewage sludge. EPA published the Round One standards (40 CFR Part 503) on February 19, 1993. These regulations established requirements for the final use and disposal of sewage sludge when it is: (1) Applied to the land for a beneficial purpose, including in home gardens, (2) placed in a surface disposal site, including biosolids-only landfills, and (3) incinerated.

For land application, Part 503 set numerical limits for nine heavy metals in sewage sludge, established operational standards (described below) to reduce or eliminate pathogens in sewage sludge and to reduce vector attraction, and required management practices to restrict the application rate and placement of sewage sludge on the land. Regarding surface disposal, Part 503 set numerical limits for three metals in sewage sludge, established requirements for the placement and management of a surface disposal site, and established operational standards to reduce or eliminate pathogens in sewage sludge and to reduce vector attraction. For incineration in a sewage sludge incinerator (SSI), Part 503 establishes

limits for five metallic pollutants in sewage sludge fired in a SSI and adopted standards under the Clean Air Act for two additional metallic pollutants. The Agency has also established performance standards for SSIs through an operational standard for total hydrocarbons or carbon monoxide emissions that controls numerous organic compounds found in the emissions of sewage sludge incinerators. Part 503 also allows disposal of sewage sludge in a municipal solid waste landfill in accordance with 40 CFR part 258. In addition, the final rule requires monitoring, record keeping, and reporting. Standards apply to publicly and privately-owned treatment works that generate or treat domestic sewage sludge and to anyone who uses or disposes of sewage sludge.

The part 503 Standards consist of six elements designed to work together to protect human health and the environment. These elements are (1) numerical limits for certain pollutants, (2) management practices, (3) operational standards, (4) monitoring, (5) record keeping, and (6) reporting.

As an example, the land application provisions require a sewage sludge preparer to gather information on the nutrient content of the sewage sludge and pass this information along to the land applier in order for the land applier to be able to apply the sewage sludge at a suitable agronomic rate. Numerical limitations for land-applied sludge are pollutant concentrations in sewage sludge or cumulative or annual loading rates, based on multi-pathway exposure analyses and risk assessments to protect public health. Management practices include requirements, such as how the sewage sludge is to be placed on the land or otherwise managed in the environment. An example is the prohibition against applying sewage sludge to land closer than 10 meters from waters of the United States. Operational standards are technology requirements such as process descriptions and performance requirements to reduce or eliminate pathogens from sewage sludge and reduce vector attraction. These, together with required crop harvesting restrictions and site controls, constitute the approach for the control of pathogens in sewage sludge.

Monitoring of chemicals and pathogens in sewage sludge and certification of certain actions by the preparer or land applier must be performed at a frequency commensurate with the annual amount of land-applied sewage sludge. Records must be kept of these monitoring and certification activities at the locations where the

monitoring/certifications have occurred. Finally, the larger sewage sludge preparers and land appliers must report this information to the permitting authority at least annually.

EPA has amended part 503 several times since its initial publication in February 1993. Following promulgation of the Round One rule, several petitions for review were filed challenging various aspects of the rule. In one petition, several mining and chemical concerns challenged the land application molybdenum limits. EPA amended the part 503 numerical standards for molybdenum to delete the cumulative loading rate, annual loading rate, and the pollutant concentration for molybdenum in sewage sludge to be land-applied. 59 FR 9095 (February 25, 1994). The ceiling concentration value for molybdenum was retained. Also, in that **Federal Register** notice, EPA added continuous monitoring of carbon monoxide as an alternative to continuous monitoring of total hydrocarbons in the sewage sludge incinerator requirements. In another case, *Leather Industries of America v. EPA*, 40 F.3d 392 (D.C. Cir. 1994), the court remanded several of the land application requirements. As a result of that decision, EPA deleted all numerical standards for chromium in sewage sludge to be land-applied and adjusted the Table 3 limit for selenium. 60 FR 54764 (October 25, 1995). EPA is considering further amendments to address the issues remaining from the partial remand, as well as other issues. EPA most recently amended Part 503 to make a number of technical amendments, provide regulatory flexibility, and make the sewage sludge incinerator standards self-implementing. 64 FR 42552 (August 4, 1999).

For a detailed discussion of the Part 503 Rule, see A Plain English Guide to the EPA Part 503 Biosolids Rule (1994), which is available as stated in the **ADDRESSES** section of the preamble. A copy of the Plain English Guide is available at the website address <http://www.epa.gov/owm/mtb/biosolids/503pe/index.htm>.

III. What Is the Purpose of Today's Notice?

Section 405(d)(2)(C) of the CWA calls on EPA to review the existing sewage sludge regulations in part 503 at least every two years for the purpose of identifying additional toxic pollutants in sewage sludge and promulgating regulations for such pollutants consistent with the requirements of section 405(d). Over the past decade, questions have been raised over the