

conditions (i.e., in addition to the requirements in Part 503) are necessary to protect public health and the environment.

Many Class I sludge management facilities are already required by their pretreatment program to monitor their sewage sludge for these pollutants. In addition, many State sewage sludge programs require monitoring for some or all of these pollutants. EPA seeks comments on this approach.

Section 405(d) of the CWA contemplates a phased approach to establishing numerical limits for pollutants in sewage sludge that is used or disposed. Moreover, sec. 405(d)(2)(D) of the CWA provides that "[f]rom time to time, but not less often than every 2 years, the Administrator shall review the regulation * * * for the purpose of identifying additional pollutants and promulgating regulations for such pollutants * * *."

The Standards for the Use or Disposal of Sewage Sludge that were published on February 19, 1993, constitute Round One of EPA's sewage sludge standards program. The Agency has identified a tentative list of pollutants for which limits will be established in a Round Two regulation (i.e., an amendment to the Round One regulation) and has announced a tentative schedule for the publication of that amendment.

Pollutants on the tentative list for the Round Two regulation include acetic acid (2,4,-dichlorophenoxy), aluminum, antimony*, asbestos, barium, beryllium*, boron, butanone (2-), carbon disulfide, cresol (p-), cyanide (soluble salts and complexes)*, dioxin/dibenzofuran (all monochloro to octochloro congeners), endsulfan-II, fluoride, manganese, methylene chloride*, nitrate*, nitrite*, pentachloronitrobenzene, phenol*, phthalate (bis-2-ethylhexyl)*, polychlorinated biphenyls (co-planar), propanone (2-), silver*, thallium*, tin, titanium, toluene*, trichlorophenoxyacetic acid (2,4,5-), trichlorophenoxypropionic acid ([2-(2,4,5-)], and vanadium. EPA has indicated that it retains the discretion either to add to or delete pollutants from the above list of pollutants.

The Agency is considering adding the above pollutants to the list of pollutants for which data have to be submitted by Class I sludge management facilities with a permit application. Eleven of the above pollutants are included in Tables 2 or 3 of proposed Appendix J or are nutrients (see pollutants marked with an asterisk). Therefore, this approach would require that Class I sludge management facilities submit data for 20

additional pollutants. The Agency requests comments on this proposal.

b. All TWTDS. Part 503 contains pollutant limits for ten inorganic pollutants for sewage sludge that is land applied (subpart B), three inorganic pollutants for sewage sludge placed on an unlined surface disposal site (subpart C), and five inorganic pollutants for sewage sludge fired in a sewage sludge incinerator (subpart E). There are no pollutant limits in Part 503 for sewage sludge placed on a lined surface disposal site or for sewage sludge placed in a municipal solid waste landfill unit.

The pollutants for which limits are included in Part 503 are arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, and zinc. Part 503 also contains an operational standard for pathogens (i.e., fecal coliform, *Salmonella* sp. bacteria, enteric viruses, and viable helminth ova) and for total hydrocarbons (THC). The operational standards for pathogens are values that can not be exceeded in sewage sludge and the operational standard for THC is a value that can not be exceeded in the air emissions for a sewage sludge incinerator stack.

With today's rulemaking, EPA proposes that applicants for a sewage sludge use or disposal permit submit sewage sludge concentration data for all of the Part 503 inorganic pollutants. The permitting authority needs to determine whether a TWTDS can change its use or disposal practice if the need arises. Data for all of the Part 503 pollutants will help the permitting authority make that determination.

The Agency is aware that many TWTDS employ only one sewage sludge use or disposal practice, and that such treatment works may object to submitting data for pollutants that are not regulated for that practice. Nevertheless, EPA believes that the additional information burden to collect and submit data for all of the Part 503 pollutants is offset by the value of the data to the permitting authority. The Agency solicits comments on whether an applicant should be required to submit data only for the pollutants regulated for the TWTDS's use or disposal practice.

As indicated previously, EPA also proposes that all applicants submit sewage sludge data for TKN, ammonia, nitrate-nitrogen, and total phosphorus with a permit application. In addition, the percent solids of the sewage sludge that is used or disposed of would have to be reported. Percent solids is required to ensure that all sewage sludge data can be converted to dry weight values.

Information on the nitrogen and phosphorus content of sewage sludge is needed for several reasons. One important use of the nitrogen data is to help the permit writer to evaluate the design of the agronomic rate for a land application site. Part 503 requires that sewage sludge be land applied at a rate that is equal to or less than the agronomic rate for the application site. The Agency also can use the data on nutrients in sewage sludge in future considerations as to whether to establish limits for nitrogen and phosphorus in sewage sludge.

The Agency is also considering adding certain pathogens to the list of pollutants for which data would be required with an application. These include *Salmonella* sp. bacteria, enteric viruses, and viable helminth ova. Part 503 contains density levels for these microorganisms that cannot be exceeded in sewage sludge that is used or disposed. In addition to pathogens, the Agency is also considering requesting data for fecal coliform, which is used in Part 503 as a pathogen indicator. The permitting authority would use these data to determine whether the sewage sludge meets the Class A or Class B pathogen requirements in Part 503. Pathogen data only would have to be submitted by persons who land apply or place sewage sludge in a surface disposal site. EPA is seeking comments on this issue as part of today's proposal.

Results of current efforts within the Agency may require that limits be established prior to the Round Two sewage sludge regulation, for dioxin/dibenzofuran and co-planar polychlorinated biphenyls (PCBs) in sewage sludge that is used or disposed. Dioxin/dibenzofuran is a carcinogen that is highly toxic in low concentrations. Because the chemical structure of co-planar PCBs is similar to the chemical structure of dioxin/dibenzofuran, they are expected to have similar human health effects (i.e., toxic in low concentrations). Data for these two pollutants could be used to develop Part 503 limits for these pollutants or to evaluate the Part 503 limits. For this reason, the Agency is considering requesting all TWTDS to submit data for these pollutants with a sewage sludge permit application. EPA seeks comments on whether TWTDS who are not Class I sludge management facilities should be required to submit data on these two pollutants.

8. Requirements for a Person Who Prepares Sewage Sludge

Proposed § 122.21(q)(8) identifies permit application information that a person who prepares sewage sludge for