DECEMBER

TENTATIVE AGENDA

LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

TUESDAY, DECEMBER 14, 1993, 10:00 A.M. - 1:00 P.M.

SENATE FINANCE COMMITTEE ROOM - M-451

1. Approval of Minutes - Meeting November 16, 1993

2. Review of Legislative Rules:

   a. Division of Environmental Protection
      Sewage sludge management regulations

   b. Human Rights Commission
      Rules regarding discrimination against individuals with disabilities

   c. Division of Tax
      Bingo Rules

   d. Air Pollution Control Commission
      To prevent and control air pollution from the emission of sulfur oxides

   e. Air Pollution Control Commission
      Permits for construction, modification, relocation and operation of stationary sources of air pollutants, notification requirements, temporary permits, general permits, and procedures for evaluation

   f. Air Pollution Control Commission
      To prevent and control air pollution from hazardous waste treatment, storage, or disposal facilities

   g. Air Pollution Control Commission
      Requirements for operating permits

   h. Board of Osteopathy
      Rules and Regulations for Osteopathic Physician Assistants

   i. Board of Osteopathy
      Licensing, Disciplinary and Complaint Procedures, Osteopathic Physicians

   j. Board of Examiners for Registered Professional Nurses
      Standards for Professional Nursing Practice

   k. Board of Examiners for Registered Professional Nurses
      Disciplinary Action

l. State Commission on Aging
West Virginia Long-Term Care Ombudsman Program

m. Tax Division
Legislative Rule Pertaining to the West Virginia Consumer Goods Rental Protection Act

n. Tax Division
Charitable Raffle Boards and Games

o. Division of Environmental Protection
Groundwater Protection Act Fee Schedule

p. Division of Environmental Protection
Dam Safety Regulations

q. Division of Environmental Protection
Underground Storage Tank Regulations

r. Division of Environmental Protection
Underground Injection Control Fee Schedule

3. Other Business:

Tuesday, December 14, 1993

10:00 a.m. - 1:00 p.m. Legislative Rule-Making Review Committee (Code §29A-3-10)

Keith Burdette ex officio nonvoting member	Robert "Chuck" Chambers, ex officio nonvoting member
Senate	House
Manchin, Chairman	Gallagher, Chairman
Grubb	Douglas
Anderson	Compton
Macnaughtan (absent)	Huntwork
Minard	Burk
Boley	Faircloth

The meeting was called to order by Mr. Manchin, Co-Chairman.

The minutes of the November 16, 1993, meeting were approved.

Mr. Minard moved that the following rules be laid over until the Committee's next meeting: Air Pollution Control Commission, To prevent and control air pollution from the emission of sulfur oxides; Air Pollution Control Commission, Requirements for operating permits; and, Attorney General, Legislative Rule Pertaining to the West Virginia Consumer Goods Rental Protection Act. The motion was adopted.

Mike Mowery, House General Counsel, reviewed his abstract on the rule proposed by the Division of Environmental Protection, Sewage sludge management regulations, and answered questions from the Committee. Ann Spaner, Deputy Director, Division of Environmental Protection, Clifton Browning, representing the Office of Water Resources, Norm Steenstra, representing the West Virginia Citizen Action Group, Shirley Mullet, Co-Ordinator Wetzel County Solid Waste Authority, Mayor Steve LeRose, Summersville, Dave Sutherland, Representing the Solid Waste Section, WV Environmental Council, Richard Rodriguez of Grant Town, Robert Rodecker, representing WV Rural Water Association, Doyle Coakley of Webster County Citizens for a Clean Environment and Bruce McDaniels, representing WV Rural Water, addressed the Committee and responded to questions from the Committee.

Mr. Gallagher requested unanimous consent to address the Committee regarding developments in a pending case related to sewage sludge. There being no objection, Mr. Gallagher updated the Committee on recent developments in the pending case.

Ms. Douglas moved that the proposed rule lie over until the Committee's next meeting. The motion was adopted.

Mr. Grubb moved that counsel be authorized, within the bounds of the Attorney General's opinion on rule-making, to meet with the Division and other interested persons to try to resolve the outstanding issues. The motion was adopted.

Mr. Mowery explained the rule proposed by the Air Pollution Control Commission, Permits for construction, modification, relocation and operation of stationary sources of air pollutants, notification requirements, temporary permits, general permits, and procedures for evaluation.

Mr. Gallagher moved that the proposed rule be approved. The motion was adopted.

Mr. Mowery reviewed his abstract on the rule proposed by the Air Pollution Control Commission, To prevent and control air pollution from hazardous waste treatment, storage, or disposal facilities. Michael McThomas, representing the WV Manufacturers Association and Dale Farley, Chief, Office of Air Quality, addressed the Committee and responded to questions. Mr. McThomas requested that the Committee modify the proposed rule to specify which agency will determine that a material is a hazardous waste.

Mr. Minard moved that the proposed rule be moved to the foot of the agenda. The motion was adopted.

Marjorie Martorella, Counsel to the House Government Organization Committee, explained that the rule proposed by the Human Rights Commission, Rules regarding discrimination against individuals with disabilities, had been laid over at the previous meeting. She addressed concerns that were expressed at the previous meeting and answered questions from the Committee.

Ms. Douglas moved that the proposed rule be approved as modified. The motion was adopted.

Alison Patient, Counsel to the House Finance Committee explained the rule proposed by the Division of Tax, Bingo Rules, and responded to questions from the Committee.

Ms. Douglas moved that the proposed rule be approved. The motion was adopted.

Debra Graham, Committee Counsel, stated that the rule proposed by the Board of Osteopathy, Rules and Regulations for Osteopathic Physician Assistants, had been laid over at the October meeting and had been removed from the agenda at the November meeting. She briefly explained the proposed rule and answered questions from the Committee. Dr. Joe Schreiber, Board Secretary, addressed the Committee and responded to questions. He stated that he would be amenable to modifying the rule relating to written consent and the percentage of required supervision.

Mr. Minard moved that the proposed rule be approved as modified.

Mr. Huntwork moved that the proposed rule be amended by substituting the text of the Board of Medicine's rule on Certification, Disciplinary and Complaint Procedures: Physician Assistants, 11 CSR 1B, with appropriate changes in code cites and other technical changes. The motion was adopted.

Mr. Minard moved that the proposed rule be approved as amended. The motion was adopted.

Ms. Graham told the Committee that the rule proposed by the Board of Osteopathy, Licensing, Disciplinary and Complaint Procedures, Osteopathic Physicians, had been laid over at the October meeting and had been removed from the agenda at the November meeting. She briefly reviewed her abstract on the proposed rule.

Mr. Huntwork moved that the proposed rule be modified to include the language of Section 10.5(1) of the Board of Medicine's Board Organization and Meeting Procedure; Contested Case Hearing Procedure. 11 CSR 3. The motion was adopted.

Mr. Minard moved that the proposed rule be approved as modified. The motion was adopted.

Ms. Compton moved that the rules proposed by the Board of Examiners for Registered Professional Nurses, Standards for Professional Nursing Practice, and Disciplinary Action, be laid over until the Committee's next meeting. The motion was adopted.

Mr. Minard moved that the Committee consider the rule proposed by the Air Pollution Control Commission, To prevent and control air pollution from hazardous waste treatment, storage, or disposal facilities, which had been placed at the foot of the agenda. Mr. McThomas requested that the Committee modify the proposed rule to require that the Chief of the Office of Waste Management consult with the Chief of the Office of Air Quality in determining whether a material is a hazardous waste. He stated that the Commission has agreed to the modification.

Mr. Gallagher moved that the proposed rule be modified in accordance with Mr. McThomas' proposed modification. The motion was adopted.

Mr. Minard moved that the proposed rule be approved as modified. The motion was adopted.

The meeting was adjourned.

ROLL CALL - LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

DATE: December 14, 1993

TIME: 10:00 - 1:00 p.m.

NAME	Present	Absent	Yeas	Nays
Chambers, Robert "Chuck", Speaker				
Brian Gallagher, Co-Chair	✓			
Burk, Robert W., Jr.	✓			
Faircloth, Larry V.	✓			
Douglas, Vickie	✓			
Compton, Mary P.	✓			
Huntwork, John	✓			
Burdette, Keith, President				
Joe Manchin, III Co-Chair	✓			
Anderson, Leonard	✓			
Grubb, David	✓			
Minard, Joseph	✓			
Macnaughtan, Don		✓		
Boley, Donna	✓			
TOTAL				

RE: _____

_____

_____

_____

REGISTRATION OF PUBLIC
AT
COMMITTEE MEETINGS
WEST VIRGINIA LEGISLATURE

COMMITTEE: Rule-making Review DATE: December 14, 1993 10:00 A.M.

NAME (Please print or write plainly)	ADDRESS	REPRESENTING	PLEASE CHECK (X) IF YOU DESIRE TO MAKE A STATEMENT
Mary Kay Buchmelter		Counsel for Human Rights Commission	X
John Montgomery	Charleston	Attorney - Tax & Revenue	As needed
~~Elise~~ Jensen	Charleston	Director Office of Rural Health WV. Bureau of Public Health	X - Osteopathic PA Rule
Tom Hayward	Belington	WVAPA.	X
~~Bob Rodecker~~	~~Chas~~	WV Rural Water	X
Jim Wesolowski	Bluefield	WV " "	—
X ~~Mayor Steve LaRosa~~	Summersville	W.V. Mun. League	X
Deborah L. Penn	Charleston	Steptoe & Johnson	
Twyla Wallace	Lewisburg	Concerned Nurses of WV	X
Jerry Dotson	Ravenswood	WV Rural Water	
~~Dave Sutherland~~	~~Augusta~~	~~S.W. Section~~, WVEC	✓
✓ Tom Degen	Chloe	Calhoun Co. SWA	✓
~~Doyle Coakley~~	~~Cowen~~	~~WV FACE~~	✓
X ~~[illegible]~~	Chas	WV CAG	✓
X ~~Shirley Mullett~~	New Martinsville WV	WCSWA	✓
Joe Schreiber DO	Weirton	Board of Osteopathy	✓
G. Dale Farley	Chas	Chief Office of Air Quality	To Answer Questions

LS-C-66-1a

REGISTRATION OF PUBLIC
AT
COMMITTEE MEETINGS
WEST VIRGINIA LEGISLATURE

COMMITTEE: ______________________ DATE: ______________

NAME	ADDRESS	REPRESENTING	PLEASE CHECK (X) IF YOU DESIRE TO MAKE A STATEMENT
Please print or write plainly			
GRIS GREEN	P.O. Box 7 CLARKSBURG	HARRISON COUNTY ENVIRONMENTAL CITIZ	✓
Carolyn S. Riffle	St. Commission on Aging	Ombudsman / Aging	✓ To Answer Questions
Janet S. Vineyard	410 Washington St. East Suite chas.	WV Petroleum Mkters; WV Cn. Store Assn.	
David Yaussy	P.O. Box 1791 Chas.	WVMA	✓ respond to questions
Mike McThomas	Robinson + McElwee Box 1791 Chas	WVMA	✓ APCC Reg 25 Haz Waste
BARBARA SMITH	1207 LARCHWOOD RD CHAS.		
Sue Maguire	Rt 1-Bx 78 Auburn, WV		✓
~~NORM STEENSTRA~~	CHARLESTON	WV-EC	✓
✓ Bruce McDaniels	Fairmont	WV Rural Water	✓
Dwight Reggi	Bradley PSD	" " "	✓
Lacy Grattan	Shady Springs PSD	" " "	✓
JAMES KOTCON	WV SIERRA CLUB - Rt. 12 MORGANTOWN	WV SIERRA CLUB	✓
Terry Honaker	Bluefield WV	Sant. Board	✓
RONALD L. DODSON	" "	" "	✓
Richard Rodriguez	GRANTTOWN WV	concerned citizen	✓
mark Harman			

LS-C-66-1a

Distributed Meeting 12/14/93

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
1201 Greenbrier Street
Charleston, WV 25311-1088

Gaston Caperton
Governor

John M. Ranson
Cabinet Secretary

David C. Callaghan
Director

Ann A. Spaner
Deputy Director

TO: Ann Spaner, Deputy Director
Division of Environmental Protection

FROM: Eli McCoy, Chief
Office of Water Resources

RE: Use of Sludge Fees and Position Descriptions

As per your request we have prepared an overview of the sludge program with a breakdown of how the sludge fees are to be spent by our office. It will be divided as follows:

1. Permitting and Administration - $170,000
2. Enforcement and Inspections - $330,000

The total number of new positions funded by these fees is nine (9). This number represents the resource needs of the two agencies. Estimated collections were based on statistics from the sludge program currently in place with modifications to reflect the new law. A reevaluation will be conducted subsequent to anticipated influx of out-of-state sludge and septage to determine the expansion needs. A break down of additional equipment and support needs is attached.

Also, included is a breakdown of the POTW's sludge disposal practices (in tons) to show the assumptions used to calculate the proposed budget and where additional dollars will come. Some of the POTW's now participating in the program show zero sludge disposed of for the year 1991. The best year for use in this exercise do to consistency was 1991. We are currently working on creating a data set to compile theoretical sludge production for a more accurate tonnage for in-state facilities. We will keep you updated as we progress.

If you have questions concerning the attachments Clifton Browning or Bill Brannon will be able to answer them.

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DIVISION OF ENVIRONMENTAL PROTECTION
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LAND APPLICATION FEES

Fees are based on a $ 2.00 per wet ton basis

INSTATE - Assume 110,000 wet tons per year (75% land applied) 82,500 tons	$165,000
LANDFILLS - 200,000 wet tons per year 50% reduction by composting (75% final compost) land applied	$150,000
SEPTAGE AND PACKAGE PLANTS - 30,000,000 gallons (75% land applied) 92,500 tons	$185,000
TOTAL	$500,000

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SLUDGE BUDGET

SALARIES, BENEFITS, AND INDIRECT COSTS FOR NINE POSITIONS

Environmental Resource Specialist
Data Entry Operator
Chemist
Field Inspectors - Four (4)
Compliance Inspectors - Two (2)

Total - $330,000

CURRENT EXPENSES

Vehicles, Travel, Office Supplies, Clothing, Insurance, Etc.

Total - $90,000

EQUIPMENT

Computers, Soil Test Kits, Furniture, Lab Equipment, Etc.

Total - $30,000

EXTRAORDINARY DISBURSEMENTS

West Virginia University Extension Service

Total - $50,000

TOTAL BUDGET - $500,000

Based on previous year's figures it is anticipated that a low estimate of sludge generated and\or imported for land application would be approximately 250,000 wet tons per year.

The Office of Water Resources would be the lead agency for the land application program and have needs for at three (3) additional employees to begin implementation. The budget for this would be approximately $170,000. The duties of these employees will be:

Environmental Resource Specialist:

(1) Review of approved sludge programs at existing facilities and begin incorporating new criteria and requirements as part of reissuance process of expiring NPDES permits. 40 per year

(2) Review chemical analyses submitted by facilities and begin incorporating parameters, as appropriate, to insure compliance with provisions of the program and the new regulations. 600 per year

(3) Review and modify monthly monitoring report forms and land application site report forms, both submitted and maintained at the facilities. 2,500 per year

(4) Review land application sites, soil tests, etc. to determine suitability and application rates, prior to and after application. Also, issue permits to new private land application sites. Provide information to GIS group. 600 per year

Chemist: Employee will be responsible for the digestion and analysis of water, waste water, soil and sludge samples for metals by atomic absorption spectroscopy following procedures approved by the United States Environmental Protection Agency for NPDES analysis. Analysis will be carried out on a computer driven atomic absorption spectrometer and include both direct aspiration flame, Atomic Absorption Spectroscopy and Graphite Furnace Atomic Absorption Spectroscopy and follow approved quality control protocols.

This position would be used by the program to carry out the necessary sludge and soil analysis generated by the compliance monitoring group, field inspectors and any samples taken as part of complaints and\or enforcement actions. 400 samples per year

Data Entry Operator: Employee will enter data into PSC and State's databases from sludge notification forms, letters, closure forms and other applicable sources. Will enter data consisting of monthly reports, chemical analysis, soil analysis and other data relating to sludge programs. Will sort data and

generate reports from the applicable computer systems for office and field staff. Will maintain sludge facility hard files by overseeing security of files, including tracking files checked out by other employees, copying files when requested, filing applicable materials in files. Will perform minor typing duties and related work as required. Approximately 4,000 entries

The Office of Environmental Enforcement will employ four (4) additional field inspectors and two (2) compliance monitoring inspectors. These employees will be used to expand the existing office of environmental enforcement staff. Criteria for sludge inspections will be included to their existing duties. The budget for this will be approximately $ 330,000. Their duties will be:

Employee works in a full performance inspector capacity or a training capacity (depending upon experience) in the performance and coordination of technical and compliance inspection work related to the sludge management program as it pertains to water pollution control an solid waste management. Makes compliance inspections of facilities to determine procedures with sludge and laboratory quality assurance (QA) in order to ascertain degree of compliance with laws, regulations, permit conditions, etc. Employee will be responsible for collecting soil, surface water, groundwater, waste, sludge, and effluent samples for laboratory analyses; and the initiation and follow-up of appropriate enforcement action. Duties will include the use of specific sampling equipment, evaluation of laboratory technique and reporting procedures. Some survey work will be performed to determine ambient conditions of water, soils, etc. Written reports on inspections and surveys will be prepared and submitted. Employee will utilize personal computer and pen-based computer to enter information into various data base, spreadsheet, word processing systems, forms, etc. Will sort data and generate reports from applicable computer systems for office and field use. Will utilize Global Positioning System (GPS) receivers (field portables and fixed base stations) and digitizers to geocode data for importation into Geographic Information System (GIS). Employee will be responsible for familiarizing inspection staff on the utilization of such automation technology. Duties will include initiation of administrative procedures or other action provided by law to effect compliance with established procedures. Employee may be required to attend public meetings and provide technical assistance to program staff. Employee will receive limited training in other areas of environmental investigation and inspection, and will be provided training/directive in the area of personal protection, use of equipment necessary for job performance; may be subject to emergency response. 300 sludge inspections per year

The two(2) compliance monitoring inspectors for the sludge program duties will be as listed above and will complete

compliance sampling inspections at the land application sites for POTW's and private land application companies. Sludge CSI's will be performed in accordance with EPA's procedures as specified. Approximately 80 per year.

Dist. Meeting 12/14/93

TITLE 47
LEGISLATIVE RULES
DIVISION OF ENVIRONMENTAL PROTECTION

SERIES 38D
SEWAGE SLUDGE MANAGEMENT REGULATIONS

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OFFICE OF WEST VIRGINIA SECRETARY OF STATE

TITLE 47
LEGISLATIVE RULES
DIVISION OF ENVIRONMENTAL PROTECTION

SERIES 38D
SEWAGE SLUDGE MANAGEMENT REGULATIONS

§47-38D-1. GENERAL.

1.1. Scope and Purpose. – This legislative rule establishes requirements for the permitting, siting, bonding, installation, establishment, construction, modification, and operation of any facility that generates, processes, recycles and/or disposes of sewage sludge by whatever means, including, but not limited to, land application, composting, incineration, mixed waste composting, or any other method of handling sewage sludge within the state. This rule applies to any person who owns or operates a sewage sludge

1.1.b EXCLUSIONS. These sewage sludge management regulations do not establish requirements for the matters described in 40 CFR 503.6 set out at Appendix C.

1.2. Authority. – W. Va. Code §20-5F-2(b)

1.3. Filing Date. --

1.4. Effective Date. --

§47-38D-2. DEFINITIONS.

The following definitions shall apply to this rule unless otherwise specified herein:

2.1. "Agronomic rate" means the whole sewage sludge application rate, by dry weight, designed: (1) To provide the amount of nitrogen needed by the food crop, feed crop, fiber crop, cover crop or vegetation on the land; and (2) To minimize the amount of nitrogen in sewage sludge that passes below the root zone of the crop or vegetation grown on the land to the ground water.

2.2. "Applicant" means the person applying for a commercial solid waste facility permit or similar renewal permit and any person related to such person by virtue of common ownership, common management or family relationships, as the Director of the

Division may specify, including the following: spouses, parents, children and siblings.

2.3. "Approved solid waste facility" means a solid waste facility or practice which has a valid permit under W. Va. Code §20-5F.

2.4. "Backhauling" means the practice of using the same container to transport solid waste and to transport any substance or material used as food by humans, animals raised for human consumption or reusable item which may be refilled with any substance or material used as food by humans.

2.5. "Bulking Agent" means materials such as yard waste, wood chips, leaves and other living or dead plant tissues approved by the Chief as suitable to promote the passage of air through a static pile or windrow.

2.6. "Chief" means the Chief of the Office of Waste Management of the Division.

2.7. "Commercial recycler" means any person, corporation or business entity whose operation involves the mechanical separation of materials for the purpose of reselling or recycling at least seventy percent (70%) by weight of the materials coming into the commercial recycling facility.

2.8. "Commercial solid waste facility" means any solid waste facility which accepts solid waste generated by sources other than the owner or operator of the facility and shall not include an approved solid waste facility owned and operated by a person for the sole purpose of disposing of solid wastes created by that person or such person and other persons on a cost-sharing or nonprofit basis and shall not include land upon which reused or recycled materials are legitimately applied for structural fill, road base, mine reclamation and similar applications.

2.9. "Composting" means the aerobic, thermophilic decomposition of natural constituents of solid waste to produce a stable, humus-like material.

2.10. "Composting facility" means any solid waste facility processing solid waste by composting, including sludge composting, organic waste or yard waste composting, but does not include a facility for composting solid waste that is located at the site where the waste was generated.

2.11. "Curing area" means an area where organic material that has undergone the rapid initial stage of decomposition is further stabilized into a humus-like material.

2.12. "Director" means the Director of the Division.

2.13. "Distributor" is a person who prepares the product for distribution and marketing and is responsible for distributing and marketing the product.

2.14. "Division" means the Division of Environmental Protection .

2.15. "Domestic septage" means either liquid or solid material (septage) removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from a grease trap at a restaurant.

2.16. "Energy recovery incinerator" means any solid waste facility at which solid waste is incinerated with the intention of using the resulting energy for the generation of steam, electricity or any other use not specified herein.

2.17. "Importer" means any person receiving sewage sludge from any source whatsoever for the purpose of processing.

2.18. "Incineration technologies" means any technology that uses controlled flame combustion to thermally break down solid waste, including refuse-derived fuel, to an ash residue that contains little or no combustible materials, regardless of whether the purpose is processing, disposal, electric or steam generation or any other method by which solid waste is incinerated.

2.19. "Incinerator" means an enclosed device using controlled flame combustion to thermally break down solid waste, including refuse-derived fuel, to an ash residue that contains little or no combustible materials.

2.20. "Landfill" means any solid waste facility for the disposal of solid waste on land. Such facility is situated, for purposes of W. Va. Code §20-5F, in the county where the majority of the spatial area of such facility is located.

2.21. "Materials recovery facility" means any solid waste facility at which source-separated materials or materials recovered through a mixed waste processing facility are manually or mechanically shredded or separated for purposes of reuse and recycling, but does not include a composting facility.

2.22. "Mixed solid waste" means solid waste from which materials sought to be

reused or recycled have not been source-separated from general solid waste.

2.23. "Mixed waste processing facility" means any solid waste facility at which materials are recovered from mixed solid waste through manual or mechanical means for purposes of reuse, recycling or composting.

2.24. "Municipal solid waste incineration" means the burning of any solid waste collected by any municipal or residential solid waste disposal company.

2.25. "Open dump" means any solid waste disposal which does not have a permit under W. Va. Code §20-5F, or is in violation of state law, or where solid waste is disposed in a manner that does not protect the environment.

2.26. "Person" or "persons" mean any industrial user, public or private corporation, institution, association, firm or company organized or existing under the laws of this or any other state or country; state of West Virginia; governmental agency, including federal facilities; political subdivision; county commission; municipal corporation; industry; sanitary district; public service district; drainage district; soil conservation district; watershed improvement district; partnership trust; estate; person or individual; group of persons or individuals acting individually or as a group; or any legal entity whatever.

2.27. "Producer" means any person producing sewage sludge at a publicly owned treatment works (POTW).

2.28. "Publicly owned treatment works" or "POTW" means any device or system used in the conveyance and/or treatment (including recycling and reclamation) of municipal sewage [redacted] of a liquid nature which is owned by a state or municipality as defined by section 502 (4) of the Clean Water Act, any other treatment works treating domestic sewage (TWTDS), or wastewater treatment device or system, regardless of ownership (including federal facilities) used in the storage, treatment, recycling and reclamation of municipal or domestic sewage.

2.29. "Recycling facility" means any solid waste [illegible] for the purpose of recycling at which neither land disposal nor biological, chemical or thermal transformation of solid waste occurs. That mixed waste recovery facilities, sludge processing facilities and composting [illegible] not considered recycling facilities nor considered to be reusing or recycling solid waste within the meaning of W. Va. Code §§20-9 and 11.

2.30. "Representative sample" means a sample collected from a population or whole that ~~exhibits~~ is designed to reflect the average or typical properties of the larger population or whole.

2.31. "Sewage sludge" means solid, semi-solid or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage, scum or solids removed in primary, secondary or advanced wastewater treatment processes and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator.

2.32. "Sewage sludge processing facility" is a solid waste facility that processes sewage sludge for land application, incineration or disposal at an approved landfill. Such processes include, but are not limited to, composting, lime stabilization, thermophilic digestion and anaerobic digestion.

2.33. "Sludge" means any solid, semisolid, residue or precipitate, separated from or created by a municipal, commercial or industrial waste treatment plant, water supply treatment plant or air pollution control facility or any other such waste having similar origin.

2.34. "Solid waste" means any garbage, paper, litter, refuse, cans, bottles, waste processed for the express purpose of incineration; sludge from a waste treatment plant, water supply treatment plant or air pollution control facility; and other discarded materials, including offensive or unsightly matter, solid, liquid, semisolid or contained liquid or gaseous material resulting from industrial, commercial, mining or community activities but does not include solid or dissolved material in sewage or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources and have permits under W. Va. Code §20-5A, or source, special nuclear or by-product material considered by federal standards to be below regulatory concern, or a hazardous waste either identified or listed under W. Va. Code §20-5E, or refuse, slurry, overburden or other wastes or material resulting from coal-fired electric power or steam generation, the exploration, development, production, storage and recovery of coal, oil, and gas and other mineral resources placed or disposed of at a facility which is regulated under W. Va. Code §22, 22A, or 22B, so long as such placement or disposal is in conformance with a permit issued pursuant to such chapters.

2.35.. "Solid waste disposal" means the practice of disposing of solid waste including placing, depositing, dumping or throwing or causing to be placed, deposited, dumped or thrown any solid waste.

2.36. "Solid waste disposal shed" means the geographical area which the solid waste management board designates and files in the state register pursuant to W. Va. Code §16-26-8.

2.37. "Solid waste facility" means any system, facility, land, contiguous land, improvements on the land, structures or other appurtenances or methods used for processing, recycling or disposing of solid waste, including landfills, transfer stations, materials recovery facilities, mixed waste processing facilities, sewage sludge processing facilities, composting facilities and other such facilities not herein specified but not including land upon which sewage sludge is applied in accordance with W. Va. Code §20-5F-2b. Such facility shall be deemed to be situated, for purposes of this rule, in the county where the majority of the spatial area of such facility is located: Provided, That a salvage yard licensed and regulated pursuant to the terms of W. Va. Code §17-23, is not a solid waste facility.

2.38. "Source separated materials" means materials separated from general solid waste at the point of origin for the purpose of reuse and recycling but does not mean sewage sludge.

2.39. "Source separated organic waste" means readily degradable organic material such as food waste, yard wasge and wood waste which is collected separately from the mixed solid waste stream, except that for present purposes this definition shall excludg pressure treated, creosote coated, or lead painted lumber and excluding wood bearing or containing other materials similarly hazardous. It does not include sewage sludge or domestic septage.

2.40. "Stabilization" means the decomposition of organic material to the point where it neither reheats when wetted nor gives off offensive odors and does not include pathogens, toxins or vectors in excess of Federal regulations 40 CFR, part 503.

2.41. "Batch" means a quantity of sewage sludge or sewage sludge product handled as a unit by the producer or importer and which is derived from a common source and may otherwise be expected to contain similar levels of pollutants.

§47-38D-3. STANDARDS FOR USE, DISPOSAL AND PROCESSING OF SEWAGE SLUDGE.

3.1 FEDERAL REGULATIONS. These sewage sludge management regulations have been drawn so as to authorize federal approval for state management. All federal requirements have either been incorporated in the text or adopted for reference in Appendix P+C. Accordingly, no reference may be had to any federal regulations to permit any lower standard or less stringent compliance than what is required herein.

3.1.1 No person shall apply sewage sludge to any land if the pollutant concentrations in such sewage sludge exceed the rates in Table I or if such application would result in pollutant concentrations in the soil that would exceed the maximum existing soil concentration as determined either by a representative sample of that type of soil or by current test of soil at the application site.

No person shall apply domestic septage to any land if the pollutant concentrations in such domestic septage exceed the rates in Table I or if such application would result in pollutant concentrations in the soil that would exceed the maximum existing soil concentration as determined either by a representative sample of that type of soil or by current test of soil at the application site.

3.1.2. When sewage sludge is applied to any land, Class A pathogen requirements or Class B pathogen reuuirements and site restrictions and vector attraction reduction re uirements of 40 CFR 503.33(b)(1) through (b)(10) shall be met, provided that an application to a lawn or a home garden shall be limited to Class A pathogen requirements and vector attraction re uirements of 40 CFR 503.33(b)(1) through (b)(8). When domestic septage is applied to any land, pathogen re uirements of 40 CFR 503.31(c)(1) or (c)(2) and vector attraction reduction re uirements of 40 CFR 503.33(b)(9), (b)(10), or (b)(10) shall be met. When sewage sludge or a sewage sludge product is sold or given away in a bag or other container for application to the land, the Class A pathogen requirements and the vector attraction reduction re uirements of 40 CFR 503.33(b)(8) shall be met. For references to 40 CFR 32 and 33, use Appendix C.

3.2. Sewage Sludge Land Application Siting Restrictions and Location Standards.

3.2.1. Sludge will not be applied to land that meets any of the following conditions:

3.2.1.a. Land that is frozen, snow covered, saturated, being rained on, ~~or~~, within the one hundred year flood plain, or known to be flooded regularly.

3.2.1.b. Land within ~~50~~ 300 feet of surface water to include streams, springs, ponds, wetlands, or other collection points for surface water.

3.2.1.c. Land within ~~200~~ 1000 feet of drinking water supply wells or other personal water supply.

3.2.1.d. Land within ~~200~~ 1000 feet of an occupied dwelling ~~or~~ 600 feet by written consent of occupant.

3.2.1.e. Land within 50 feet of a federal or state highway.

3.2.1.f. Land within 100 feet of an adjacent property owner's property line.

3.2.1.g. Land from which drainage leads into a sinkhole.

3.2.1.h. Land that has been tested and determined to have a pH of less than ~~6.2~~, unless the pH is adjusted to ~~6.2~~ 6.5 or greater. 6.5 as determined by current test

3.2.1.i. Land that has a slope greater than ~~fifteen~~ 5% percent (~~15~~ 6%).

3.2.1.j. Land that has a seasonal high groundwater table less than 2 feet from the surface.

3.2.1.k. Land that has less than ~~5~~ 16 inches of soil over bedrock or an impervious pan.

3.2.1.l. Land containing soil with surface permeability of less than 0.6 inches/hour or greater than 6 inches/hour.

3.2.1.m Land that is 10 meters or less from waters of the United States.

3.2.2. No person or entity shall be allowed to apply sewage sludge to land in a manner that will result in exceeding the maximum soil concentration for all pollutants, including, but not limited to, arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium and zinc, to be determined, based upon cumulative loading rates of the "Ontario Compost Quality Standards"* and the results of soils tests furnished by the applicant. Such tests shall prove zero pathogens present.

Soil tests to determine existing soil concentrations shall be furnished by the applicant for a permit for land application. Such tests shall be taken no less per acre and evaluated as by present agronomic standards, unless greater frequency and higher evaluation are required by general rule developed under these regulations or determined by the Chief to be needed in a particular case.

*mg/kg dry weight

Arsenic	~~10~~ 15	Cobalt	~~25~~ 26	Molybdenum	~~2~~ 7
Boron	--	Copper	~~60~~ 300	Nickel	60
Cadmium	3	Lead	~~150~~ 200	Selenium	~~2~~ 2.6
Chromium	~~50~~ 350	Mercury	~~.15~~ 2	Zinc	~~500~~ 900

In addition to the maximum loading established herein, land application shall in no case be made of sewage sludge that tests worse in any listed component than the existing soil as tested herein. With the approval of the Chief in each case sewage sludge may be diluted prior to application so as to satisfy this requirement.

3.2.3. No land, except a solid waste facility, shall be allowed to accept or store so much sewage sludge as to exceed the agronomic rate or a rate of fifteen dry tons per acre per year, whichever is less: Provided, That up to twenty-five dry tons per acre per year may be applied in the reclamation of surface mine land.

3.2.4. The concept of so-called "dedicated sites" is excluded from these regulations and accordingly 40 CFR 503.23 (b)(1) and 503.23 (b)(2) are inapplicable in West Virginia.

3.2.5. No person shall be allowed to land apply sludge except during the hours of daylight.

3.2.6. Sewage sludge and intermediate products may be stored only subject to requirements for protection by permits as set out in Sec. 3.3.1.d. Such materials may be stored for no longer than three months. Septage may only be stored in a tank and then for no more than two days. Materials permitted for land application may be stored at the land application site beyond the day of arrival only if covered and contained as to ground water and then for no more than one week. In no case may such materials be stored at a land application beyond that in quantity or uuality allowed to be immediately applied to that site.

Compost piles or windrows shall be constructed within one day following receipt of compostable material at the facility. Finished compost may be stored at the processing facility for no longer than one year. Storage in tanks or otherwise out of direct contact with land is required in certain events elsewhere in this rule.

Storage beyond the times limited in these regulations shall be deemed disposal and must be in an area suitable for disposal and otherwise in accordance with applicable regulations as to disposal.

[INTERPRETATIVE NOTE: In general, sludge and sludge products may be disposed of only in a landfill meeting both solid waste and clean water requirements, except in prescribed limited quantities in applications to suitable land or except when tested for low pollutants and distributed as finished compost in bags or other small containers of no more than 100 pounds capacity.]

3.2.7. Before beginning land application of each batch of sewage sludge or sewage sludge product, the producer or importer shall test the batch for all pollutants limited by the permit for such application. The results of such test shall be kept and be open for inspection for no less than three (3) years after the end of application of the tested batch. A batch which tests over any limit so set may not be land applied under such permit and must be disposed of in some other lawful manner or returned to its source for lawful disposition by the original producer.

3.2.8. Sewage sludge may be processed as compost and sold or given away in bags or other containers no bigger than 100 pounds each for use as compost by homeowners or others, subject to the following conditions and limitations and subject to the pathogen and vector requirements. Such sludge or sludge products shall pass out of the scope of permits under this rule when so sold or given away and the processor shall be entitled at that time to a credit for solid waste ~~assessments previously~~ disposal assessments previously paid on the material, computed like the similar credit under Sec. 6.4.1.

Either the sewage sludge that is sold or given away, the material derived from sewage sludge, or the sewage sludge from which it was derived must meet the pollutant constituent limits of ~~40 CFR~~ Table 1 ~~503.13(b)(3)~~, the Class A pathogen requirements of 40 CFR 503.32(a), and one of the vector requirements of 40 CFR 503.33(b)(1) through (b)(8).

For references to 40 CFR 503, see Appendix C.

3.2.9 **Either a label shall be affixed to the bag or other container in which sewage sludge that is sold or given away for application to the land, or an information sheet shall be provided to the person who receives sewage sludge sold or given away in an other container for application to the land. The label or information sheet shall contain the following information:**

(1) The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.

(2) A statement that application of the sewage sludge to the land is prohibited except in accordance with the instructions on the label or information sheet.

(3) The annual whole sludge application rate for the sewage sludge that does not cause any of the annual pollutant loading rates in Table 4 of § 503.13 to be exceeded.

3.2.10 No person shall apply sewage sludge to any land if it is likely to adversely affect a threatened or endangered species listed under Section 4 of the Endangered Species Act or its designated critical habitat.

3.3. Sewage Sludge Processing Facility Operational and Design Requirements.

3.3.1. Sewage sludge processing facilities must adhere to the following requirements:

3.3.1.a. Incineration is not permitted at a sewage sludge processing facility and sewage sludge may not be incinerated or confined anywhere, except that an incinerator or incineration facility existing at the effective date of Senate Bill 288 of 1993 may continue to treat sewage sludge under 40 CFR 503 subpart E, for which purpose among others existing incineration permits may be modified from time to time by the Office of Air Quality. The quantity of sewage sludge being treated by such a facility at such effective date may not be increased.

3.3.1.b. The facility must be designed and operated to control vectors and odors.

3.3.1.c. The facility must not be operated or constructed within the one hundred year flood plain except that a facility existing on the effective date of these regulations may be operated if provisions have been made to prevent the encroachment of flood waters upon the facility.

3.3.1.d. Sewage sludge, intermediate or final products shall not come in direct contact with the land surface unless at a permitted solid waste facility or a POTW, and then only subject to a permit for a sewage sludge processing facility issued hereunder; except for land application in accordance with a permit therefor issued hereunder or for distribution as finished compost under these regulations. Areas of a solid waste facility where such materials contact the ground shall be protected according to regulations for solid waste and, in addition, according to regulations developed under the Ground Water Protection Act, Chapter 20, Article 5A & 5M. A POTW placing such materials in contact with the ground shall comply with such Ground Water Protection Act regulations.

3.4. Leachate Management Requirements.

3.4.1. Any liquid which comes in contact with sewage sludge at a sewage sludge processing facility must be handled as leachate and is subject to the requirements of W. Va. Code §§20-5A and 5M, ~~and the~~ rules promulgated thereunder.

Regs. 47-38 - 4.8 and other

3.5. Storm Water Requirements.

3.5.1. Storm water drainage must be directed around and away from the operating area. All storm water must be collected and discharged in compliance with State Water Quality Standards and the permit issued by the Office of Water Resources of the Division.

3.6. Landfill Disposal of Sewage Sludge. – Sewage sludge disposed at a landfill shall contain at least twenty percent (20%) solids by weight. This requirement may be met by adding or blending sand, sawdust, lime, or soil. Alternative sludge disposal methods can be utilized upon obtaining prior written approval from the Chief.

3.6.1. Sewage sludge may not represent more than twenty-five percent (25%) by weight of the total weight of waste disposed of at the landfill on any working day. 3.6.2. Sewage sludge disposed of in a landfill must be stabilized by composting prior to disposal.

3.7 Incineration. State law and these regulations do not authorize the construction or operation of a new incinerator for sewage sludge or the increase of quantity of sewage sludge regularly incinerated at present in any existing facility. Existing incinerators burning sewage sludge shall comply with all applicable federal and state regulations including those in 40 CFR 503.

3.8. INFORMATION. A person who prepares sewage sludge and provides it to another person, or a person who applies sewage sludge to land owned or leased by another person, shall provide the receiving person with notice and necessary information to comply with this rule, including the concentration of total nitrogen (as N on a dry weight basis). Whoever delivers sewage sludge for land application shall include the same information as is required in the case of compost removed for sale or other disposition in bags or other containers. Whoever applies sewage sludge to the land shall give written notice to the permitting authority, or shall assure that the preparer or other person gives such notice on his behalf in accordance with 40 CFR 503.12(j) set out at Appendix C.

3.9. Notice to Other States. Notice as required by 40 CFR 503.12(i) set out in Appendix C shall be given when sewage sludge is shipped out of state for land application.

§47-38D-4. PERMITS REQUIRED.

4.1. Applicability.

4.1.1. No person may construct or operate a sewage sludge processing facility (including mixed waste composting facilities which utilize sewage sludge) or a commercial solid waste facility which processes or handles sewage sludge or materials derived from sewage sludge without first obtaining a solid waste facility permit; Provided, That land upon which sewage sludge is applied, in accordance with the permit issued under 4.1.3 below, is not a solid waste facility.

4.1.2. In addition to a solid waste permit required under Chapter 20, Article 5F, a sewage sludge processing facility permit must be obtained through a process like that required for an initial solid waste permit, including without limitation certificate of site approval, certificate of meed, proof of site being in a zone authorized by the local county or commission siting plan, and all other siting and permitting requirements of code for an initial solid waste permit, in all cases, particularly referring to the proposed or existing sewage sludge processing facility. Notice to the local solid waste authority, public notice and opportunity for comment and a hearing will be provided as for an initial solid waste permit. Where no solid waste permit is outstanding, proceedings for the permit required by 4.1.1 may be included with proceedings for the permit here required. For those sewage sludge processing facilities which are or are intended to be located on or within a facility for which a solid waste permit is outstanding under Chapter 20, Article 5F may proceed as above by way of MAJOR permit modification in lieu of separate permit for sludge processing. such major modification shall require submission of and proceedings on a new permit application.

4.1.3. No person may produce or import sewage sludge that is land applied without first obtaining a land application permit under the permit issuance procedures (Sections 3.17 through 3.29 inclusive) of Title 47, Series 38; provided that land application permit requirements may be incorporated into a modification of a facility's WV/NDPES permit required under Chapter 20, Article 5A.

4.1.4. For those publicly owned treatment works (POTW's) which produce sewage sludge and are regulated by the Division pursuant to an WV/NPDES permit required under W. Va. Code §20-5A, a sewage sludge processing facility modification will be obtained by the applicant as a part of the existing WV/NPDES permit and shall include a sewage sludge management plan approved by the Chief of the Office of Water Resources of the Division.

4.1.5. Facilities which are surface disposal sites as defined in 40 CFR 503, Subpart C, are hereby defined as "landfills" and must meet all requirements of 47 CSR 38 applicable to landfills.

4.1.6. Permits issued under paragraph 4.1.4 of this rule, shall be subject to the permit issuance procedures, procedures for permit modifications, suspension and revocation, procedures for transfer of permits, and the procedures for permit appeals of 46 CSR 2 and are not subject to the procedures outlined in paragraphs 4.1.5.

4.1.7. Permits issued under paragraph 4.1.3 of this rule, except for land application modifications made in WV/NPDES permits under paragraph 4.1.4 of this rule, shall be subject to the permit issuance procedures (subsections 3.17 through 3.29 inclusive) of 47 CSR 38, and are not subject to the procedures outlined in paragraphs 4.1.5 and 4.1.8 of this rule.

4.1.8. In addition to other procedures, the Division shall publish notice of the receipt of each application for a permit for a sludge processing facility or for land application (or composting) of sewage sludge, such notice to be published once in a newspaper of general circulation in the county or counties where activity for which permission is sought will occur, such publication to be at least thirty (30) days prior to any issue of the permit applied for; and, if any substantial comment is received from the public, the Division shall hold a public hearing in each affected county at least with ten days' notice and shall suspend review of the application until any comment at the hearings can be taken into consideration.

4.1.9. Permits issued under Section 4.1.2 of these regulations may be revoked by the Chief on account of material error in information submitted to obtain such permit, violation of law, regulation, or permit restriction in operation thereunder, quantities of sewage sludge or amount of any pollutant substantially in excess of those anticipated in information submitted to obtain such permit, or for other proper cause.

4.1.10. Prior to granting an exemption from any reuuirement of these regulations, the Division shall make available to the public a written rationale for the proposed exemption; post public notice of the proposed exemption at the courthouse in each county in the affected region; establish a period for public comment on the proposed exemption of no less than thirty (30) days; hold a public hearing on ten (10) days notice if any substantial comment is received from the public; and suspend consideration of the request for exemption until all public comment can be considered.

4.1.11. DIRECT ENFORCEABILITY. No person shall use or dispose of sewage sludge through any practice for which requirements are established in these sewage sludge management regulations except in accordance with such reuuirements.

4.2. General, Processing Facility, and Land Application Permit Requirements. -- Persons required to obtain a permit pursuant to this rule, or to modify a WV/NPDES permit under sec. 4.1.3, must provide the following information, in the form and manner prescribed by the Chief of the Office of Waste Management or the Office of Water Resources of the Division as appropriate. The form may require information in addition to that required by this subsection.

4.2.1. Permit Application General Requirements. -- All applicants must provide the following information: in addition to the requirements of §47-38

4.2.1.a. The name, address, and location of the facility;

4.2.1.b. A description of the activities conducted or to be conducted by the applicant;

4.2.1.c. The operator's and owner's name, address, telephone number, ownership status, and status as a federal, state, private, public or other entity;

4.2.1.d. Other environmental permits issued by any local, state or federal agency;

4.2.1.e. A description of the specific source(s) of sewage sludge;

4.2.1.f. The amount of sewage sludge actually generated or imported;

4.2.1.g. The content of heavy metals, pathogens, toxins or vectors, and moisture (percent solids) present in the sewage sludge;

4.2.1.h. Each location that the sewage sludge is stored, land applied or otherwise disposed of; the amount so stored, land applied or otherwise disposed of; and the capacity of that location to accept sewage sludge;

4.2.1.i. Information relative to the quality of the sewage sludge(s) or product(s) derived from sewage sludge as required by ~~40 CFR 503~~ this rule; and

4.2.1.j. A detailed design and a description of the method to collect and control leachate and surface water runoff, including the method for treatment and disposal of leachate generated.

4.2.2. Sewage Sludge Processing Facility Permit Requirements. – All applicants for permits for sewage sludge processing facilities, except facilities located at the site where sewage sludge is generated, must submit the following additional information:

4.2.2.a. An engineering report to construct must contain, at a minimum, the following:

4.2.2.a.A. A regional map, or maps, (of appropriate scale) of the regions served by the POTW's from which the proposed facility will receive sewage sludge (as both existing and proposed); existing and proposed collection, processing, and disposal operations; the location of the closest population centers; and the transportation systems including highways, airports, railways and waterways;

4.2.2.a.B. A vicinity map (minimum scale of 1"=2000') that delineates the area within one mile of the facility boundaries, zoning and land use, residences, surface waters, access roads, bridges, railroads, airports, historic sites, and other existing and proposed man-made or natural features relating to the project;

4.2.2.a.C. A site plan (minimum scale of 1"=200' with five foot contour intervals) that delineates property boundaries, the location of existing and proposed soil boring, monitoring wells, buildings and appurtenances, fences, gates, roads, parking areas, drainage, culverts, storage facilities or areas, loading areas; existing and proposed elevation contours and direction of prevailing winds; and the location of residences, potable wells, surface water bodies, and drainage swales located within the site and in the site plan area; and

4.2.2.a.D. A map indicating wetlands and flood plains within 1,000 feet of the site, if any.

4.2.2.a.E. Every applicant shall file a disclosure statement with the Director at the time the application is filed except publicly owned and operated facilities and the owner or lessee of land to which sewage sludge is applied, such statement to be in accordance with Section 3.14 of the solid waste management regulations (Title 47, Series 38).

4.2.2.b. A description of the operation of the facility, detailed engineering plans and specifications for the entire facility, must be submitted by the applicant including at a minimum:

4.2.2.b.A. A schedule of operation, including the days and hours that the facility will be open, preparations before opening, and procedures followed after closing for the day;

4.2.2.b.B. Anticipated daily traffic flow to and from the facility, including the number of trips by private or public collection vehicles, and the quantity of material contained in each vehicle;

4.2.2.b.C. The procedure for unloading trucks (including frequency, rate, and method);

4.2.2.b.D. Special precautions or procedures for operation during wind, heavy rain, snow, and freezing conditions;

4.2.2.b.E. A statement of each location that the sewage sludge is to be land applied or otherwise disposed of, and if it is to be stored temporarily the location and how long; method of any removal from the site; and, in the case of processing to produce finished compost, the proposed distributor or distribution scheme and the plan for disposal of those finished products that cannot be delivered as finished compost due to poor quality, adverse market conditions, or any other failure of the distribution scheme to accept the product as finished compost.

4.2.2.b.F. In the case of processing to produce finished compost, an example of the label or other information source for end users to be furnished by the distributer stating the type of waste the compose product was received from, listing any restrictions on use, and recommending safe uses and application rates.

4.2.2.b.G. Identification of the personnel required to operate and maintain the facility and their job descriptions/responsibilities;

4.2.2.b.H. A detailed description of the source, and anticipated quality, and quantity of any bulking agent to be used in the process; and

4.2.2.b.I. A detailed description of the quantity, quality and specific source of the sewage sludge received or anticipated to be received, including anticipated content of heavy metals, pathogens, toxins or vectors present in the sewage sludge. organics

4.2.2.c. The permit application must contain an operating engineering report which must include, at a minimum, the following:

4.2.2.c.A. Detailed engineering plans and specifications for the entire sewage sludge processing facility, including manufacturer's performance data for the selected equipment;

4.2.2.c.B. Contingency plans detailing corrective (or remedial) action to be taken in the event of equipment breakdown; air pollution (odors); unacceptable waste delivered to the facility; groundwater contamination; spills; and undesirable conditions such as fires, dust, noise, vectors, lack of a market for the compost product and unusual traffic conditions; and

4.2.2.c.C. An Operation and Maintenance manual. -- The manual must contain general design information, detailed operational information and instructions. In addition, the manual must list the specific procedures used or to be used in monitoring, sampling and analyzing sewage sludge and the finished product, and record keeping requirements.

4.2.2.d. A description of the design of the facility, including:

4.2.2.d.A. The type, size, and associated detention times of equipment used in the handling, processing, and storage of sewage sludge;

4.2.2.d.B. The method of measuring, shredding, mixing, and proportioning input materials;

4.2.2.d.C. A description and sizing of the storage facilities for amendment, bulking agent, and finished product;

4.2.2.d.D. The separation, processing, storage, and ultimate disposal of materials that cannot be composted, if applicable;

4.2.2.d.E. The location of all temperature and any other type of monitoring points, and the frequency of monitoring;

4.2.2.d.F. A process flow diagram of the entire process, including all major equipment and flow streams. The flow streams must indicate the quantity of material on a wet weight, dry weight, and volumetric basis;

4.2.2.d.G. The aeration capacity of the system;

4.2.2.d.H. The method of supplying and regulating airflow;

4.2.2.d.I. The expected mass balance through the composting system;

4.2.2.d.J. A description of how the (temperature) monitoring equipment will ensure that facility qualifies as a process to further reduce pathogens, toxins, heavy metals and/or vectors;

4.2.2.d.K. If applicable, a description of the air emission collection and control technologies;

4.2.3. Land Application Permit Requirements. – Persons performing land application of sewage sludge or materials derived from sewage sludge must submit the following information to the Chief of the Office of Water Resources of the Division in addition to that required under paragraph 4.2.1. of this rule:

4.2.3.a. Soil analysis for all land application sites including but not limited to pH; potassium, phosphorus, nitrogen, all metals listed in Table 1 of this rule and any additional chemical analysis required by the Director;

4.2.3.b. Information relative to the nitrogen content of the sludge(s) or product(s) derived from sewage sludge to be land applied;

4.2.3.c. A soils map with application sites clearly defined;

4.2.3.d. An agreement between the preparer of sewage sludge(s) or material(s) derived from sewage sludge, the applier, and the owner of the land application site indicating each party's concurrence with the application, and certifying that each will comply with applicable requirements of this rule, including requirements of 40 CFR 503 set out in Appendix C herein; such agreement shall include the consent of the land owner for employees or agents of the Division to go on the land for inspection and testing at whatever times they find necessary or convenient to insure compliance by all parties with these regulations and permits issued hereunder.

4.2.3.e. A description of existing and future uses of the land application site;

4.2.3.f. Information relative to past application(s) of sewage

sludge or material(s) derived from sewage sludge as necessary to comply with ~~40 CFR 503.12, and~~ this rule;

4.2.3.g. Information relative to past fertilizer applications to the site;

4.2.3.h. In addition to the chemical analyses required in paragraph 4.2.1 of this rule, any additional chemical analyses of sewage sludge(s) or material(s) derived from sewage sludge, requested by the Chief of the Office of Water Resources of the Division, including, but not limited to sodium, chloride, fluoride, calcium and sulfates;

4.2.3.i. A description of the methods to be used for land application;

4.2.3.j. A description of the methods for transportation of sludge to the site;

4.2.3.k. For sewage sludge or material derived from sewage sludge, which has been imported, a copy of the POTW's NPDES permit;

4.2.3.l. For sewage sludge or material derived from sewage sludge, which has been imported, ~~information relative to the significant industrial users,~~ information describing the contents of the effluents produced by all industrial users of the POTW from which the sludge or material originated; and a complete description of any treatment of those affluents.

4.2.3.m. For sewage sludge or material derived from sewage sludge, which has been imported, a description of the methods by which pathogen control and vector attraction reduction are being achieved; and

4.2.3.n. A description of the methods to be utilized to adjust and maintain the soil to a minimum pH of 6.2 for at least 5 years from the date of application. ; or in the case of any mine land reclamation site, for at least thirty (30) years from the date of application, with a description of monitoring methods to be utilized for thirty (30) years.

§47-38D-5. GENERAL, PROCESSING FACILITY, AND LAND APPLICATION PERMIT REQUIREMENTS.

5.1. Permit General Requirements. -- All permits issued pursuant to this rule shall contain the following:

5.1.1 Any applicable requirement of §47-38, any requirement of this rule and of such of 40 CFR 503, as is set out in Appendix C, including but not limited to:

5.1.1.a. Limitations on the concentrations of pollutants (heavy

metals), organics toxins, vectors and pathogens in the sewage sludge or sewage sludge products;

5.1.1.b. Requirements relative to monitoring sewage sludge and sewage sludge product quality and reporting the results of those analyses for pH, percent solids, organic nitrogen, potassium, phosphorus, calcium, magnesium, total nitrogen, ammonia nitrogen, pathogen test results vector attraction verification and all heavy metals listed in Table 1 of this rule, except that the frequency of monitoring shall be as described in Appendix A of this rule;

5.1.1.c. Requirements relative to reporting and certification;

5.1.1.d. Requirement to pay fees as ~~identified~~ set out in section 6 of this rule;

5.1.1.e. Requirements for the proper collection, control and disposal of leachate and stormwater runoff for the protection of ground and surface waters;

5.1.1.f. Requirements to retain records for the facility for a minimum of five years;

5.1.1.g. Requirements to monitor and report monthly to the Division the quantity of sewage sludge produced or imported and the specific source of the sewage sludge produced or imported;

5.1.1.h. Requirements not to exceed a commercial solid waste facility's tonnage limits, where applicable;

5.1.1.i. Requirements to provide copies of monthly reports to the county or regional solid waste authority in which the facility or land application site(s) is located; a copy of each report shall promptly be deposited with the clerk of each county, who shall retain the series of such copies for public inspection, and notice of the deposit of each monthly report shall be published once in a newspaper of general circulation in each county receiving a copy.

5.1.1.j. Any other requirements, including additional monitoring, determined to be necessary by the Director to insure compliance with state and federal regulations;

5.2. Processing Facility Permit Requirements. – In addition to the requirements of subsection 5.1 of this rule, any solid waste facility permit issued to a sewage sludge processing facility, pursuant to the sewage sludge regulations, must contain the following:

5.2.1. Operational requirements relative to pathogen control in accordance

with 40 CFR 503.32 and its Appendix B;

5.2.2. Operational requirements relative to vector attraction reduction in accordance with 40 CFR 503.33;

5.2.3. Requirements to routinely monitor and report information relative to the quality of raw materials used in the sewage sludge processing facility including but not limited to: sewage sludge, bulking agents, and kiln dust, except that the frequency of monitoring shall be as described in Appendix A of this rule;

5.2.4. Limitations for the pollutant concentrations of the end product of the sewage sludge processing facility;

5.2.5. Labeling requirements as per ~~40 CFR 503.14(e)~~ sec. 5.2.9, if applicable;

5.2.6. Requirements for the implementation of practices to prevent the contamination of ground and surface waters, including liners if necessary; and

5.2.7. For commercial sewage sludge processing facilities, requirements for reporting in accordance with subsection 4.12 of the Solid Waste Management Regulations (47 CSR 38).

5.3. Land Application Permit Requirements. – In addition to the requirements of subsection 5.1 of this rule, any land application permit issued pursuant to the sewage sludge regulations shall contain the following:

5.3.1. Requirements delineating the sites for which land application is approved;

5.3.2. Limitations on the maximum amount of sewage sludge allowed to be land applied;

5.3.3. Requirements implementing the siting restrictions and location standards of subsection 3.2 of this rule;

5.3.4. Requirements limiting the types of crops that may be grown on land used for application of sewage sludge and the time between application of sewage sludge and the harvesting of crops, in accordance with 40 CFR 503.32(b) or Appendix C,

5.3.5. Restrictions on animal grazing and public access, in accordance with 40 CFR 503.32(b); ~~and~~ or Appendix C; and

5.3.6. Applicable vector attraction reduction requirements of 40 CFR 503.33; set out in Appendix C.

§47-38D-6. FEE AND BONDING REQUIREMENTS.

6.1. Applicability. – Any producer or importer of sewage sludge for land application shall be subject to non-refundable fees, as described herein, which shall be used to cover the costs of the sewage sludge management program. The fees established herein in paragraphs 6.4.1 and 6.4.2 of this rule shall be assessed on forms prescribed by the Chief of the Office of Water Resources of the Division and shall be paid to said Chief quarterly.

6.2. Water Quality Management Fund. – Fees collected for land application shall be deposited in the special revenue fund designated the "Water Quality Management Fund" established under the provisions of W. Va. Code §20-5A-6a except as otherwise specified herein.

6.3. Bonding. -- A bond shall be posted by the applicant prior to issue of a land application permit unless waived by the Chief in case of a minor risk defined below. Such bond shall be conditioned on full compliance with federal and state laws and regulations pertaining to land application of sewage sludge and the requirements and conditions of the permit to be issued; it shall be in an amount determined by the Chief sufficient to compensate the cost of remediation of any damage resulting from violation of such law and regulation, such determination to be guided by the quantity and pollutant level of the sewage sludge covered by the permit. Such amount may range from $1,000 to $4,000 per acre as so determined and shall in no case be less than $50,000. The bond may be a surety bond, collateral bond, cash bond, or other bond of the types allowed by Title 47, Series 38, sections 3.13.3. a and b, as may be approved by the Chief in each case. The bond shall not be released until five (5) years after the end of operations or in the case of surface mine reclamation land, thirty (30) years after the end of application of sludge.

All bonds must be submitted under the requirements of these regulations on a form prepared and furnished by the Chief, must be payable to the State of West Virginia, and must provide for continuous liability from the initiation of operations at the land application site for the full term of the operation and for up to five (5) years after operations have been concluded at the land application site. Any further time period necessary to achieve compliance with the requirements in the closure plan of the permit shall be considered an additional liability period.

The minor risk permits for which the Chief may and routinely shall waive the compliance bond herein otherwise required are permits for land application having none of the following conditions:
1.) Application in excess of 625 tons per day. 2.) Application above the agronomic rate, i.e., rates up to twenty-five (25) t/p/a in reclamation of surface mine land. 3.) Any sewage sludge processed with mixed solid waste. 4.) Application on slopes between six (6%) percent and fifteen (15%) percent.

6.4. Fee Assessments.

6.4.1. Producers or importers of sewage sludge or material derived from sewage sludge which is applied to land outside a solid waste facility shall be assessed a sewage sludge management program fee composed of $0.50 per actual ton LAND APPLIED up to 250 tons in any month and $1.50 per actual ton for excess tonnage in any month.

Such fee shall be subject to a credit for solid waste disposal assessments previously paid on the material being land applied.

6.4.3. All sewage sludge placed in, or upon, or used by a solid waste facility or processed or handled, pursuant to a permit issued by the Division, shall be subject to the same tipping and other fees as levied on the disposal of solid waste under W. Va. Code §20;, including 11-5a, 11,5b, 5F-5a, and 5N-4, which fees shall be deposited in the various funds therein described; except that on the application of sewage sludge or material derived from sewage sludge to land outside a solid waste facility, there shall be substituted for the fees levied by Section 20-5F-5a(h)(1) the fees established by 6.4.1 hereof, which fees shall be deposited in the "Water Quality Management Fund."

6.5. All sewage sludge placed in, or upon, or used by a solid waste facility or processed or handled pursuant to a permit issued by the Division for such a facility shall be counted in the tonnage limitation of such facility, regardless of intent on placement, nature of use, or subsequent disposition of the sewage sludge.

NOTE: 40 CFR 503.17 consists largely of certificates so general in form that they are unlikely to be fully understood by the persons required to make them. They are not necessary to the sewage sludge management plan authorized by state law and it is expected that they may be waived on approval for state management. All testing data, results, and reports required by this rule shall be retained for five (5) years. 40 CFR 503.17 is set out in Appendix C for reference only.

APPENDIX A

FREQUENCY OF MONITORING

AMOUNT OF SEWAGE SLUDGE RECEIVED (actual tons per 365 day period)	FREQUENCY OF MONITORING
Greater than zero but less than 290	once every 6 months
Equal to or greater than 290 but less than 1,500	once per quarter (4 times per year)
Equal to or greater than 1,500 but less 15,000	once per month (12 times per year)
Equal to or greater than 15,000	once per week

APPENDIX B

PATHOGEN TREATMENT PROCESSES

A. Processes to Significantly Reduce Pathogens (PSRP)

1. Aerobic digestion—Sewage sludge is agitated with air or oxygen to maintain aerobic conditions for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 40 days at 20 degrees Celsius and 60 days at 15 degrees Celsius.

2. Air drying—Sewage sludge is dried on sand beds or on paved or unpaved basins. The sewage sludge dries for a minimum of three months. During two of the three months, the ambient average daily temperature is above zero degrees Celsius.

3. Anaerobic digestion—Sewage sludge is treated in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 15 days at 35 to 55 degrees Celsius and 60 days at 20 degrees Celsius.

4. Composting—Using either the within-vessel, static aerated pile, or windrow composting methods, the temperature of the sewage sludge is raised to 40 degrees Celsius or higher and remains at 40 degrees Celsius or higher for five days. For four hours during the five days, the temperature in the compost pile exceeds 55 degrees Celsius.

5. Lime stabilization—Sufficient lime is added to the sewage sludge to raise the pH of the sewage sludge to 12 after two hours of contact.

B. Processes to Further Reduce Pathogens (PFRP)

1. Composting—Using either the within-vessel composting method or the static aerated pile composting method, the temperature of the sewage sludge is maintained at 55 degrees Celsius or higher for three days.

Using the windrow composting method, the temperature of the sewage sludge is maintained at 55 degrees or higher for 15 days or longer. During the period when the compost is maintained at 55 degrees or higher, there shall be a minimum of five turnings of the windrow.

2. Heat drying—Sewage sludge is dried by direct or indirect contact with hot gases to reduce the moisture content of the sewage sludge to 10 percent or lower. Either the temperature of the sewage sludge particles exceeds 80 degrees Celsius or the wet bulb temperature of the gas in contact with the sewage sludge as the sewage sludge leaves the dryer exceeds 80 degrees Celsius.

3. Heat treatment—Liquid sewage sludge is heated to a temperature of 180 degrees Celsius or higher for 30 minutes.

4. Thermophilic aerobic digestion—Liquid sewage sludge is agitated with air or oxygen to maintain aerobic conditions and the mean cell residence time of the sewage sludge is 10 days at 55 to 60 degrees Celsius.

5. Beta ray irradiation—Sewage sludge is irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (ca. 20 degrees Celsius).

6. Gamma ray irradiation—Sewage sludge is irradiated with gamma rays from certain isotopes, such as Cobalt 60 and Cesium 137, at room temperature (ca. 20 degrees Celsius).

7. Pasteurization—The temperature of the sewage sludge is maintained at 70 degrees Celsius or higher for 30 minutes or longer.

FEDERAL REGULATIONS

§ 503.4 Relationship to other regulations.

Disposal of sewage sludge in a municipal solid waste landfill unit, as defined in 40 CFR 258.2, that complies with the requirements in 40 CFR part 258 constitutes compliance with section 405(d) of the CWA. Any person who prepares sewage sludge that is disposed in a municipal solid waste landfill unit shall ensure that the sewage sludge meets the requirements in 40 CFR part 258 concerning the quality of materials disposed in a municipal solid waste landfill unit.

§ 503.6 Exclusions.

(a) *Treatment processes.* This part does not establish requirements for processes used to treat domestic sewage or for processes used to treat sewage sludge prior to final use or disposal, except as provided in § 503.32 and § 503.33.

(b) *Selection of a use or disposal practice.* This part does not require the selection of a sewage sludge use or disposal practice. The determination of the manner in which sewage sludge is used or disposed is a local determination.

(4) *Sludge generated at an industrial facility.* This part does not establish requirements for the use or disposal of sludge generated at an industrial facility during the treatment of industrial wastewater, including sewage sludge generated during the treatment of industrial wastewater combined with domestic sewage.

(e) *Hazardous sewage sludge.* This part does not establish requirements for the use or disposal of sewage sludge determined to be hazardous in accordance with 40 CFR part 261.

(f) *Sewage sludge with high PCB concentration.* This part does not establish requirements for the use or disposal of sewage sludge with a concentration of polychlorinated biphenyls (PCBs) equal to or greater than 50 milligrams per kilogram of total solids (dry weight basis).

(g) *Incinerator ash.* This part does not establish requirements for the use or disposal of ash generated during the firing of sewage sludge in a sewage sludge incinerator.

(h) *Grit and screenings.* This part does not establish requirements for the use or disposal of grit (e.g., sand, gravel, cinders, or other materials with a high specific gravity) or screenings (e.g., relatively large materials such as rags) generated during preliminary treatment of domestic sewage in a treatment works.

(i) *Drinking water treatment sludge.* This part does not establish requirements for the use or disposal of sludge generated during the treatment of either surface water or ground water used for drinking water.

(j) *Commercial and industrial septage.* This part does not establish requirements for the use or disposal of commercial septage, industrial septage, a mixture of domestic septage and commercial septage, or a mixture of domestic septage and industrial septage.

§ 503.8 Sampling and analysis.

(a) *Sampling.* Representative samples of sewage sludge that is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator shall be collected and analyzed.

(b) *Methods.* The materials listed below are incorporated by reference in this part. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. The materials are incorporated as they exist on the date of approval, and notice of any change in these materials will be published in the Federal Register. They are available for inspection at the Office of the Federal Register, 7th Floor, suite 700, 800 North Capitol Street, NW., Washington, DC, and at the Office of Water Docket, room L-102, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC. Copies may be obtained from the standard producer or publisher listed in the regulation. Methods in the materials listed below shall be used to analyze samples of sewage sludge.

(1) *Enteric viruses.* ASTM Designation: D 4994-89, "Standard Practice for Recovery of Viruses From Wastewater Sludges", 1992 Annual Book of ASTM Standards: Section 11—Water and Environmental Technology, ASTM, 1916 Race Street, Philadelphia, PA 19103-1187.

(2) *Fecal coliform.* Part 9221 E. or Part 9222 D., "Standard Methods for the Examination of Water and Wastewater", 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW., Washington, DC 20005.

(3) *Helminth ova.* Yanko, W.A., "Occurrence of Pathogens in Distribution and Marketing Municipal Sludges", EPA 600/1-87-014, 1987. National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 (PB 88-154273/AS).

(4) *Inorganic pollutants.* "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846, Second Edition (1982) with Updates I (April 1984) and II (April 1985) and Third Edition (November 1986) with Revision I (December 1987). Second Edition and Updates I and II are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 (PB-87-120-291). Third Edition and Revision I are available from Superintendent of Documents, Government Printing Office, 941 North Capitol Street, NE., Washington, DC 20002 (Document Number 955-001-00000-1).

(5) *Salmonella sp. bacteria.* Part 9260 D., "Standard Methods for the Examination of Water and Wastewater", 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW., Washington, DC 20005; or

Kenner, B.A. and H.P. Clark, "Detection and enumeration of *Salmonella* and *Pseudomonas aeruginosa*", Journal of the Water Pollution Control Federation, Vol. 46, no. 9, September 1974, pp. 2163-2171. Water Environment Federation, 601 Wythe Street, Alexandria, Virginia 22314.

(6) *Specific oxygen uptake rate.* Part 2710 B., "Standard Methods for the Examination of Water and Wastewater", 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW., Washington, DC 20005.

(7) *Total, fixed, and volatile solids.* Part 2540 G., "Standard Methods for the Examination of Water and Wastewater", 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW., Washington, DC 20005.

APPENDIX C - continued.

§503.12

(i) Any person who prepares bulk sewage sludge that is applied to land in a State other than the State in which the bulk sewage sludge is prepared shall provide written notice, prior to the initial application of bulk sewage sludge to the land application site by the applier, to the permitting authority for the State in which the bulk sewage sludge is proposed to be applied. The notice shall include:

(1) The location, by either street address or latitude and longitude, of each land application site.

(2) The approximate time period bulk sewage sludge will be applied to the site.

(3) The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who prepares the bulk sewage sludge.

(4) The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk sewage sludge.

§ 503.17 Recordkeeping.

(a) *Sewage sludge.* (1) The person who prepares the sewage sludge in § 503.10(b)(1) or (e) shall develop the following information and shall retain the information for five years:

(i) The concentration of each pollutant listed in Table 3 of § 503.13 in the sewage sludge.

(ii) The following certification statement:

"I certify, under penalty of law, that the Class A pathogen requirements in § 503.32(a) and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in § 503.33(b)(1) through § 503.33(b)(8)] have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(iii) A description of how the Class A pathogen requirements in § 503.32(a) are met.

(iv) A description of how one of the vector attraction reduction requirements in § 503.33 (b)(1) through (b)(8) is met.

(2) The person who derives the material in § 503.10 (c)(1) or (f) shall develop the following information and shall retain the information for five years:

(i) The concentration of each pollutant listed in Table [illegible]

(ii) The following certification statement:

"I certify, under penalty of law, that the Class A pathogen requirements in § 503.32(a) and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in § 503.33 (b)(1) through (b)(8)] have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(iii) A description of how the Class A pathogen requirements in § 503.32(a) are met.

(iv) A description of how one of the vector attraction reduction requirements in § 503.33 (b)(1) through (b)(8) is met.

(3) If the pollutant concentrations in TABLE 1 the Class A pathogen requirements in § 503.32(a), and the vector attraction reduction requirements in either § 503.33 (b)(9) or (b)(10) are met when bulk sewage sludge is applied to agricultural land, forest, a public contact site, or a reclamation site:

(i) The person who prepares the bulk sewage sludge shall develop the following information and shall retain the information for five years.

(A) The concentration of each pollutant listed in Table 1 in the bulk sewage sludge.

(B) The following certification statement:

"I certify, under penalty of law, that the pathogen requirements in § 503.32(a) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(C) A description of how the pathogen requirements in § 503.32(a) are met.

(ii) The person who applies the bulk sewage sludge shall develop the following information and shall retain the information for five years.

(A) The following certification statement:

"I certify, under penalty of law, that the management practices in § 503.14 and the vector attraction reduction requirement in [insert either § 503.33 (b)(9) or (b)(10)] have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

(B) A description of how the management practices in § 503.14 are met for each site on which bulk sewage sludge is applied.

(C) A description of how the vector attraction reduction requirements in either § 503.33(b)(9) or (b)(10) are met for each site on which bulk sewage sludge is applied.

(4) If the pollutant concentrations in TABLE 1 and the Class B pathogen requirements in § 503.32(b) are met when bulk sewage sludge is applied to agricultural land, forest, a public contact site, or a reclamation site:

(i) The person who prepares the bulk sewage sludge shall develop the following information and shall retain the information for five years:

(A) The concentration of each pollutant listed in Table 1 in the bulk sewage sludge.

(B) The following certification statement:

"I certify under, penalty of law, that the Class B pathogen requirements in § 503.32(b) and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in § 503.33 (b)(1) through (b)(8) if one of those requirements is met] have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements [and vector attraction reduction requirements if applicable] have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(C) A description of how the Class B pathogen requirements in § 503.32(b) are met.

(D) When one of the vector attraction reduction requirements in § 503.33 (b)(1) through (b)(8) is met, a description of how the vector attraction reduction requirement is met.

(ii) The person who applies the bulk sewage sludge shall develop the following information and shall retain the information for five years.

(A) The following certification statement:

"I certify, under penalty of law, that the management practices in § 503.14, the site restrictions in § 503.32(b)(5), and the vector attraction reduction requirements in [insert either § 503 33 (b)(9) or (b)(10), if one of those requirements is met] have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices and site restrictions [and the vector attraction reduction requirements if applicable] have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(B) A description of how the management practices in § 503.14 are met for each site on which bulk sewage sludge is applied.

(C) A description of how the site restrictions in § 503.32(b)(5) are met for each site on which bulk sewage sludge is applied.

(D) When the vector attraction reduction requirement in either § 503.33 (b)(9) or (b)(10) is met, a description of how the vector attraction reduction requirement is met.

(5) If the requirements in § 503.13(a)(2)(i) are met when bulk sewage sludge is applied to agricultural land, forest, a public contact site, or a reclamation site:

(i) The person who prepares the bulk sewage sludge shall develop the following information and shall retain the information for five years.

(A) The concentration of each pollutant listed in Table 1 in the bulk sewage sludge.

(B) The following certification statement:

"I certify, under penalty of law, that the pathogen requirements in [insert either § 503.32(a) or § 503.32(b)] and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in § 503.33 (b)(1) through (b)(8) if one of those requirements is met] have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements [and vector attraction reduction requirements] have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(C) A description of how the pathogen requirements in either § 503.32 (a) or (b) are met.

(D) When one of the vector attraction requirements in § 503.33 (b)(1) through (b)(8) is met, a description of how the vector attraction requirement is met.

(ii) The person who applies the bulk sewage sludge shall develop the following information, retain the information in § 503.17 (a)(5)(ii)(A) through (a)(5)(ii)(G) indefinitely, and retain the information in § 503.17 (a)(5)(ii)(H) through (a)(5)(ii)(M) for five years.

(A) The location, by either street address or latitude and longitude, of each site on which bulk sewage sludge is applied.

(B) The number of hectares in each site on which bulk sewage sludge is applied.

(C) The date and time bulk sewage sludge is applied to each site.

(D) The cumulative amount of each pollutant (i.e., kilograms) listed in Table 1 in the bulk sewage sludge applied to each site, including the amount in § 503.12(a)(2)(iii).

(E) The amount of sewage sludge (i.e., metric tons) applied to each site.

(F) The following certification statement:

"I certify, under penalty of law, that the requirements to obtain information in § 503.12(e)(2) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the requirements to obtain information have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

(G) A description of how the requirements to obtain information in § 503.12(e)(2) are met.

(H) The following certification statement:

"I certify, under penalty of law, that the management practices in § 503.14 have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

(I) A description of how the management practices in § 503.14 are met for each site on which bulk sewage sludge is applied.

(J) The following certification statement when the bulk sewage sludge meets the Class B pathogen requirements in § 503.32(b):

"I certify, under penalty of law, that the site restrictions in § 503.32(b)(5) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the site restrictions have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

(K) A description of how the site restrictions in § 503.32(b)(5) are met for each site on which Class B bulk sewage sludge is applied.

(L) The following certification statement when the vector attraction reduction requirement in either § 503.33 (b)(9) or (b)(10) is met:

"I certify, under penalty of law, that the vector attraction reduction requirement in [insert either § 503.33(b)(9) or § 503.33(b)(10)] has been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the vector attraction reduction requirement has been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(M) If the vector attraction reduction requirements in either § 503.33 (b)(9) or (b)(10) are met, a description of how the requirements are met.

(8) If the requirements in § 503.13(e)(4)(ii) are met when sewage sludge is sold or given away in a bag or other container for application to the land, the person who prepares the sewage sludge that is sold or given away in a bag or other container shall develop the following information and shall retain the information for five years:

(i) The annual whole sludge application rate for the sewage sludge that does not cause the annual pollutant loading rates in Table 4 of § 503.13 to be exceeded.

(ii) The concentration of each pollutant listed in Table 4 of § 503.13 in the sewage sludge.

(iii) The following certification statement:

"I certify, under penalty of law, that the management practice in § 503.14(e), the Class A pathogen requirement in § 503.32(a), and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in § 503.33 (b)(1) through (b)(8)] have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practice, pathogen requirements, and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(iv) A description of how the Class A pathogen requirements in § 503.32(a) are met.

(v) A description of how one of the vector attraction requirements in § 503.33 (b)(1) through (b)(8) is met.

(b) *Domestic septage.* When domestic septage is applied to agricultural land, forest, or a reclamation site, the person who applies the domestic septage shall develop the following information and shall retain the information for five years:

(1) The location, by either street address or latitude and longitude, of each site on which domestic septage is applied.

(2) The number of acres in each site on which domestic septage is applied.

(3) The date and time domestic septage is applied to each site.

(4) The nitrogen requirement for the crop or vegetation grown on each site during a 365 day period.

(5) The rate, in gallons per acre per 365 day period, at which domestic septage is applied to each site.

(6) The following certification statement:

"I certify, under penalty of law, that the pathogen requirements in [insert either § 503.32(c)(1) or § 503.32(c)(2)] and the vector attraction reduction requirements in [insert § 503.33(b)(9), § 503.33(b)(10), or § 503.33(b)(12)] have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(7) A description of how the pathogen requirements in either § 503.33 (c)(1) or (c)(2) are met.

(8) A description of how the vector attraction reduction requirements in § 503.33 (b)(9), (b)(10), or (b)(12) are met.

(Approved by the Office of Management and Budget under control number 2040-0157)

§ 503.18 Reporting.

(a) Class I sludge management facilities, POTWs (as defined in 40 CFR 501.2) with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve 10,000 people or more shall submit the following information to the permitting authority:

(1) The information in § 503.17(a), except the information in § 503.17 (a)(3)(ii), (a)(4)(ii) and in (a)(5)(ii), for the appropriate requirements on February 19 of each year.

(2) The information in § 503.17 (a)(5)(ii)(A) through (a)(5)(ii)(G) on [insert the month and day from the date of publication of this rule] of each year when 90 percent or more of any of the cumulative pollutant loading rates in Table 2 of § 503.13 is reached at a site.

§ 503.28 Reporting.

Class I sludge management facilities, POTWs (as defined in 40 CFR 501.2) with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve 10,000 people or more shall submit the information in § 503.27(a) to the permitting authority on February 19 of each year.

(Approved by the Office of Management and Budget under control number 2040-0157)

Subpart D—Pathogens and Vector Attraction Reduction

(a) This subpart contains the requirements for a sewage sludge to be classified either Class A or Class B with respect to pathogens.

(b) This subpart contains the site restrictions for land on which a Class B sewage sludge is applied.

(c) This subpart contains the pathogen requirements for domestic septage applied to agricultural land, forest, or a reclamation site.

(d) This subpart contains alternative vector attraction reduction requirements for sewage sludge that is applied to the land or placed on a surface disposal site.

§ 503.31 Special definitions.

(a) *Aerobic digestion* is the biochemical decomposition of organic matter in sewage sludge into carbon dioxide and water by microorganisms in the presence of air.

(b) *Anaerobic digestion* is the biochemical decomposition of organic matter in sewage sludge into methane gas and carbon dioxide by microorganisms in the absence of air.

(c) *Density of microorganisms* is the number of microorganisms per unit mass of total solids (dry weight) in the sewage sludge.

(d) *Land with a high potential for public exposure* is land that the public uses frequently. This includes, but is not limited to, a public contact site and a reclamation site located in a populated area (e.g., a construction site located in a city).

(e) *Land with a low potential for public exposure* is land that the public uses infrequently. This includes, but is not limited to, agricultural land, forest, and a reclamation site located in an unpopulated area (e.g., a strip mine located in a rural area).

(f) *Pathogenic organisms* are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.

(g) *pH* means the logarithm of the reciprocal of the hydrogen ion concentration.

(h) *Specific oxygen uptake rate (SOUR)* is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the sewage sludge.

(i) *Total solids* are the materials in sewage sludge that remain as residue when the sewage sludge is dried at 103 to 105 degrees Celsius.

(j) *Unstabilized solids* are organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

(k) *Vector attraction* is the characteristic of sewage sludge that attracts rodents, flies, mosquitos, or other organisms capable of transporting infectious agents.

(l) *Volatile solids* is the amount of the total solids in sewage sludge lost when the sewage sludge is combusted at 550 degrees Celsius in the presence of excess air.

§ 503.32 Pathogens.

(a) *Sewage sludge—Class A.* (1) The requirement in § 503.32(a)(2) and the requirements in either § 503.32(a)(3), (a)(4), (a)(5), (a)(6), (a)(7), or (a)(8) shall be met for a sewage sludge to be classified Class A with respect to pathogens.

(2) The Class A pathogen requirements in § 503.32 (a)(3) through (a)(8) shall be met either prior to meeting or at the same time the vector attraction reduction requirements in § 503.33, except the vector attraction reduction requirements in § 503.33 (b)(6) through (b)(8), are met.

(3) *Class A—Alternative 1.* (i) Either the density of fecal coliform in the sewage sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in § 503.10 (b), (c), (e), or (f).

(ii) The temperature of the sewage sludge that is used or disposed shall be maintained at a specific value for a period of time.

(A) When the percent solids of the sewage sludge is seven percent or higher, the temperature of the sewage sludge shall be 50 degrees Celsius or higher; the time period shall be 20 minutes or longer; and the temperature and time period shall be determined using equation (2), except when small particles of sewage sludge are heated by either warmed gases or an immiscible liquid.

$$D = \frac{131{,}700{,}000}{10^{0.1400t}} \quad \text{Eq. (2)}$$

Where,
D=time in days.
t=temperature in degrees Celsius.

(B) When the percent solids of the sewage sludge is seven percent or higher and small particles of sewage sludge are heated by either warmed gases or an immiscible liquid, the temperature of the sewage sludge shall be 50 degrees Celsius or higher; the time period shall be 15 seconds or longer; and the temperature and time period shall be determined using equation (2).

(C) When the percent solids of the sewage sludge is less than seven percent and the time period is at least 15 seconds, but less than 30 minutes, the temperature and time period shall be determined using equation (2).

(D) When the percent solids of the sewage sludge is less than seven percent; the temperature of the sewage sludge is 50 degrees Celsius or higher; and the time period is 30 minutes or longer, the temperature and time period shall be determined using equation (3).

$$D = \frac{50{,}070{,}000}{10^{0.1400t}} \quad \text{Eq. (3)}$$

Where,
D=time in days.
t=temperature in degrees Celsius.

(4) *Class A—Alternative 2.* (i) Either the density of fecal coliform in the sewage sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in § 503.10 (b), (c), (e), or (f).

(ii) (A) The pH of the sewage sludge that is used or disposed shall be raised to above 12 and shall remain above 12 for 72 hours.

(B) The temperature of the sewage sludge shall be above 52 degrees Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12.

(C) At the end of the 72 hour period during which the pH of the sewage sludge is above 12, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50 percent.

(5) *Class A—Alternative 3.* (i) Either the density of fecal coliform in the sewage sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in § 503.10 (b), (c), (e), or (f).

(ii) (A) The sewage sludge shall be analyzed prior to pathogen treatment to determine whether the sewage sludge contains enteric viruses.

(B) When the density of enteric viruses in the sewage sludge prior to pathogen treatment is less than one Plaque-forming Unit per four grams of total solids (dry weight basis), the sewage sludge is Class A with respect to enteric viruses until the next monitoring episode for the sewage sludge.

(C) When the density of enteric viruses in the sewage sludge prior to pathogen treatment is equal to or greater than one Plaque-forming Unit per four grams of total solids (dry weight basis), the sewage sludge is Class A with respect to enteric viruses when the density of enteric viruses in the sewage sludge after pathogen treatment is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen treatment process that produces the sewage sludge that meets the enteric virus density requirement are documented.

(D) After the enteric virus reduction in paragraph (a)(5)(ii)(C) of this section is demonstrated for the pathogen treatment process, the sewage sludge continues to be Class A with respect to enteric viruses when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented in paragraph (a)(5)(ii)(C) of this section.

(iii)(A) The sewage sludge shall be analyzed prior to pathogen treatment to determine whether the sewage sludge contains viable helminth ova.

(B) When the density of viable helminth ova in the sewage sludge prior to pathogen treatment is less than one per four grams of total solids (dry weight basis), the sewage sludge is Class A with respect to viable helminth ova until the next monitoring episode for the sewage sludge.

(C) When the density of viable helminth ova in the sewage sludge prior to pathogen treatment is equal to or greater than one per four grams of total solids (dry weight basis), the sewage sludge is Class A with respect to viable helminth ova when the density of viable helminth ova in the sewage sludge after pathogen treatment is less than one per four grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen treatment process that produces the sewage sludge that meets the viable helminth ova density requirement are documented.

(D) After the viable helminth ova reduction in paragraph (a)(5)(iii)(C) of this section is demonstrated for the pathogen treatment process, the sewage

sludge continues to be Class A with respect to viable helminth ova when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented in paragraph (a)(5)(iii)(C) of this section.

(6) *Class A—Alternative 4.* (i) Either the density of fecal coliform in the sewage sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in § 503.10 (b), (c), (e), or (f).

(ii) The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in § 503.10 (b), (c), (e), or (f), unless otherwise specified by the permitting authority.

(iii) The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in § 503.10 (b), (c), (e), or (f), unless otherwise specified by the permitting authority.

(7) *Class A—Alternative 5.* (i) Either the density of fecal coliform in the sewage sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella*, sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or given away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in § 503.10(b), (c), (e), or (f).

(ii) Sewage sludge that is used or disposed shall be treated in one of the Processes to Further Reduce Pathogens described in appendix B of this part.

(8) *Class A—Alternative 6.* (i) Either the density of fecal coliform in the sewage sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella*, sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or given away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in § 503.10(b), (c), (e), or (f).

(ii) Sewage sludge that is used or disposed shall be treated in a process that is equivalent to a Process to Further Reduce Pathogens, as determined by the permitting authority.

(b) *Sewage sludge—Class B.* (1)(i) The requirements in either § 503.32(b)(2), (b)(3), or (b)(4) shall be met for a sewage sludge to be classified Class B with respect to pathogens.

(ii) The site restrictions in § 503.32(b)(5) shall be met when sewage sludge that meets the Class B pathogen requirements in § 503.32(b)(2), (b)(3), or (b)(4) is applied to the land.

(2) *Class B—Alternative 1.*

(i) Seven samples of the sewage sludge shall be collected at the time the sewage sludge is used or disposed.

(ii) The geometric mean of the density of fecal coliform in the samples collected in paragraph (b)(2)(i) of this section shall be less than either 2,000,000 Most Probable Number per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

(3) *Class B—Alternative 2.* Sewage sludge that is used or disposed shall be treated in one of the Processes to Significantly Reduce Pathogens described in appendix B of this part.

(4) *Class B—Alternative 3.* Sewage sludge that is used or disposed shall be treated in a process that is equivalent to a Process to Significantly Reduce Pathogens, as determined by the permitting authority.

(5) *Site Restrictions.* (i) Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.

(ii) Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for four months or longer prior to incorporation into the soil.

(iii) Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than four months prior to incorporation into the soil.

(iv) Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge.

(v) Animals shall not be allowed to graze on the land for 30 days after application of sewage sludge.

(vi) Turf grown on land where sewage sludge is applied shall not be harvested for one year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the permitting authority.

(vii) Public access to land with a high potential for public exposure shall be restricted for one year after application of sewage sludge.

(viii) Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.

(c) *Domestic septage.* (1) The site restrictions in § 503.32(b)(5) shall be met when domestic septage is applied to agricultural land, forest, or a reclamation site; or

(2) The pH of domestic septage applied to agricultural land, forest, or a reclamation site shall be raised to 12 or higher by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for 30 minutes and the site restrictions in § 503.32 (b)(5)(i) through (b)(5)(iv) shall be met.

§ 503.33 Vector attraction reduction.

(a)(1) One of the vector attraction reduction requirements in § 503.33 (b)(1) through (b)(10) shall be met when bulk sewage sludge is applied to agricultural land, forest, a public contact site, or a reclamation site.

(2) One of the vector attraction reduction requirements in § 503.33 (b)(1) through (b)(8) shall be met when bulk sewage sludge is applied to a lawn or a home garden.

(3) One of the vector attraction reduction requirements in § 503.33 (b)(1) through (b)(8) shall be met when sewage sludge is sold or given away in a bag or other container for application to the land.

(4) One of the vector attraction reduction requirements in § 503.33 (b)(1) through (b)(11) shall be met when sewage sludge (other than domestic

septage) is placed on an active sewage sludge unit.

(5) One of the vector attraction reduction requirements in § 503.33 (b)(9), (b)(10), or (b)(12) shall be met when domestic septage is applied to agricultural land, forest, or a reclamation site and one of the vector attraction reduction requirements in § 503.33 (b)(9) through (b)(12) shall be met when domestic septage is placed on an active sewage sludge unit.

(b)(1) The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38 percent (see calculation procedures in "Environmental Regulations and Technology—Control of Pathogens and Vector Attraction in Sewage Sludge", EPA–625/R–92/013, 1992, U.S. Environmental Protection Agency, Cincinnati, Ohio 45268).

(2) When the 38 percent volatile solids reduction requirement in § 503.33(b)(1) cannot be met for an anaerobically digested sewage sludge, vector attraction reduction can be demonstrated by digesting a portion of the previously digested sewage sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. When at the end of the 40 days, the volatile solids in the sewage sludge at the beginning of that period is reduced by less than 17 percent, vector attraction reduction is achieved.

(3) When the 38 percent volatile solids reduction requirement in § 503.33(b)(1) cannot be met for an aerobically digested sewage sludge, vector attraction reduction can be demonstrated by digesting a portion of the previously digested sewage sludge that has a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20 degrees Celsius. When at the end of the 30 days, the volatile solids in the sewage sludge at the beginning of that period is reduced by less than 15 percent, vector attraction reduction is achieved.

(4) The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius.

(5) Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40 degrees Celsius and the average temperature of the sewage sludge shall be higher than 45 degrees Celsius.

(6) The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for two hours and then at 11.5 or higher for an additional 22 hours.

(7) The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75 percent based on the moisture content and total solids prior to mixing with other materials.

(8) The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90 percent based on the moisture content and total solids prior to mixing with other materials.

(9)(i) Sewage sludge shall be injected below the surface of the land.

(ii) No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.

(iii) When the sewage sludge that is injected below the surface of the land is Class A with respect to pathogens, the sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(10)(i) Sewage sludge applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.

(ii) When sewage sludge that is incorporated into the soil is Class A with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

(11) Sewage sludge placed on an active sewage sludge unit shall be covered with soil or other material at the end of each operating day.

(12) The pH of domestic septage shall be raised to 12 or higher by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for 30 minutes.

§ 503.48 Reporting.

Class I sludge management facilities, POTWs (as defined in 40 CFR 501.2) with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve a population of 10,000 people or greater shall submit the information in § 503.47(b) through § 503.47(h) to the permitting authority on February 19 of each year.

(Approved by the Office of Management and Budget under control number 2040–0157)

TABLE 1

POLLUTANT CONCENTRATION OF METALS IN SEWAGE SLUDGE

Metal	Concentration (mg/kg)
Arsenic	15
Cadmium	3
Chromium	350
Cobalt	26
Copper	300
Lead	200
Mercury	2
Molybdenum	7
Nickel	60
Selenium	2.6
Zinc	900

Pollutant concentration limits for organics shall be set in permits as issued, including dioxin, furan, petroleum products, and total PCB's not to exceed 10 ppm, dry weight basis.

Distributed Meeting 12/14/93

BEFORE THE LEGISLATIVE RULE-MAKING REVIEW COMMITTEE
COMMENTS OF THE
WEST VIRGINIA MANUFACTURERS ASSOCIATION
ON NEW PROPOSED REGULATION 25
TO PREVENT AND CONTROL AIR POLLUTION FROM HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES
45CSR25

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December 14, 1993

BEFORE THE LEGISLATIVE RULE-MAKING REVIEW COMMITTEE
COMMENTS OF THE
WEST VIRGINIA MANUFACTURERS ASSOCIATION
ON NEW PROPOSED REGULATION 25
TO PREVENT AND CONTROL AIR POLLUTION FROM HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES
45CSR25

INTRODUCTION

The West Virginia Manufacturers Association ("WVMA") previously filed comments regarding the proposed rule on July 22, 1993. While the WVMA believes the rule should have be changed to reflect the suggested changes, at this time the WVMA will not elaborate on those comments, but request the Legislative Rule-Making Review Committee ("LRRC") give the prior submitted comments due consideration in addressing the provisions contained in the proposed rule.

RECOMMENDED ALTERNATIVES

In addition to the prior submitted suggestions, the WVMA urges the LRRC to adopt addition language to clarify the role of the Chief of the Office of Waste Management. Because the Chief of the Office of Waste Management has exclusive authority to make the determination of whether a material is a waste, and if a waste, whether the waste is a hazardous waste, the WVMA offers the following:

(a) Delete Sections 2.15 and 2.32; and

(b) Add a new Section designated Section 3.1.a, to read as follows:

"3.1.a In all cases, the Chief of the Office of Waste Management possesses the exclusive authority to make the determination of whether a material is a waste and, if such determination concludes a material is a waste, whether the material is a hazardous waste."

CONCLUSION

The WVMA urges the LRRC to support legislative changes that would consolidate rule-making responsibilities and allow for promulgation of a single DEP rule relating to hazardous waste management. Such change should also provide for incorporation of the federal regulations by reference and authority of the Director of DEP to define the enforcement responsibilities between the various offices under the auspices of the DEP. Similarly, in lieu of two permits covering the same activity, one from the APCC and one from the OWM, the WVMA calls for a single permit issued by the DEP covering applicable aspects of a hazardous waste management activity. In conclusion, the WVMA appreciates the opportunity to present its concerns to the LRRC.