



Sewage Sludge (Biosolids) Annual Report

EPA Regulations – 503.18, 503.28, 503.48

INSTRUCTIONS

EPA's sewage sludge regulations ([40 CFR part 503](#)) require certain POTWs and Class I sewage sludge management facilities to submit to an annual biosolids report. POTWs that must submit an annual report include POTWs with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve 10,000 people or more. This is the biosolids annual report form for POTWs and Class I sewage sludge management facilities in the 42 states and all tribes and territories where EPA administers the Federal biosolids program.

For the purposes of this form, the term 'sewage sludge' also refers to the material that is commonly referred to as 'biosolids.' EPA does not have a regulatory definition for biosolids but this material is commonly referred to as sewage sludge that is placed on, or applied to the land to use the beneficial properties of the material as a soil amendment, conditioner, or fertilizer. EPA's use of the term 'biosolids' in this form is to confirm that information about beneficially used sewage sludge (a.k.a. biosolids) should be reported on this form.

Please note that questions with a (*) are required. Please also note that EPA may contact you after you submit this report for more information regarding your sewage sludge program.

Questions regarding this form should be directed to the NPDES Electronic Reporting Helpdesk at:

- NPDESeReporting@epa.gov OR
- 1-877-227-8965

What action would you like to take? *

New Biosolids Program Report

1. Program Information

Please select the NPDES ID number below for this Sewage Sludge (Biosolids) Annual Report. *

TNL074748: HARPETH VALLEY UTILITY DISTRIC

IMPORTANT - If you do not see the NPDES ID associated with your facility (i.e., you only see a blue bar in the above drop down list), you MUST follow the instructions in the "Biosolids User's Guide." A shorter set of instructions to fix this issue are in the "Important Instructions on Accessing Your NPDES ID" document. Both documents are located at: <https://epanet.zendesk.com/hc/en-us/sections/207108787-General-Biosolids>.

Facility Name: HARPETH VALLEY UTILITY DISTRIC

Street: 4063 OLD HICKORY BLVD.

City: NASHVILLE

State: TN

Zip Code: 37221

1.1 Please select at least one of the following options pertaining to your obligation to submit a Sewage Sludge (Biosolids) Annual Report in compliance with [40 CFR 503](#). The facility is: *

- a POTW with a design flow rate equal to or greater than one million gallons per day
 a POTW that serves 10,000 people or more
 a Class I Sludge Management Facility as defined in [40 CFR 503.9](#)
- otherwise required to report (e.g., permit condition, enforcement action)
 none of the above

1.2 Reporting Period Start and End Dates

Start Date of Reporting Period *

End Date of Reporting Period *

01-01-2016

12-31-2016

2. Facility Information

2.1 Biosolids or Sewage Sludge Treatment Processes

Please check the box next to the following biosolids or sewage sludge treatment processes that you used on the sewage sludge or biosolids generated or produced at your facility during the reporting period (check one or more that apply). *

Pathogen Reduction Operations (see Appendix B to Part 503)

Processes to Significantly Reduce Pathogens (PSRP)

- Aerobic Digestion
- Air Drying (or "sludge drying beds")
- Anaerobic Digestion
- Lower Temperature Composting
- Lime Stabilization

Processes to Further Reduce Pathogens (PFRP)

- Higher Temperature Composting
- Heat Drying (e.g., flash dryer, spray dryer, rotary dryer)
- Heat Treatment (Liquid sewage sludge is heated to temp. of 356°F (or 180°C) or higher for 30 min.)
- Thermophilic Aerobic Digestion
- Beta Ray Irradiation
- Gamma Ray Irradiation
- Pasteurization

Physical Treatment Operations

- Preliminary Operations (e.g., sludge grinding, degritting, blending)
- Thickening (e.g., gravity and/or flotation thickening, centrifugation, belt filter press, vacuum filter)
- Sludge Lagoon

Other Processes to Manage Sewage Sludge

- Temporary Sludge Storage (sewage sludge stored on land 2 years or less, not in sewage sludge unit)
- Long-term Sludge Storage (sewage sludge stored on land 2 years or more, not in sewage sludge unit)
- Methane or Biogas Capture and Recovery
- Other Treatment Process:

2.2 Biosolids or Sewage Sludge Analytical Methods

EPA regulations specify that representative samples of sewage sludge that is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator must be collected and analyzed. These regulations also specify the analytical methods that must be used to analyze samples of sewage sludge. For example, EPA requires facilities to monitor for the certain parameters, which are listed in Tables 1, 2, 3, and 4 at [40 CFR 503.13](#) and Tables 1 and 2 [40 CFR 503.23](#). See also [40 CFR 503.8](#).

Please check the box next to the following analytic methods used on the sewage sludge or biosolids generated or produced by you or your facility during the reporting period (check one or more that apply). *

Parameter	Method Number or Author	Description Text for Certification Section
Pathogens	<input type="checkbox"/> Sludge Monitoring - Ascaris ova.	Sludge Monitoring - Ascaris ova., "Method for the Recovery and Assay of Total Culturable Viruses from Sludge (Appendix I)," Control of Pathogens and Vector Attraction in Sewage Sludge", EPA-625-R-92-013, July 2003
	<input type="checkbox"/> Other Ascaris ova. Analytical Method:	
Ascaris ova.	<input type="checkbox"/> Sludge Monitoring - Ascaris ova.	
	<input type="checkbox"/> Other Ascaris ova. Analytical Method:	

Parameter	Method Number or Author	Description Text for Certification Section
Enteric viruses	<input type="checkbox"/> ASTM Method D4994 - Enteric Viruses	ASTM Method D4994 - Enteric Viruses, "Standard Practice for Recovery of Viruses From Wastewater Sludges," ASTM International
	<input type="checkbox"/> Other Enteric Viruses Analytical Method:	
	<input checked="" type="checkbox"/> Standard Method 9222 - Fecal Coliform	Standard Method 9222 - Fecal Coliform, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association [Note: This method is only allowable for Class B sewage sludge]
	<input type="checkbox"/> Standard Method 9221 - Fecal Coliform	Standard Method 9221 - Fecal Coliform, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	<input type="checkbox"/> EPA Method 1680 - Fecal Coliform	EPA Method 1680 - Fecal Coliform, "Fecal Coliforms in Sewage Sludge by Multiple-Tube Fermentation using Lauryl Tryptose Broth and EC Medium," EPA-821-R-10-003, April 2010
Fecal coliform	<input type="checkbox"/> EPA Method 1681 - Fecal Coliform	EPA Method 1681 - Fecal Coliform, Fecal Coliforms in Sewage Sludge (Biosolids) by MultipleTube Fermentation using A-1 medium, EPA-821-R-04-027, June 2005
	<input checked="" type="checkbox"/> Other Fecal Coliform Analytical Method:	
	Hach Method 8368 - Most Probable Number Method 8368 (A-1 medium) for non-potable waters is USEPA accepted. Method 8368 meets or exceeds the specification criteria in Standard Methods for the Examination of Water and Wastewater, 18th edition, 9221 E, fecal coliform procedure.	
Helminth ova.	<input type="checkbox"/> W.A. Yanko Method - Helminth ova.	W.A. Yanko Method - Helminth Ova., "Occurrence of Pathogens in Distribution and Marketing Municipal Sludges," EPA-600-1-87-014, 1987
	<input type="checkbox"/> Other Helminth ova. Analytical Method:	
	<input type="checkbox"/> Standard Method 9260 - Salmonella	Standard Method 9260 - Salmonella, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
Salmonella sp. Bacteria	<input type="checkbox"/> EPA Method 1682 - Salmonella	EPA Method 1682, "Salmonella in Sewage Sludge (Biosolids) by Modified Semisolid Rappaport-Vassiliadis (MSRV) Medium," EPA-821-R-06-014, July 2006
	<input type="checkbox"/> Kenner and Clark Method - Salmonella	Kenner and Clark Method - Salmonella, "Detection and Enumeration of Salmonella and Pseudomonas aeruginosa," J. Water Pollution Control Federation, 46(9):2163-2171, 1974
	<input type="checkbox"/> Other Salmonella sp. Bacteria Analytical Method:	
Total Culturable Viruses	<input type="checkbox"/> Class A Sludge Monitoring - Total Culturable Viruses	EPA Class A Sludge Monitoring - Total Culturable Viruses, "Method for the Recovery and Assay of Total Culturable Viruses from Sludge (Appendix H)," Control of Pathogens and Vector Attraction in Sewage Sludge, EPA-625-R-92-013, July 2003
	<input type="checkbox"/> Other Total Culturable Viruses Analytical Method:	
Metals		
Arsenic	<input checked="" type="checkbox"/> EPA Method 6010 - Arsenic (ICP-OES)	EPA Method 6010 - Arsenic (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 6020 - Arsenic (ICP-MS)	EPA Method 6020 - Arsenic (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7010 - Arsenic (GF-AAS)	EPA Method 7010 - Arsenic (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7061 - Arsenic (AA-GH)	EPA Method 7061 - Arsenic (Atomic Absorption - Gaseous Hydride), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> Other Arsenic Analytical Method:	

Parameter	Method Number or Author	Description Text for Certification Section
Beryllium	<input type="checkbox"/> EPA Method 6010 - Beryllium (ICP-OES)	EPA Method 6010 - Beryllium (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 6020 - Beryllium (ICP-MS)	EPA Method 6020 - Beryllium (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7000 - Beryllium (FAAS)	EPA Method 7000 - Beryllium (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7010 - Beryllium (GF-AAS)	EPA Method 7010 - Beryllium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> Other Beryllium Analytical Method	
Cadmium	<input checked="" type="checkbox"/> EPA Method 6010 - Cadmium (ICP-OES)	EPA Method 6010 - Cadmium (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 6020 - Cadmium (ICP-MS)	EPA Method 6020 - Cadmium (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7000 - Cadmium (FAAS)	EPA Method 7000 - Cadmium (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7010 - Cadmium (GF-AAS)	EPA Method 7010 - Cadmium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7131 - Cadmium (GF-AAS)	EPA Method 7131 - Cadmium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
Chromium	<input type="checkbox"/> Other Cadmium Analytical Method:	
	<input checked="" type="checkbox"/> EPA Method 6010 - Chromium (ICP-OES)	EPA Method 6010 - Chromium (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 6020 - Chromium (ICP-MS)	EPA Method 6020 - Chromium (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7000 - Chromium (FAAS)	EPA Method 7000 - Chromium (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7010 - Chromium (GF-AAS)	EPA Method 7010 - Chromium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
Copper	<input type="checkbox"/> EPA Method 7191 - Chromium (AA-FT)	EPA Method 7191 - Chromium (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> Other Chromium Analytical Method:	
	<input checked="" type="checkbox"/> EPA Method 6010 - Copper (ICP-OES)	EPA Method 6010 - Copper (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 6020 - Copper (ICP-MS)	EPA Method 6020 - Copper (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7000 - Copper (FAAS)	EPA Method 7000 - Copper (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
Lead	<input type="checkbox"/> EPA Method 7010 - Copper (GF-AAS)	EPA Method 7010 - Copper (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> Other Copper Analytical Method:	
	<input checked="" type="checkbox"/> EPA Method 6010 - Lead (ICP-OES)	EPA Method 6010 - Lead (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 6020 - Lead (ICP-MS)	EPA Method 6020 - Lead (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7000 - Lead (FAAS)	EPA Method 7000 - Lead (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
Lead	<input type="checkbox"/> EPA Method 7010 - Lead (GF-AAS)	EPA Method 7010 - Lead (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7421 - Lead (AA-FT)	EPA Method 7421 - Lead (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> Other Lead Analytical Method:	

Parameter	Method Number or Author	Description Text for Certification Section
Mercury	<input checked="" type="checkbox"/> EPA Method 7471 - Mercury (CVAA)	EPA Method 7471 - Mercury in Solid or Semi-Solid Waste (Cold Vapor Atomic Absorption), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> Other Mercury Analytical Method:	
Molybdenum	<input checked="" type="checkbox"/> EPA Method 6010 - Molybdenum (ICP-OES)	EPA Method 6010 - Molybdenum (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 6020 - Molybdenum (ICP-MS)	EPA Method 6020 - Molybdenum (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7000 - Molybdenum (FAAS)	EPA Method 7000 - Molybdenum (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7010 - Molybdenum (GF-AAS)	EPA Method 7010 - Molybdenum (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7481 - Molybdenum (AA-FT)	EPA Method 7481 - Molybdenum (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> Other Molybdenum Analytical Method:	
Nickel	<input checked="" type="checkbox"/> EPA Method 6010 - Nickel (ICP-OES)	EPA Method 6010 - Nickel (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 6020 - Nickel (ICP-MS)	EPA Method 6020 - Nickel (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7000 - Nickel (FAAS)	EPA Method 7000 - Nickel (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7010 - Nickel (GF-AAS)	EPA Method 7010 - Nickel (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> Other Nickel Analytical Method:	
Selenium	<input checked="" type="checkbox"/> EPA Method 6010 - Selenium (ICP-OES)	EPA Method 6010 - Selenium (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 6020 - Selenium (ICP-MS)	EPA Method 6020 - Selenium (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7010 - Selenium (GF-AAS)	EPA Method 7010 - Selenium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7740 - Selenium (AA-FT)	EPA Method 7740 - Selenium (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7741 - Selenium (AA-GH)	EPA Method 7741 - Selenium (Atomic Absorption - Gaseous Hydride), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> Other Selenium Analytical Method:	
Zinc	<input checked="" type="checkbox"/> EPA Method 6010 - Zinc (ICP-OES)	EPA Method 6010 - Zinc (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 6020 - Zinc (ICP-MS)	EPA Method 6020 - Zinc (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7000 - Zinc (FAAS)	EPA Method 7000 - Zinc (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 7010 - Zinc (GF-AAS)	EPA Method 7010 - Zinc (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> Other Zinc Analytical Method:	
Nitrogen Compounds		
Ammonia Nitrogen	<input checked="" type="checkbox"/> EPA Method 350.1 - Ammonia Nitrogen	EPA Method 350.1 - Ammonia Nitrogen, "Determination of Ammonia Nitrogen by Semi-Automated Colorimetry," August 1993
	<input type="checkbox"/> Standard Method 4500-NH3 - Ammonia Nitrogen	Standard Method 4500-NH3 - Ammonia Nitrogen, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	<input type="checkbox"/> Other Ammonia Nitrogen Analytical Method	

Parameter	Method Number or Author	Description Text for Certification Section
Nitrate Nitrogen	<input checked="" type="checkbox"/> EPA Method 9056 - Nitrate Nitrogen (IC)	EPA Method 9056 - Nitrate Nitrogen (Ion Chromatography), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> EPA Method 9210 - Nitrate Nitrogen (ISE)	EPA Method 9210 - Nitrate Nitrogen (Ion-Selective Electrode), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> Other Nitrate Nitrogen Analytical Method:	
Nitrogen	<input type="checkbox"/> Standard Method 4500-N - Nitrogen	Standard Method 4500-N - Nitrogen, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	<input type="checkbox"/> Other Nitrogen Analytical Method:	
Organic Nitrogen	<input type="checkbox"/> Standard Method 4500-Norg - Organic Nitrogen	Standard Method 4500-Norg - Organic Nitrogen, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	<input type="checkbox"/> Other Organic Nitrogen Analytical Method:	
	<input type="checkbox"/> EPA Method 351.2 - Total Kjeldahl Nitrogen	EPA Method 351.2 - Total Kjeldahl Nitrogen, "Determination of Total Kjeldahl Nitrogen by Semi-Automated Colorimetry," August 1993
Total Kjeldahl Nitrogen	<input checked="" type="checkbox"/> Other Total Kjeldahl Nitrogen Analytical Method:	<div style="border: 1px solid black; padding: 5px;">Standard Method 4500-NOrg C-2011, "Standard Methods for the Examination of Water and Wastewater,"</div>
Other Analytes		
Fixed Solids	<input type="checkbox"/> Standard Method 2540 - Fixed Solids	Standard Method 2540 - Total, fixed, and volatile solids, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	<input type="checkbox"/> Other Fixed Solids Analytical Method:	
Paint Filter Test	<input type="checkbox"/> EPA Method 9095 - Paint Filter Liquids Test	EPA Method 9095 - Paint Filter Liquids Test, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> Other Paint Filter Test Analytical Method:	
pH	<input type="checkbox"/> EPA Method 9040 - pH (\leq 7% solids)	EPA Method 9040 - pH (\leq 7% solids), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input checked="" type="checkbox"/> EPA Method 9045 - pH ($>$ 7% solids)	EPA Method 9045 - pH ($>$ 7% solids), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
Specific Oxygen Uptake Rate	<input type="checkbox"/> Other pH Analytical Method:	
	<input checked="" type="checkbox"/> Standard Method 2710 - SOUR	Standard Method 2710 - Specific Oxygen Uptake Rate, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
TCLP	<input type="checkbox"/> Other Specific Oxygen Uptake Rate Analytical Method:	
	<input checked="" type="checkbox"/> EPA Method 1311 - Toxicity Characteristic Leaching Procedure	EPA Method 1311 - Toxicity Characteristic Leaching Procedure, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
Temperature	<input type="checkbox"/> Other TCLP Analytical Method:	
	<input checked="" type="checkbox"/> Standard Method 2550 - Temperature	Standard Method 2550 - Temperature, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
Total Solids	<input type="checkbox"/> Other Temperature Analytical Method:	
	<input checked="" type="checkbox"/> Standard Method 2540 - Total Solids	Standard Method 2540 - Total, fixed, and volatile solids, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	<input type="checkbox"/> Other Total Solids Analytical Method:	

Parameter	Method Number or Author	Description Text for Certification Section
Volatile Solids	<input checked="" type="checkbox"/> Standard Method 2540 - Volatile Solids	Standard Method 2540 - Total, fixed, and volatile solids, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	<input type="checkbox"/> Other Volatile Solids Analytical Method:	
No Analytical Methods	<input type="checkbox"/> No Analytical Methods Used	

2.3 What is the estimated total volume of biosolids or sewage sludge produced at your facility for the reporting period (in dry metric tons)? *

1451.43

3. Biosolids or Sewage Sludge Management

EPA NPDES regulations at [40 CFR 503](#) only require reporting for land application, surface disposal, or incineration. You have the option to select "Other Management Practice" if you wish to provide more information on how you manage your sewage sludge or biosolids.

Please use the selections below to identify how sewage sludge or biosolids generated or produced at your facility was managed, used, or disposed by you or your facility for the reporting period. You can use the button below to add as many Sewage Sludge Unique Identifier (SSUID) sections as needed to describe how you manage your sewage sludge.

SSUID Section

Sewage Sludge Unique Identifier (SSUID): 001

Management Practice Type *	Handler or Preparer Type *	Management Practice Detail *
Land Application	Owner or Operator	Agricultural Land Applicaton

Please Note: Land Application includes the distribution and marketing (sale or give away) of Class A EQ.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
Bulk	Class B	1451.43

Pollutant Concentrations:

Did the facility land apply bulk sewage sludge when one or more pollutant concentrations in the sewage sludge exceeded a monthly average pollutant concentration in Table 3 of [40 CFR 503.13](#)? *

Yes No

Biosolids or Sewage Sludge Pathogen Reduction Options

Please use the selections below to identify the pathogen reduction options used by your facility for this sewage sludge unique identifier for the reporting period (check one or more that apply). *

Code	Pathogen Reduction Option
Class A (must also demonstrate that meet fecal coliform or salmonella limits)	
<input checked="" type="checkbox"/> B1	Class B-Alternative 1: Fecal Coliform Geometric Mean
<input checked="" type="checkbox"/> B21	Class B-Alternative 2 PSRP 1: Aerobic Digestion
<input type="checkbox"/> B22	Class B-Alternative 2 PSRP 2: Air Drying
<input type="checkbox"/> B23	Class B-Alternative 2 PSRP 3: Anaerobic Digestion
<input type="checkbox"/> B24	Class B-Alternative 2 PSRP 4: Composting
<input type="checkbox"/> B25	Class B-Alternative 2 PSRP 5: Lime Stabilization
<input type="checkbox"/> B3	Class B-Alternative 3: PSRP Equivalency
<input type="checkbox"/> pH	pH Adjustment (Domestic Septage)

Biosolids or Sewage Sludge Vector Attraction Reduction Options

Please use the selections below to identify the vector attraction reduction options used by your facility or another person/facility for this sewage sludge unique identifier for the reporting period (check one or more that apply). *

Vector Attraction Reduction Options

- VR1 Option 1-Volatile Solids Reduction
- VR2 Option 2-Bench-Scale Volatile Solids Reduction (Anaerobic Bench Test)
- VR3 Option 3-Bench-Scale Volatile Solids Reduction (Aerobic Bench Test with Percent Solids of Two Percent or Less)
- VR4 Option 4-Specific Oxygen Uptake Rate
- VR5 Option 5-Aerobic Processing (Thermophilic Aerobic Digestion/Composting)
- VR6 Option 6-Alkaline Treatment
- VR7 Option 7-Drying (Equal to or Greater than 75 Percent)
- VR8 Option 8-Drying (Equal to or Greater than 90 Percent)
- VR9 Option 9-Sewage Sludge Injection
- VR10 Option 10-Sewage Sludge Timely Incorporation into Land
- VR11 Option 11-Sewage sludge Covered at the End of Each Operating Day

Noncompliance Reporting

Please use the check boxes below to indicate any noncompliance with EPA's Federal sewage sludge program requirements (see [40 CFR 503](#)) for this facility during the reporting period. EPA notes that any person who prepares sewage sludge (i.e., person who generates sewage sludge or a person who derives a material from sewage sludge) shall ensure that the applicable requirements in EPA's biosolids regulations ([40 CFR 503](#)) are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator (see [40 CFR 503.7](#)).

Land Application

- Facility land applied bulk sewage sludge or sold or gave away sewage sludge in a bag or other container when one or more pollutant concentrations in the sewage sludge exceeded a land application ceiling pollutant limit (see Table 1 of [40 CFR 503.13](#)).

- Facility failed to properly collect and analyze its sewage sludge in accordance with the required monitoring frequency and approved analytical methods in order to obtain an accurate and representative sample (including appropriate method holding times) (see permit requirements and [40 CFR 503.8](#)).
- Facility had deficiencies with pathogen reduction (see [40 CFR 503.32](#)).
- Facility had deficiencies with vector attraction reduction (see [40 CFR 503.33](#)).
- Land application of bulk sewage sludge likely to adversely affected a threatened or endangered species listed under Section 4 of the Endangered Species Act or its designated critical habitat (see [40 CFR 503.14\(a\)](#)).
- Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site that was flooded, frozen, or snow-covered such that the bulk sewage sludge entered a wetland or other waters of the United States, as defined in [40 CFR 122.2](#), except as provided in a permit issued pursuant to Section 402 or 404 of the CWA (see [40 CFR 503.14\(b\)](#)).
- Bulk sewage sludge was applied to agricultural land, forest, or a reclamation site was 10 meters or less from waters of the United States, as defined in [40 CFR 122.2](#), unless otherwise specified by the permitting authority (see [40 CFR 503.14\(c\)](#)).
- Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site at a whole sludge application rate that was greater than the agronomic rate for the bulk sewage sludge, unless, in the case of a reclamation site, otherwise specified by the permitting authority (see [40 CFR 503.14\(d\)](#)).
- One or more label or information sheet requirements were not met for sewage sludge that was sold or given away for land application (see [40 CFR 503.14\(e\)](#)).
- Bulk sewage sludge was applied to land where the cumulative pollutant loading rates in [§503.13\(b\)\(2\)](#) have been reached.
- The required notice and information was not provided to the land application applier (see [40 CFR 503.12\(f\) and \(g\)](#)).
- The required notice and information was not provided to the owner or lease holder of the land on which bulk sewage sludge was applied (see [40 CFR 503.12\(h\)](#)).
- The required notice was not provided to the permitting authority for the State in which bulk sewage sludge was applied if the bulk sewage sludge was applied to land in a State other than the State in which the bulk sewage sludge was prepared (see [40 CFR 503.12\(i\) and \(j\)](#)).
- The facility failed to keep the necessary records for preparers and appliers during the reporting period (see [40 CFR 503.27](#)).

When sewage sludge that meets Class B pathogen reduction requirements, but not Class A, is applied to the land, additional site restrictions must be met. Please use the check boxes below to indicate any noncompliance with EPA's Federal sewage sludge Class B pathogen reduction requirements (see [40 CFR 503.32](#)) for this facility during the reporting period.

- Food crops with harvested parts that touched the sewage sludge/soil mixture (such as melons, cucumbers, squash, etc.) were harvested within 14 months after application of sewage sludge (see [40 CFR 503.32\(b\)\(5\)\(i\)](#)).
- Food crops with harvested parts below the soil surface (root crops such as potatoes, carrots, radishes) were harvested within 20 months after application of sewage sludge and the sewage sludge remained on the land surface for four months or longer prior to incorporation into the soil (see [40 CFR 503.32\(b\)\(5\)\(ii\)](#)).
- Food crops with harvested parts below the soil surface (root crops such as potatoes, carrots, radishes) were harvested within 38 months after application of the sewage sludge and the sewage sludge remained on the land surface for less than four months prior to incorporation into the soil (see [40 CFR 503.32\(b\)\(5\)\(iii\)](#)).
- Food crops, feed crops, and fiber crops were harvested within 30 days after application of sewage sludge (see [40 CFR 503.32\(b\)\(5\)\(iv\)](#)).
- Animals were grazed on a site within 30 days after application of sewage sludge (see [40 CFR 503.32\(b\)\(5\)\(v\)](#)).
- Turf was harvested within 1 year after application of sewage sludge if the turf was placed on land with a high potential for public exposures or a lawn, unless otherwise specified by the permitting authority (see [40 CFR 503.32\(b\)\(5\)\(vi\)](#)).
- Public access to land with high potential for public exposure was not restricted for 1 year after application of sewage sludge (see [40 CFR 503.32\(b\)\(5\)\(vii\)](#)).
- Public access to land with a low potential for public exposure was not restricted for 30 days after application of sewage sludge (see [40 CFR 503.32\(b\)\(5\)\(viii\)](#)).
- Check when done with SSUID section. *

Biosolids Monitoring Data

INSTRUCTIONS: These monitoring data should be representative of the sewage sludge that was applied to land or placed on a surface disposal site during the reporting year see [40 CFR 503.8\(a\)](#). This section uses the frequency of monitoring requirements in [40 CFR 503.16](#) and [503.26](#). The following codes can be used as data qualifiers: T = Too Numerous to Count, E = Estimated, N = No Data.

Maximum Pollutant Concentration Data for All Sewage Sludge Applied to Land *

This section summarizes the maximum pollutant concentrations in sewage sludge that was applied to land during the reporting year. In accordance with [40 CFR 503.13\(a\)](#), EPA's sewage sludge regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit ([see Table 1 of 40 CFR 503.13](#)). In order to identify noncompliance, EPA will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of [40 CFR 503.13](#).

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Arsenic	Maximum	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 15.7	= 5.80	= 13.4	= 12.2

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Cadmium	Maximum	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 3.92	= 1.45	= 1.61	= 1.85

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Copper	Maximum	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 135	= 168	= 142	= 159

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Lead	Maximum	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 12.1	= 12.0	= 5.77	= 15.1

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Mercury	Maximum	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 0.79	= 0.58	= 0.65	= 0.74

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Molybdenum	Maximum	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 3.92	= 4.36	= 3.37	= 4.27

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Nickel	Maximum	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 15.7	= 20.3	= 22.2	= 17.3

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Nitrogen	Average	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 27273	= 34553	= 27679	= 40709

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Selenium	Maximum	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 15.7	= 5.80	= 6.45	= 10.5

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Zinc	Maximum	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 392	= 417	= 416	= 439

Monthly Average Pollutant Concentration Data for All Sewage Sludge Applied to Land *

This section summarizes the monitoring-period average pollutant concentrations in sewage sludge that was applied to land during the reporting year.

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Arsenic	Average	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 12.8	= 5.70	= 9.80	= 9.80

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Cadmium	Average	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 3.20	= 1.43	= 1.58	= 1.33

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Copper	Average	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 108	= 146	= 117	= 151

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Lead	Average	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 8.68	= 9.62	= 4.55	= 13.1

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Mercury	Average	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 0.64	= 0.57	= 0.63	= 0.53

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Nickel	Average	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 12.8	= 17.4	= 17.6	= 12.4

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Selenium	Average	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 12.8	= 5.70	= 6.33	= 8.95

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Zinc	Average	mg/kg	COMPOS
January-March	April-June	July-September	October-December
= 284	= 362	= 345	= 426

Pathogens: Class B, Alternative 1 *

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Fecal Coliform	Geometric Mean	MPN/gram	GRAB-7
January-March	April-June	July-September	October-December
= 215470	= 276999	= 337981	= 1327650

Vector Attraction Reduction - SOUR Option (Option 4) *

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Specific Oxygen Uptake Rate (SOUR)	Maximum	Milligrams per hour per gram	GRAB
January-March	April-June	July-September	October-December
= 1.2	= 1.3	= 0.7	= 1.4

Additional Information

Please enter any additional information in the comment box below (limit to 3,900 characters) that you would like to provide.

Additional Attachments

Certification Information

I certify, under penalty of law, that the information in this report was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Certifier E-Mail *

jpendleton@hvud.com

Form Action *

Approve