

CHAPTER 10

RECORD-KEEPING AND REPORTING REQUIREMENTS

ESSENTIAL ELEMENTS OF A SAMPLING PLAN

- ◆ Goals of the Sampling Plan
- ◆ Description of the Facility Generating Sludge
- ◆ Data Quality Objectives
- ◆ Selecting and Describing Sampling Points
- ◆ Sample Collection Procedures
- ◆ Sample Handling Procedures
- ◆ Evaluation of Completeness
- ◆ **Record-Keeping and Reporting Procedures**

*Although record-keeping and reporting are not technically part of the sampling process, any sampling program that ignores these elements will lack documentation of the quality of its sludge. Further, inappropriate or inadequate record-keeping and reporting can be a violation of state and federal regulations. If the primary goal of your sampling program is to demonstrate compliance with applicable regulations, then poor record-keeping and improper reporting can cause serious problems.*

***Inappropriate or inadequate record-keeping and reporting can be a violation of state and federal regulations***

*The following information is presented to highlight general record-keeping and reporting requirements under the federal and state regulations governing disposal of sewage sludge. This information pertains to land application and disposal at a sludge-only surface disposal facility (also known as a sludge-only landfill). If your sampling program (as documented in your sampling plan) is being developed for purposes other than sludge disposal, you may still find the information in this chapter useful.*

**General Considerations**

Federal regulations under 40 CFR Part 503 are very specific regarding record-keeping and reporting requirements. The Part 503 rule specifies who must keep records, what records must be kept, and how long records must be retained.

The record-keeping and reporting requirements applicable to EPA are found in 40 CFR 503.17 for POTWs that land-apply materials and in 40 CFR 503.27 for those that dispose material in a sludge-only surface disposal facility. The following three EPA documents provide excellent guidance on record-keeping:

- *Part 503 Implementation Guidance*, EPA 833-R-95-001, Office of Water, October 1995.

- *Preparing Sewage Sludge for Land Application or Surface Disposal: A Guide for Preparers of Sewage Sludge on the Monitoring, Record-keeping, and Reporting Requirements of the Federal Standards for the Use or Disposal of Sewage Sludge*, 40 CFR Part 503, EPA 831B-93-002a, Office of Water, August 1993.
- *Land Application of Sewage Sludge: A Guide for Land Appliers on the Requirements of the Federal Standards for the Use or Disposal of Sewage Sludge*, 40 CFR Part 503, EPA 831-B-93-002b, Office of Enforcement and Compliance Assurance, December 1994.

Some states may have monitoring requirements that exceed federal requirements. Additional monitoring generally entails additional record-keeping and reporting. Table 10-1 cites the applicable sections of state regulations that pertain to record-keeping and reporting for the New England states and New York.

The records that need to be retained depend on the quality of the material and its ultimate end use. Some records need to be reported, while others need to be retained to support the information submitted to the permitting authority. Both the POTWs that generate material and those that use or dispose material must keep records. States may have record retention requirements that are more stringent than the federal 503 regulations. In addition to reviewing the federal guidance documents cited in this chapter, you should also contact the appropriate state regulatory agency to confirm the length of time that records must be kept. See Appendix L for regional regulatory contact information for EPA, the New England states, and New York.

**Table 10-1. RECORD-KEEPING AND REPORTING REGULATIONS IN NEW ENGLAND AND NEW YORK**

State	Land Application	Sludge-Only Disposal	Sludge Treatment and Monitoring
Connecticut	CGS Section 22a-430 of Chapter 446K	CGS Section 22a-430 of Chapter 446K	CGS Section 22a-430 of Chapter 446K
Maine	06-096 CMR 419 6.	06-096 CMR 401 4	06-096 CMR 409 F. G. and H.
Massachusetts	310 CMR 32.20-26, and 60	310 CMR 32.20 and 60	310 CMR 32.60
New Hampshire	Env-Ws 806.11 Env-Ws 806.12	Env-Ws 808.11 Env-Ws 808.12 Env-Ws 809.04	Env-Ws 807.06 Env-Ws 808.11 Env-Ws 808.12 Env-Ws 810.03
New York	Title 6 NYCRR 360-4.7(c)	Title 6 NYCRR 360-2.17(t)	Title 6 NYCRR 360-5.5(e)
Rhode Island	#12-190-008	#12-190-008	#12-190-008
Vermont	Solid Waste Management Rule §§ 6-703, 6-704	Solid Waste Management Rule §§ 6-703, 6-704	Solid Waste Management Rule §§ 6-703, 6-704

## Record-Keeping for Sludge Preparers

Record-keeping and reporting should address two distinct activities: sludge preparation and use/disposal. Sludge sampling at a POTW or other sludge treatment facility (e.g., a compost facility) is a process that monitors the preparation of sludge. A sampling plan should therefore focus on the record-keeping and reporting requirements applicable to sludge treatment and preparation. Typical records that should be maintained by a facility preparing sludge for use or disposal include:

- Data documenting pathogen reduction.
- Data documenting vector attraction reduction (VAR).
- Analytical data showing concentrations of regulated contaminants.
- The amount of sludge produced and its final disposition.

Records relating to pathogen reduction generally involve physical measurements (e.g., time, temperature, pH, percent solids) that document that a specific operational standard associated with an anticipated microbial kill has been met. Various processes have been documented for reducing pathogen concentrations in biosolids. Implementing these processes to meet established operational standards provides a degree of confidence that pathogen densities have been reduced to an acceptable level. Examples of records that might be kept to document pathogen reduction are time and pH for class B lime stabilization. With regard to the sale or distribution of class A biosolids, records relating to actual microbial analyses must be maintained.

Record-keeping for VAR is similar to pathogen reduction. If biosolids are treated in a prescribed manner, then vector attractiveness has been reduced. It is necessary to maintain records that demonstrate that the process used meets the prescribed standards. The example used above – maintaining time and pH records for lime stabilization – would also be applicable for VAR.

Record-keeping for analytical data involves retaining and organizing much of the information collected during the sampling process. Some of this information would include:

- Date, time, and sample location.
- Sample type and method of collection.
- Name and contact information of laboratory performing analyses.
- QA/QC procedures.
- Analytical results.

Most data describing the who, what, when, where, and how of your sampling should be retained. Not all these data have to be reported, but the records should be kept. How long the records must be kept depends on the data and the applicable regulatory requirements.

***How long the records must be kept depends on the data and the applicable regulatory requirements.***

Most regulatory agencies want to know how much sludge a facility has produced and where it went. Regulations typically require preparers to record:

- The total amount of biosolids produced.
- Each location where the preparer's biosolids were used or disposed of.
- The amount received at each use or disposal location.

In all cases, preparers should check state and federal regulations to determine exactly which records they need to maintain. After determining your exact record-keeping needs, it is recommended that you develop data forms, spreadsheets, or databases that include all the records. These forms and record procedures should be included in the facility sampling plan. The sampling plan should also include details on how long records will be maintained or archived.

### Reporting Requirements for Sludge Preparers

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Considerations sludge preparers should keep in mind regarding reporting include:

- Reporting term and deadline.
- Reporting format.
- Reporting units.
- Data and information that need to be reported.

Part 503 requires sludge preparers to report annually by February 19 on data collected during the previous calendar year. What must be reported depends on how the sludge is treated to reduce pathogens and vector attractiveness and the use or disposal option. Under federal regulations, preparers must declare the methods and standard operating procedures used to treat their sludge and certify that these methods and procedures were followed. Federal guidance should be consulted to assure the certification process is performed properly.

One potential source of error in reporting is the use of incorrect units. EPA requires that sludge amounts be reported in dry metric tons, while states might require reporting in English tons, either wet or dry. Preparers should ensure that the units used in their reports are those required by the regulatory authority.

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Finally, some states may provide a specific reporting form. Such a form can make the reporting process simpler for both the sender and recipient of the report because it clearly details what needs to be reported and how. As always, state and federal regulations should be consulted to determine exact reporting requirements. If you are not required to use a specific reporting form, it is advisable to develop your own form to provide consistency. If you maintain a database, you can develop reporting forms that will rapidly produce a report from data entered into the database over the course of the year.

### Other Record-Keeping or Reporting Requirements

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POTW operators and sludge preparers may have other record-keeping or reporting requirements associated with the land application or disposal of their sludge. Some of these record-keeping and reporting responsibilities may not be directly related to a sludge sampling program. For example, the location of land application sites is subject to recording and reporting under federal regulations, but this is not a consideration in the development of a sampling plan. For POTWs that contract land application or disposal services, the POTW may have to provide analytical data produced by sludge sampling to the contractor. However, it may be the contractor's responsibility to report on the actual land application or disposal activities. Although these other record-keeping and reporting activities are important and require attention, they are not generally considerations in the development and execution of a sampling program.

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## CHAPTER 10 REFERENCES

*Preparing Sewage Sludge for Land Application or Surface Disposal: A Guide for Preparers of Sewage Sludge on the Monitoring, Record-Keeping, and Reporting Requirements of the Federal Standards for the Use or Disposal of Sewage Sludge*, 40 CFR Part 503, EPA 831B-93-002a, Office of Water, August 1993.

*Land Application of Sewage Sludge: A Guide for Land Appliers on the Requirements of the Federal Standards for the Use or Disposal of Sewage Sludge*, 40 CFR Part 503, EPA 831-B-93-002b, Office of Enforcement and Compliance Assurance, December 1994.

*Part 503 Implementation Guidance*, EPA 833-R-95-001, Office of Water, October 1995

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