# **Most Frequently Needed Records for Wastewater Investigations**

## **Background**

The Texas Commission on Environmental Quality (TCEQ) carries out investigations of wastewater treatment plants (such as sewage treatment plants). These investigations occur periodically, based on a number of factors, such as the facility's size and compliance history, and how recently it has been investigated. Citizen complaints also can trigger an investigation.

These investigations are conducted to ensure compliance with applicable health, safety, and environmental regulations, as well as specific permit requirements. Investigators evaluate the plant's entire operation, including equipment condition, maintenance practices, and historical problems.

### Purpose

The purpose of this regulatory guidance document is to provide owners and operators of wastewater treatment plants with a list of records typically needed during a TCEQ wastewater investigation. However, since individual permits vary, investigators may request additional records particular to your facility.

# Which Records Will Investigators **Need to Evaluate Compliance?**

All records required by your plant's permit must be retained at the plant site or must be easily available for review by a TCEQ representative.

#### Operation and Maintenance Records

- Operational or process control records, such as MLSS, SV30, SVI, MCRT, F/M Ratio, GSA, WAS rate, RAS rate, sludge blanket levels, and influent sampling data. (A glossary of commonly used acronyms is provided at the end of this document.)
- Operator daily logs, including the date and time of activity, operator's initials, and other information such as flow, total chlorine residual (including manganese correction), influent and effluent pH, influent and effluent dissolved oxygen, solids wasted, volume of solids processed, rainfall records, and comments about exceptions or incidents.

• Maintenance records for equipment such as pumps, motors, blowers, rotors, and on-site and offsite lift stations.

#### Laboratory and Sampling Records

- Sampling records, including the date, time, and location of sampling; the name of the individual who took the sample or measurement; the sample type; and any preservation information.
- Laboratory reports, including the analyst's name, the date and time of analysis, the method of analysis or measurement, quality assurance data for each sample set, and a copy of the completed Chain-of-Custody form.
- Calibration records for lab instruments, such as pH meter, dissolved oxygen meter, chlorine meter, thermometers, and analytical balances.
- Records of in-house lab analyses. For more information on records required for in-house lab analyses, please see TCEQ publication RG-376, Keeping Complete Records for Wastewater Monitoring.

#### Self-Monitoring Records

- · Self-monitoring forms, such as Discharge Monitoring Reports (DMRs) and Monthly Effluent Reports (MERs), with copies of supporting data by
- Copies of noncompliance notifications for bypasses, unauthorized discharges, sanitary sewer overflows, and any effluent violation that deviates from the permitted effluent limitation by more than 40 percent.
- Sludge disposal records should include analytical data such as TCLP, paint filter tests, amounts of sludge disposed of, dates of disposal, method or methods of disposal, disposal site, owner of disposal site, name and registration number of sludge hauler, manifests, application rate, and the alternatives selected for reducing (1) pathogens and (2) vector attraction.
- · Backflow prevention assembly certifications, if applicable.
- Irrigation application records and soil analysis results, if applicable.

- Flow meter calibration records and flowcharts, if applicable.
- Composite sample and loading calculation records, if applicable.
- Operator certification records.

# How Long Do Records Need to Be Retained?

All records required by the permit must be retained at the plant site for at least three years. However, monitoring information related to the permittee's sewage sludge use and disposal activities must be retained for at least five years. The TCEQ may, however, request that records be retained for a longer period.

#### For More Information

To get a copy of a TCEQ publication:

- go to the TCEQ's Web site, at <www.tceq.state.tx.us/goto/publications>;
- fax orders to the TCEQ's Publications Unit at 512-239-4488, or order by telephone at 512-239-0028;
- write to TCEQ Publications, MC 195, PO Box 13087, Austin, TX 78711-3087.

You can find the official version of TCEQ rules in the Texas Administrative Code on the Secretary of State's Web site, <www.sos.state.tx.us>. For your convenience, the TCEQ Web site provides **unofficial** versions of the rules, in PDF, at

<www.tceq.state.tx.us/goto/rules>.

Other information sources include your regional TCEQ office or the Wastewater Permitting Section in Austin at 512-239-4671. You can find contact information for your regional office in TCEQ publication GI-2, *TCEQ Regional Offices*. (This publication is also available on the Internet, at <www.tceq.state.tx.us/goto/region\_map>.)

## **Commonly Used Abbreviations**

MLSS, Mixed Liquor Suspended Solids

SV30, Settleability test, or the 30-minute settling test

SVI, Sludge Volume Index

MCRT, Mean Cell Residence Time

F/M, Food to Microorganism Ratio

GSA, Gould Sludge Age

WAS, Waste-Activated Sludge Rate

RAS, Return-Activated Sludge Rate

TCLP, Toxicity Characteristic Leaching Procedure

**2** March 2008