

Conducting a State Facility Water Audit

Introduction

A facility water audit identifies water uses such as sanitation, irrigation, heating and cooling, process, and maintenance. The audit then compares the sum of the individual uses to the total use at the facility. Unaccountable losses are investigated and areas are identified in which water use efficiency can be improved using alternative technologies or practices.

What is a facility water audit?

A water audit determines where and how much water is being used at a State facility. The process starts with each Department Secretary designating a water conservation coordinator who will plan and delegate responsibilities through their Department. An audit will be conducted at each facility and compiled by the coordinator for each Department. The information then can be used to develop a plan to reduce use to bring each Department into compliance with Executive Order 01.01.2001.

Elements of the facility audit include:

- Record of the amount of incoming water
- Identification of each water use at the facility
- Estimation of the quantity at each use point
- Determination of amount of water loss (leaks and other unaccounted water)
- Development of a plan to conserve (eg. replacement fixtures, leak location and repair, employee water use education)

How much time will it take to complete a water audit ?

A preliminary, or simple, water audit can be completed in one day at a small facility if meter reading records are easily available and there are few water use points. Larger facilities will take more time. Complete water audits may take more time and resources, but will provide all of the benefits described in this guidance.

How do I perform a water audit ?

Before undertaking the audit, the facility manager should take time to study the buildings and locate all points where water use can take place. The audit will estimate as accurately as possible the frequency of use and the quantity of water used per occurrence, to arrive at an average use for each use point. The sum of all use points will result in an overall picture of water use for the facility. The Departmental water conservation coordinator will be responsible for compiling the results from all facilities and determining where conservation efforts would be most effective. The audit should utilize existing records as much as possible. Thorough audits should include plans to check existing meters for accuracy or install meters to ensure accurate baseline figures.

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