



Solid Waste Audits and The Power of Data: Improving Waste Management Practices with Data

Every business generates waste. Understanding the nature and quantity of wastes is essential for your business to be sustainable and can be instrumental in cutting costs, increasing efficiency, and creating a company culture around the principles of Zero Waste.

An easy first step towards reaping these benefits is to consider making informed changes to your waste management practices. An effective solid waste collection program should be based on accurate data that includes waste stream types and quantities. One way to capture accurate quantity and composition data is through conducting solid waste audits.

What is a solid waste audit?

A solid waste audit, also known as a “Dumpster Dive,” involves physically sorting and cataloging wastes to determine the composition of your waste stream. Field teams hand sort waste into material categories such as paper, plastics, cardboard, glass, metal, and food scraps. The results are detailed and quantifiable and can be used to help develop a program and future evaluations on that program’s success.

Using this real-world waste audit data, it is easy to streamline your waste collection into solid waste, recycling, and organics streams. APTIM’s teams are also trained to look for special categories, which compose a large portion of the waste being audited. Often times, businesses are not even aware of the tremendous number of certain materials they are generating. These become the low-hanging fruits for waste reduction and/or minimization.

There are different methods of solid waste audits that can be conducted depending on a business or facility’s specific scope of work and data needs. The three most common types of audits are:

- Visual solid waste audits, or “Lid Flips”: Less precise and include estimated percentages of material types and quantities
- Sample size solid waste audits: Include sampling a fraction of the waste in 200-300-pound samples
- Comprehensive solid waste audits: Provide the most detailed and precise information as all waste is physically sorted and weighed

Taking it a step further, a business’s entire operation can be audited in order to identify where materials enter and exit the chain. Materials that are not discarded as part of a company’s solid waste disposal program will not be part of the waste audit’s results. Including those materials in your waste data can often be beneficial in identifying waste reduction, reuse, repurposing, recycling, or other diversion practices that are already in place and could be expanded to other material categories. Such materials can be identified by reviewing product purchasing documentation or observing processes throughout the operation, including internal waste collection containers.



What are the benefits to conducting a solid waste audit?

It offers a business or facility a unique opportunity to determine how they can improve their waste collection processes, determine the effectiveness of current waste management strategies, and identify needs for implementing new strategies. Additional benefits of solid waste audits include:

- **Reduced Costs:** “You can’t manage what you don’t measure.” Solid waste audits provide measurable data on your waste streams. This information is crucial for materials with recycling or diversion potential that can be resold as a new revenue stream. By throwing out less, you may pay lower fees for trash hauling services by right sizing your solid waste collection containers or pickup frequency. Alternatively, you might find that your current container sizes or collection frequencies are too high for your generation needs, resulting in immediate reduction in service, and thus, costs.
- **Compliance:** Data collected during a solid waste audit can support a compliance requirement. For example, some local jurisdictions require businesses to conduct periodic waste audits and report on results to demonstrate compliance with local waste diversion initiatives. A waste audit can also reveal the best strategy for complying with a mandate requiring your business to contract for recycling or organics recycling services.
- **Sustainability Goals:** Waste audit data can be used to establish waste diversion targets and support long-term planning efforts. The data can be used to create a baseline and to measure progress against established waste diversion goals. Observing the audit itself, or seeing pictures or videos from an audit of their own waste stream, can increase employees’ awareness of and commitment to your sustainability goals.
- **Operational Efficiencies:** Measurable data can support the business case to invest in operational improvements. For example, solid waste audit data may reveal an excessive amount of food scraps in the waste stream. As a result, a business may decide to implement an organics management program to divert organic waste.

APTIM’s waste minimization team performs solid waste audits and other services nationwide. APTIM can assist with the planning, execution, data analysis, and reporting for your waste audit needs. For more information on solid waste audits or how APTIM can support you in advancing your waste minimization strategies, reach out the APTIM team today.

By: Amy Martinez, CHMM, PMP, APTIM

Contact:

Christian Dettman

Client Relationship Manager (Hospitality)

M 720 234 2093

E christian.dettman@aptim.com