

ZERO WASTE CASE STUDIES - HOSPITALS

Recycling Programs: Setting up for Success

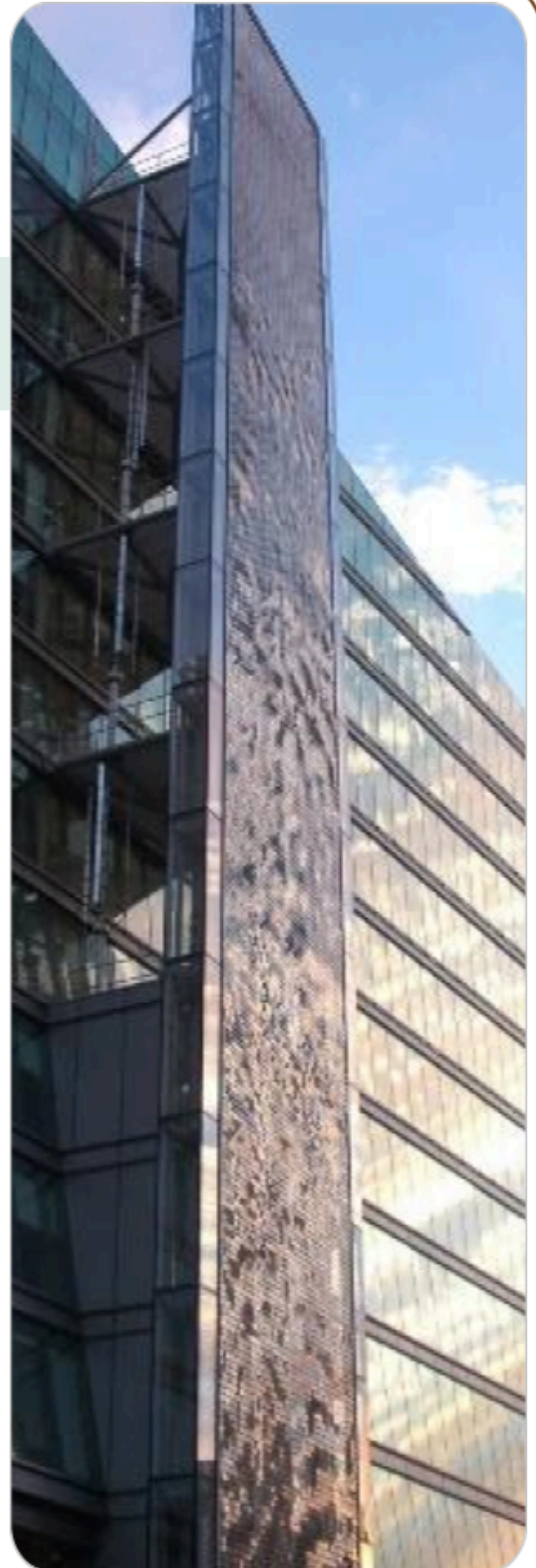
San Francisco's zero waste requirements and hospital strategies to meet them.

The City of San Francisco requires residents and businesses to separate recycling, organic waste, and trash to ensure that recyclables get recycled, organics gets composted and trash goes to the landfill. This case study reviews the City's requirements and best practice strategies that hospitals can use to ensure successful compliance with these rules, including various examples from San Francisco hospitals.

Rules of recycling

A successful recycling program starts with proper set-up. But for a hospital's efforts to be effective, employees that manage the refuse streams need to know what materials go in which bin and to stand up programs that ensure that recyclables, organics and trash collected at the bin remain separated all the way from the bin to the dock and beyond. To this end, San Francisco's Mandatory Recycling and Composting Ordinance (MRCO) establishes rules for businesses, such as hospitals, to follow. These include:

- Estimating the amount of refuse generated and the type (recyclables, organic waste, or trash) and match bin set-up to expected refuse generated.
- Making it easy and convenient for staff and visitors to comply by: (i) setting up color-coded bins: blue for recycling, green for organic waste, and black for trash, in appropriate areas; (ii) adding clear signage



that helps users identify where to dispose of materials; and (iii) placing the bins near each other to increase access to each type of bin.

- Educating employees and contractors, including providing information and/or training at least annually, on how to properly source separate recyclables, compostables, and trash.
- Working with on-site janitorial staff, e.g., Environmental Services (EVS) staff, to set-up effective recycling and composting programs that reduce the amount of refuse sent to the landfill and help the City reach its zero waste and climate commitments.

First impressions matter: front-of-house hospital refuse management strategies

How the hospital handles its waste may be one of the first things a visitor sees when they enter the lobby. It may leave a good impression or a bad one. Ideally, the hospital's refuse management approach conveys to the visitor the hospital's positive environmental values and effective communication approach.

Hospitals can encourage quality separation of recyclable and compostable materials from front-of-house areas, such as lobbies, the cafeteria, bathrooms and staff break rooms, by providing color-coded bins and signage that directs visitors and staff to place their refuse in the appropriate container.

Make your signs work for you

Clear signs, color-coded to match their corresponding bins, are one of the hospital's main tools for communicating to staff and visitors what goes where. To limit bin contamination, make sure to include images of the waste typically discarded where the bin is located and ensure that the signs and images are large enough that they grab the attention of the user. Key contaminants of the recycling and compost streams should also be featured prominently, so staff and visitors know where they go.

For example, if masks and gloves are significant contaminants, they should be featured prominently on an adjacent landfill sign. In bathrooms, where the main waste generated is often paper towels, best practice is to locate a larger compost bin, with signage specifying "Paper Towels Only" next to a smaller trash bin with signage that includes gloves, masks and other typical contaminants.

One option for creating signs is the City of San Francisco's Signmaker available on its website (Figure 1). This web application allows hospitals to choose from a range of



Figure 1. A compost sign using the City's Signmaker tool.

graphics to create custom signs, including key messages in multiple languages. Both of these features (customizable design and language options) make the signs more accessible, which also contributes to reducing bin contamination.

UCSF Health's cafeteria signage at its Mission Bay Campus (Figure 2) is an excellent example of best practice for effective recycling and compost education. The sign includes a large color-coded display that clearly indicates the bin in which each

product sold in the cafe should be disposed. Velcro tabs, used to adhere the refuse to the sign, ensure that the sign remains flexible to changes in cafe packaging or recycling rules.



Figure 2. Cafeteria sign at UCSF Health's Mission Bay campus. Photo: Mikayla White, UCSF Health.

Clear and visible signage encourages staff and visitors to separate their refuse properly, but may run counter to hospital aesthetic guidelines. These guidelines govern the hospital's look and feel, particularly in public areas, and may limit the size, type, colors, and location of bins and signage, impacting quality recycling and composting education. Communicating to hospital administrators about the City's legal requirements and potential costs of non compliance can initiate discussions about how to balance aesthetics with sustainability requirements.

Monitor to keep contamination at bay

Contamination happens, but there are ways to minimize it. Check the recycling or compost bins at least daily with a visual inspection or mini audit; this can serve to increase awareness of the primary contaminants and inform updates to signage and educational efforts. When a new program or quality initiative is launched, it's best to work with staff or green team members to personally monitor the recycling or compost bins and observe how staff and the public interact with the new set-up.

If some contaminants are routinely thrown into recycling or compost, despite clear signage, consider brief, non-invasive staff and visitor surveys that help identify reasons why these items are being mis-sorted. Is it convenience, lack of education, or something else? Based on findings from informal waste audits or surveys, consider options to improve compliance, e.g., moving bins, improving or modifying signage.

Other visual reminders and audits can help reinforce these messages and support compliance. Front-of-house bins, in public areas, are a bit more difficult to control with these methods than break rooms or kitchens where staff training can be added to improve quality. But temporary eye-catching signs with one simple message, can serve as an effective reminder to visitors and staff. It may help to replace these signs frequently, rotating key messages every other week or monthly to ensure that the content is fresh.

Special considerations for set-up and signage

- **Office recycling** - Plastic liners placed in office desk-side bins are typically replaced daily and add an estimated 9 pounds per bin per year of plastic to landfill. Eliminating desk-side bins is a best practice that both reduces plastic waste and minimizes cross-contamination of the waste streams. Instead place co-located bins for recycling and trash in a central breakroom. This has the added benefit of encouraging standing and walking breaks, which improve employee mental and physical wellbeing.
- **Cafeteria recycling** - Big volumes of waste tend to be generated during busy lunch hours. Purchasing reusables for in-house dining can significantly reduce waste volumes and the

hospital's environmental footprint. Absent that, clear signage such as in Figure 2 above that maps specific cafeteria packaging to the bin it goes in, is the best option.

- **Bathroom recycling** - Because the primary refuse from most bathrooms is paper towel waste, install a green compost bin in each bathroom with signage that indicates “Paper Towels Only” alongside a small black trash waste container to collect PPE and other trash.

Signage and auditing doesn't stop at the bin

In waste holding areas and at the dock, color-coded bins and well-marked signage help to reduce any error on the part of staff as to which waste goes where. One example, illustrated in Figure 3, is UCSF Health's recycling compactor, which is color-coded in blue to indicate recycling and clearly marked with signage to facilitate quality recycling collection. In addition to color-coded bins and signage, color-coded bags in each bin, such as blue-tinted clear plastic bags for recycling, and green compostable bags for organic waste, help to ensure that the refuse streams make it from bin to dock without cross-contamination.

Staff training required under the City's MRCO, aims to address two things: education about what goes where and how to keep materials separate and clean. The City requires that staff be trained, at least, annually, but more training and engagement are recommended. St. Mary's Medical Center kitchen staff uses a multi-pronged approach to staff training, which includes periodic education at staff in-services, regular bin audits, reminders and encouragement, to educate and encourage a culture among staff that values sustainability.

Additionally, the City requires that businesses like hospitals work with



Figure 3. UCSF Health's recycling compactor is color-coded in blue for easy identification.

staff to stand up programs that ensure that recycling, compost, and trash refuse streams remain separated from bin to dock. Educating about what goes where is a good first step, but establishing systems and processes that make it easier for EVS and kitchen staff to move waste from various areas in the hospital to the dock without contamination supports the hospital's need to comply with the City's recycling requirements and advances the City's zero waste and climate goals.

Learn more about San Francisco businesses working towards zero waste and helping the City meet its zero waste and climate goals at SFEnvironment.org.