



Public Hygiene Lets Us Stay Human

c/o Old Town Chinatown Neighborhood Association
115 SW Ash Street, #400G Portland, Oregon 97204
phlush@oldtownchinatown.com www.phlush.org

Subject: Update to Emergency Sanitation Instructions for San Franciscans

An Open Letter to Officials of the City and County of San Francisco,

On this occasion of [World Toilet Day](#) November 19th, we respectfully ask that you update emergency sanitation instructions for San Franciscans given the high likelihood that water and sewer systems will be destroyed in an earthquake. Providing revised instructions will help avoid a public health debacle, and it will better prepare families in the event of long-term recovery time.

The [Earthquake and Hazards Program of the Association of Bay Governments](#) offers graphic evidence of liquefaction, landslides, dam failure inundation, sea-level rise, and tsunami impacts that could affect the San Francisco Bay area. More than a thousand miles of San Francisco County's [water supply pipes and sewer lines](#) are likely to be damaged in an earthquake with sewer systems singularly vulnerable to liquefaction. Isn't it time to reset citizen expectations of both initial impact and recovery times?

The [San Francisco Department of Emergency Management](#) recommends households gather sanitation supplies (e.g. towels, washcloths, unscented bleach with eyedropper and heavy duty garbage bags) and provides [these instructions](#).

- *If sewer lines are broken, line the [toilet] bowl with double-bagged plastic garbage bags to collect human waste. Before discarding the bag, add a small amount of bleach; then seal the bag and place in a tightly covered container, away from people.*
- *If the toilet is unusable, use a sturdy bucket with a tight fitting lid, and line it with a double-bagged plastic garbage bag.*

However, there would be few options for safe "discarding" of these toilet contents following a large quake that compromises transportation along with sewer services. Furthermore, the possible mixing of identically bagged infectious and solid waste would threaten public health.

In contrast, the [City of Portland Bureau of Emergency Management](#) offers households simple instructions for a [Twin Bucket Emergency Toilet](#) as well as sound post-disaster sanitation guidelines. Three practical principles of ecological sanitation apply: 1) waterless containerization, 2) urine separation, and 3) long-term composting. Households have on hand 2 to 4 buckets of 5-7 gal capacity (routinely discarded by supermarkets, bakeries and restaurants). They add an inexpensive plastic seat that fits buckets. For longer term composting of human waste, please see the [Sewer Catastrophe Companion](#) prepared by our colleagues at [MDML](#) and endorsed by the city.

A large earthquake will put the burden for managing toilet needs on individual families. We strongly urge the City and County of San Francisco to adopt an approach that fosters household and neighborhood resilience for months or years that may be required for restoration of sewer service. To prepare families, we encourage you to adopt the [Twin Bucket Emergency Toilet](#). Awareness should come before disaster strikes and be affirmed in simple, clear, written instructions.

Warm Regards -

Organization Volunteers, Public Hygiene Lets Us Stay Human (PHLUSH)