

Janitorial Cleaning



Reasons for Concern

Every year about six out of every hundred professional janitors are injured by the chemicals that they use. Burns to the eyes and skin are the most common injuries, followed closely by breathing toxic fumes. One third of the cleaning chemicals used today have ingredients that can harm you. These ingredients are in products for cleaning glass, restroom fixtures, metal, kitchen, carpets, and hard floors, to name only a few. Being informed about these hazards and becoming familiar with safer alternatives can help you make a good choice in cleaning effectiveness and safety.

Complying with environmental laws and reducing health and environmental risks at the source through pollution prevention, is a first step to help ensure worker and community safety. Changing to safer technologies can further these efforts to protect our air, water and land; prevent risk of future liability and even reduce costs associated with the generation of waste.

Harmful Ingredients

Read the label. If there are the words "Caution", "Warning", "Danger", "Flammable" or "Poison" it is a hazardous product.

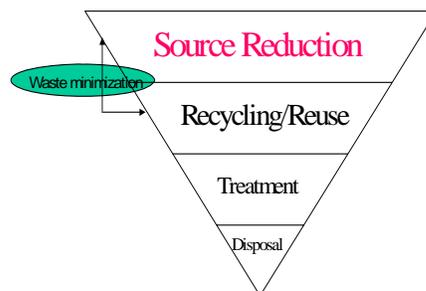
May cause severe health risk:

- Hydrofluoric Acid
- Hydrochloric Acid
- Phosphoric Acid
- Sodium Hydroxide
- Sodium Hypochlorite (bleach)
- Nitrilotriacetate
- Nitrilotriacetic Acid
- Tetrachloroethylene (Perchloroethylene, Perc)
- Trichloroethylene
- Methylene Chloride
- Tributyl Tin
- Butoxyethanol

Also avoid if possible (environmental harm):

- Dibutyl Phthalate
- Nonyl Phenol Ethoxylate
- Octyl Phenol Ethoxylate
- CFC-22 & HCFC-141 (both now banned)

Waste Management Hierarchy (US EPA Policy, 1976)



Pollution prevention (P2) is reducing waste at the source = Source Reduction.

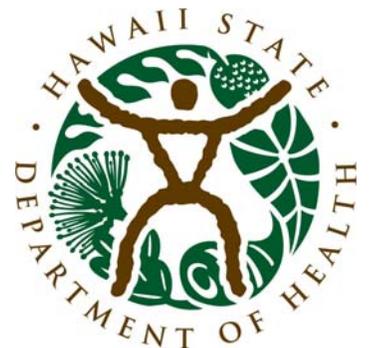
P2 is using less toxic materials and using resources efficiently (including water and energy) to reduce the generation of waste.

P2 can save businesses money while protecting our environment.

INSIDE

- **Reasons for Concern**
- **Harmful Ingredients**
- **P2 Action**

Energy and water are precious resources for our community. Do your part to save by having an audit done; check for water leaks and fix immediately; install the latest technologies and replace incandescent lights with low mercury fluorescent or LED lighting. Visit: HECO www.heco.com BWS www.hbws.org (Oahu)



LINDA LINGLE
Governor

DR. CHIYOME FUKINO
Director of Health

Pollution Prevention (P2) Action

Go Bulk on less toxic cleaners: If not already implemented, meet with management to discuss using bulk dispensed and safer cleaning products.

Green Seal certified safer cleaning and floor care products found on-line at:

<http://www.greenseal.org/findaproduct/index.cfm>

More information on safer janitorial cleaning:

<http://www.wrppn.org/Janitorial/jp4.cfm>

Toilet Cleaning: Clean first, then disinfect. Use toilet cleaners that do not have strong acids. Never mix chemicals. Mixing acids with bleach creates deadly chlorine gas. Clean the toilet with a non-acid cleaner, then disinfect with an Alkyl Ammonia Chloride containing product.

Restroom cleaning: Provide regular light cleaning using a mild cleaner and schedule deep cleaning only as necessary. For dirty surfaces it is important to clean first, and then apply a separate disinfectant. To work well, most disinfectants must remain in place for at least 10 minutes.

Hard Floor Care: Strippers can contain the most toxic chemicals a janitor could be exposed to. Some strippers also contain zinc, a toxic metal in high concentrations. First, prevent the floor from getting dirty by installing floor mats and conducting regular cleaning/maintenance. Choose less toxic (Green Seal) products. Reduce the need for stripping by doing it only when necessary and only the specific area that needs it. Follow product instructions carefully and use the most amount of water/dilution recommended.

Carpet care: Carpet shampoos are usually mild detergents, however spot removers and maintenance cleaners may contain highly toxic ingredients such as Tetrachloroethylene. Choose only non-toxic spot removers. Clean spills as soon as possible and vacuum regularly using a vacuum with filtration.

Protect the public: Keep guests/patrons away from freshly cleaned carpets and floors to protect them from exposure to cleaning chemicals. Always ventilate areas where chemicals are being used.

Stay informed: Always obtain a Material Safety Data Sheet (MSDS) on chemicals used and read them thoroughly. Ask vendors to provide safer alternatives and be sure they can show that the item is less toxic. Always read the label on every product used.



Monitor areas: Excessive dust accumulation may be related to the ventilation exhaust system and should be brought to the attention of the building maintenance staff.

Use correct methods: Use protective equipment (gloves, goggles) and keep the working area well ventilated. Clean prior to disinfecting. Disinfectants work best with proper application and contact times (10 minutes). Properly dilute products according to directions using the most water recommended.

Protect your eyes: Permanent vision loss starts within 10 seconds after having chemicals splashed in the eyes. Eyes must be flushed with water immediately and continuously for 20 minutes; seek emergency attention. Always wear protective eye wear and gloves when working with chemicals.

Protect the environment by properly disposing of wash water to the sewer. Never dump mop bucket or carpet wash water to the street or storm drain as this pollutes our streams and ocean and is against the law.

Information courtesy of the JP4 project funded by USEPA. For original fact sheets, visit: <http://www.wrppn.org/Janitorial/factsheets.cfm>

Disclaimer: The listings of products or companies on this brochure are not complete and do not constitute an endorsement by the State of Hawai'i.

Note: Final determinations of the proper handling and disposal of waste are the sole responsibility of the waste generator. For more information, contact the DOH Solid and Hazardous Waste Branch, phone: 808-586-4226 or visit our website: <http://www.hawaii.gov/health/environmental/waste/index.html>

"P2 is a choice; being "green" is making that choice."