



BEFORE THE AUDIT:

1. Submit to SFGB staff your janitorial product inventory. The inventory sheet must have the following information:

- Product name
- Manufacturer name and product code (if any)
- Ingredients list

You will be able to obtain this list from your janitorial service company OR use the product information included in the order invoice and locate ingredient information from the manufacturers website or look for the janitorial products in your work space and note down the ingredients listed on the label.

2. Identify the location of hazardous materials in your workplace. These include – janitorial chemicals, paints, inks, oils, automotive chemicals, spent fluorescent lamps etc.

3. Review the Pollution Prevention portion of the checklist you submitted and be prepared to show supporting documentation for all the measures “checked off” on your checklist.

WHAT TO EXPECT:

The Toxics Reduction Staff will go over the “pollution prevention” portion of the checklist with you and ask you to furnish supporting documentation for all measures “checked off” on your checklist. Your business will pass the audit, if minimum number of required measures are already in place. If not, SFGB staff will give you recommendations on how to implement other measures to meet GB criteria.

Please use the resources below to help you meet minimum standards and pass your toxics audit.

DIY Guide - RESOURCES TO HELP YOUR BUSINESS IMPLEMENT POLLUTION PREVENTION MEASURES:

1. Cleaning Products – Commonly used janitorial cleaning products contain ingredients that may cause harm to human health, indoor air quality and the environment. Some ingredients in janitorial cleaning products can instantly burn the eyes, skin and lungs. Choose the least toxic cleaning products available for your application and use one product to serve multiple applications instead of buying and storing several different products (eg. – multi-purpose cleaners)

- Buy the product with the least toxic ingredients you can find. Reading the product label and Material Safety Data Sheet (MSDS) can help you make this determination. Some MSDSs can be found online by searching for the product name + MSDS. The MSDSs of many cleaning products that are sold to the general public can be found in the National Institutes of Health’s Household Products Database at <http://householdproducts.nlm.nih.gov/>. Some resources that will help your business choose the least toxic products -

- Check the list of institutional cleaning products that have been certified by Green Seal as meeting their Standard GS-37 for general cleaners and GS-40 for floor care products. This list is available at <http://www.greenseal.org>. Additional environmentally preferable cleaning products are listed by the Center for a New American Dream's Institutional Purchasing website at <http://www.newdream.org/procure/products/approved.php>. A report on less-toxic graffiti removers can also be found on this website at <http://www.newdream.org/procure/graffiti.php>. Model specifications for green cleaning products were adopted by the Commonwealth of Massachusetts; for more information, see <http://www.mass.gov/epp/products/cleaning.htm>.
- Check the Janitorial Pollution Prevention Website. This public service website has fact sheets on safe and effective cleaning techniques for windows, carpets, restrooms, and other cleaning jobs <http://www.westp2net.org/Janitorial/jp4.cfm>.
- Always wear gloves and eye protection, even when using 'mild' products (if mixing or dilution is required). Follow manufacturer instructions for safe mixing and use of the product. Don't mix the products too strong. Never mix bleach and ammonia together as the mixture can create a lethal gas.
- Call the manufacturer's or distributor's service desk to ask about any less toxic alternatives they offer. Many vendors have several product lines, one of which may contain less harmful ingredients than the others.

2. Pesticides – By their very nature, pesticides are dangerous to living beings: people, pets, and wildlife—whether they're sprayed on the food we buy or used in our gardens, parks, and homes where they can poison the air or leach into the groundwater. **Apply integrated pest management (IPM) approach to dealing with pests and least-toxic pesticides, if necessary.**

- If you are a home based business, use the resources available through Northwest Coalition for Alternatives to Pesticides, www.pesticide.org
- For all larger businesses, choose a pest contractor that implements an Integrated Pest Management Program. Use third party certification programs such as [EcoWise Certification](#) or [IPM Star Certification](#) to find your pest contractor OR use the tools available [here](#) to find a pest contractor right for your business.
 - Ensure the contractor supplies information on the pests found, locations, repairs necessary, name, EPA number and type of pesticide applied, and a material safety data sheet (MSDS) for each product used on the business premises.
 - Require that a pesticide contractor use non-chemical means of pest control and prevention whenever possible (i.e. HEPA vacuums, caulking, traps).
 - Require that a contractor not use spray formulations of contact insecticides inside of a building, will use baits in containers, cracks, crevices, and wall voids and avoid perimeter spraying for ants and cockroaches.
 - Require that the contractor use a pesticide listed on San Francisco's [approved list of pesticides](#).

3. Paints - Paint can contain toxic heavy metals, while the solvents, particularly in oil-based paints, can consist of toxic and flammable petroleum-based products such as mineral spirits, toluene and xylene that emit volatile organic compounds (VOCs) which can combine with other pollutants to create ozone. **Buy and use latex or water-based paints, finishes, and varnishes rather than oil-based paints. Buy zero- or low-VOC paints.**

- Every major manufacturer has a zero- or low- VOC line. [Amazon Paint](#) offers 50% post consumer recycled content paint at competitive prices. [Sherwin-Williams](#) and [Kelly-Moore](#) offer zero or close to zero VOCs emission recycled content paint.
- Other options for less toxic paints are listed at http://eartheasy.com/live_nontoxic_paints.htm#2d.

- Find a product certified by Green Seal as meeting their GS-11 standards for paints.
<http://greenseal.org/findaproduct/index.cfm#paints>

4. Carpet - When buying new carpet or replacing old ones choose carpets made with natural fibers, recycled nylon or low VOCs. VOCs or volatile organic compounds are chemicals that under normal room conditions vaporize and enter the atmosphere. They contribute to indoor air pollution and can be found in carpet backing and paint. There are many options available some of which are listed below,

<http://www.fibreworks.com>
<http://www.shawfloors.com/carpet>
www.bentleymills.com
www.mohawkcarpet.com
<http://www.tandus.com/>
<http://www.ruckstuhl.com/en/unternehmen.html>
www.millikencarpet.com

4. Aerosol Cans – Aerosol mists can trigger asthma and other breathing problems because they contain product and propellant made up of very small droplets that are easily inhaled into the lungs. Aerosols can also be accidentally sprayed into the eyes or onto the skin, where they can cause burns and other damage. Common products such as pesticides, spray paint, cleaning supplies, and other products with hazardous ingredients are of particular concern because the products themselves can damage people's health if there is exposure to the skin, eyes, or respiratory system. Up to 40% of the contents in an aerosol container can be propellants. The most common propellants are propane, butane, nitrous oxide, and carbon dioxide. Most propellants are petroleum products that are highly flammable. Aerosol propellants can themselves cause health problems, such as nervous system damage or asphyxiation at high concentrations, and dizziness and other narcotic effects in low concentrations. **Avoid aerosol packaging whenever possible.**

- While consumer products may be just as hazardous when dispensed from other containers, the use of aerosol containers may increase the likelihood that exposure will occur.
- Pump spray bottles are less likely to cause direct health hazards because they are not pressured. They lack propellants and they deliver the product in larger droplets that are less able to penetrate the lungs.

5. Fluorescent Lamps –Several types of “lamps” contain mercury and/or lead, toxic heavy metals that persist in the environment and concentrate in the food chain – particularly in fish. Mercury-added lamps include all fluorescents (including linear tubes, circular and u-shaped models, and compact fluorescent lamps), high-intensity discharge lamps (HIDs, such as mercury vapor, metal halide, and high-pressure sodium), and neon signs (particularly those with a blue color). Incandescent and halogen lamps are mercury-free but they are much less energy-efficient than fluorescent lamps, so their use is discouraged. Exit signs contain mercury only if they contain fluorescent lights inside. **Choose energy efficient fluorescent lamps with the lowest mercury content. Older exit signs – with either incandescent or fluorescent lights inside – should be replaced with LED exit signs or retrofitted to use LED lamps**

- **Buy Fluorescent:** Whenever possible, replace your regular light bulbs with compact fluorescent bulbs (CFLs), which use about 75% less energy for the same amount of light and last 10 times longer.
- **Low Mercury:** Since all fluorescent lamps contain mercury, the best option is to identify and purchase low-mercury models (under 5 mg). Unfortunately, national fluorescent lamp labeling regulations do not require manufacturers to indicate how much mercury is in it; only that it contains mercury at all. This information can only be gathered from manufacturers themselves. At the very least, look for models with a low-mercury designation such as ALTO or ECO; many of these have either green tips or green writing on the lamp.

- **Choose Long Lamp life:** Choose lamps with the longest lamp-life possible (at least 24,000 hours for 4-foot linear T8s and 10,000 hours for compact fluorescents lamps. CFLs should also have an [Energy Star](#) designation.
- **Look for Lead-Free:** Looks for CFLs and other lamps with a screw-in base that are labeled lead-free. If buying a new fixture, choose one that uses high-efficiency T8 lamps (which are 1" in diameter) rather than the older T12 models (which are less efficient and usually have more mercury). You can tell high efficiency lighting fixtures because they use electronic (instant start) ballasts rather than older, less-efficient magnetic ballasts or preheat starters.

6. Unbleached Paper – The manufacture of office paper and janitorial paper products, including paper towels, toilet paper, napkins, and toilet seat covers can create hazardous byproducts that are often discharged directly into surface waters such as rivers or the ocean. The use of chlorine-containing bleaching agents to turn paper products bright white can generate a toxic soup of various chlorinated pollutants (including chloroform and chlorinated furans). These substances tend to persist in the environment, where they can harm wildlife and humans. Paper products are often made from virgin tree fiber, contributing to deforestation and destruction of wildlife habitat. **Buy unbleached paper with high post consumer recycled content.**

- Choose janitorial paper products with the highest recycled content possible in order to conserve natural resources and create markets for paper collected in office and curbside collection programs. (Recycled paper products also can be made with less harsh bleaching methods compared to virgin fibers.)
- Look for brands that are unbleached or that are whitened using only oxygen, ozone, hydrogen peroxide, or another chlorine-free process. (These products are sometimes labeled PCF for processed chlorine-free.) Some environmentally preferable janitorial paper products are also made with some or all tree-free fibers, which save trees and are often easier to bleach than virgin tree fiber.

7. Remanufactured Toner Cartridges – Each year, millions of empty toner and inkjet cartridges used in laser printers, fax machines, and copiers are thrown in the trash, destined for landfills and incinerators. Buying locally remanufactured toner and inkjet cartridges -- and recycling empty cartridges -- is an easy way to reduce the environmental impact of these discarded products, Remanufacturers inspect empty cartridges for damage and then repair or replace broken parts, thoroughly clean the reusable components, and refill the cartridge with new toner. **Use remanufactured toner cartridges.**

- Find a manufacturer or vendor that sells remanufactured toner cartridges through [EPA's supplier database](#).
- For information on advantages of using remanufactured toner cartridges, visit http://www.informinc.org/fact_CWPtoner.php#advantages

8. Rechargeable Batteries – Over 3 billion batteries are sold a year. All batteries are considered corrosive; if they leak, they can cause burns to eyes and skin. Depending on the type, they can contain cadmium, mercury, cobalt, copper, zinc, lead, manganese, nickel, and/or lithium. These heavy metals may leach from landfills, contaminate soil, and pollute surface water and groundwater. If incinerated, these toxic chemicals can be released into the air. **Whenever possible, choose products that operate without batteries or use rechargeable batteries whenever possible**

- Some calculators and other items are solar-powered. Choose flashlights containing Light-Emitting Diode (LED) lights because they require very little energy to operate and will make your batteries last longer.
- Nickel-metal-hydride and lithium rechargeables are preferable to nickel cadmium batteries because they are less toxic and can be more easily recharged without losing their power. Keep batteries in the recharger until you need them so you don't drain their energy.
- If rechargeables are not available for a certain application, choose long-lasting batteries that won't have to be replaced as often.

9. Markers – Can contain xylene, propylene glycol, alcohol; levels are not likely to cause acute health problems, but could be a skin, eye, and respiratory irritant. The Oregon Toxics Coalition has published a [fact sheet](#) explaining the hazards associated with markers and other art supplies. **Look for water-based markers, rather than those containing solvents or less-toxic options.**

- If water-based markers are not available, consider those containing alcohol-based solvents rather than petroleum-based solvents.
- Some markers are labeled as “ASTM D-4236 compliant.” This means that they have passed an acute toxicity test. This test may not consider exposure to solvents or other impacts on respiratory problems. Consider using wax lumber markers on wood, metal, glass, and other surfaces, when a non-permanent mark is needed.
- For a fact sheet on “Industrial Markers and Respiratory Hazards,” see <http://www.informinc.org/pamarkers.pdf>.

10. Soy inks/vegetable based ink printing – Printing inks may contain heavy metals such as barium, cadmium, chromium, lead and potentially hazardous solvents such as alcohols and hydrocarbons that are toxic or flammable, or contain volatile organic compounds (VOCs) which can combine with other pollutants in the atmosphere to create ozone. Improper disposal of spent inks can cause serious contamination of surface water, ground water, or soil.

Consider using a printer certified by the [Bay Area Green Business Program](#).

11. Building Material – Utilizing green building products and practices in building and remodeling projects results in higher quality, financial savings, environmental protection, better indoor air quality and increased employee morale. Search [Build it Green's Directory](#) to locate suppliers and service providers of green building products within the 9-County San Francisco Bay Area. Listed products must meet criteria for energy efficiency, resource conservation, or indoor environmental quality consistent with measures referenced in various [Green Building Guidelines](#)

12. Clean Air – San Francisco and the Bay Area offer many ways to get around the city that don't involve driving a car. Leaving your car at home reduces carbon dioxide (greenhouse gas) emissions. Encourage your employees to walk, or bike to work, or to use public transit.

- Post [bicycle route maps, transit schedules](#), and commuter ride sign-ups.
- [Commuter Benefits](#) saves your employees 30-40% on transit passes. A \$100 BART ticket only cost around \$70 and a \$45 MUNI pass only costs about \$27.
- Use the [Emergency Ride Home](#) program provides a free or low-cost ride home in cases of emergency for employees who use alternative transportation.

13. Wastewater – Restaurants are a significant source of FOG (fats, oils, and grease) because of the amount of grease used in cooking and other food preparation work. FOG can be a major problem for San Francisco's sewers as well as the surrounding Bay and Ocean. Use preventative measures to properly manage FOG and reduce future problems and save money.

- Install, where required, a grease trap or interceptor that can handle the amount of FOG residue generated by your establishment. Also properly maintain grease traps, interceptors, exhaust hood filters, and floor mats Implement [Best Management Practices](#) (BMP) during daily operations to keep FOG out of drains leading to sewer