It Isn't Easy Buying Green

Many businesses and employers are now looking to "buy green". With so many toxic chemicals in use in the workplace, the goal to purchase and use less toxic substances should be a positive step to protect workers from being exposed to dangerous chemicals.

However, buying "green" products – or products that are safer for workers to use – may not be as easy as it sounds. We all want to buy products that will be safe for the planet and for ourselves. Green products are often advertised as fulfilling these aims. However, workers and those who purchase products for the workplace may need to do more investigation to ensure that these newly purchased products are actually as safe as they may claim.

If your employer is introducing new green products into your workplace, here are a few things your employer, and you and your co-workers may need to consider:

Green isn't the same as "good".

Be skeptical of advertising that says a product is "good" for the environment. Some products may be considered to be less damaging to the environment, but could pose more serious hazards to users.

Always ask for Material Safety Data Sheets for each new product introduced in your workplace, so you can review all the information regarding health hazards associated with the chemicals in the new product.

Check the list of ingredients and do some research to find out more about this new product, and remember that your employer must provide you with proper training on how to use this new product safely.

Green usually means "less damaging".

Green products usually are designed to do less of a particular damage to the environment than the products they replace. For example, new air-conditioning gases were developed to be less damaging to the ozone layer. These gases still destroy ozone, but they do it so slowly that some scientists think Mother Nature will make ozone faster than it is destroyed.

Green products may only fix short-term problems.

Many green products are developed to fix specific short-term obvious environmental problems, such as smoke in the air or dead fish in our waterways. But some of these short-term fixes could have unexpected long-term consequences. For example, the old phosphate detergents acted like fertilizer in the environment. But we poured too much detergent "fertilizer" into lakes and streams, which caused algae to bloom and fish to die.

So the phosphates were replaced with greener detergents. One type was the biodegradable enzyme cleaners, which were found to cause serious allergies in some people. Another of the phosphate-free detergents was the NPEs (nonylphenol ethoxylates). These are now known to release a chemical into water that scientists think causes deformity in the sex organs of fish and other aquatic life. Europe banned the NPE detergents, and some activists in the US are trying to do the same.

Green may mean "untested" for long-term toxicity.

It is estimated that there are roughly 100,000 chemicals used in our consumer, industrial and research products. However, only about 900

chemicals have been fully assessed for their potential to cause cancer and/or other effects from long-term exposure. An even smaller number have been evaluated for their ability to cause birth defects or long-term organ damage. Ingredients in good "green" products may have been tested to ensure that they do not release any chemicals known to damage water, soil or air quality. But there is no reason to believe they have been fully tested for their long-term effects on humans.

"Green" and "Natural" are not the same.

Products derived from natural sources are not always safer and greener than synthetic ones. Turpentine, molds, poison ivy, hemlock, and tobacco, are natural or derived from natural sources. Ricin, a toxic substance that has been used by terrorists, is derived from the castor bean plant; it is about a thousand times more toxic than any synthetic chemical known.

Natural products, such as foods, can be particularly damaging to the environment. For example, a spill or release of milk to a stream or waterway will cause bacteria to thrive, which leads to other problems.

Green products may be more toxic to you.

Do not assume that what is safer for the environment is necessarily safer for workers during use of the product. For example, the chlorinated hydrocarbon solvents that once were used in brake cleaners were replaced in California, largely due to environmental regulations, by n-hexane-containing products, which caused neurological damage to workers who used the new products.[1]

[1] http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5045a3.htm

"Green" in the product name is no guarantee.

There is no copyright on the word "green." So products with "green" in their names should be investigated the same as you would any other product. For example, one such cleaner was found to contain 6 percent of a toxic solvent called 2-butoxyethanol. This chemical is associated with reproductive damage in animals, can be inhaled and absorbed through your skin, and can penetrate rubber work gloves in minutes without changing the gloves' appearance.

When talking about chemicals, "organic" usually means "hydrocarbon".

Technically, "organic" means the chemical is based on carbon. Tobacco, petroleum, plastics, and your body are made up of many types of hydrocarbons. Unless manufacturers certify that the natural ingredients in the product were grown without certain fertilizers or pesticides, the word "organic" is meaningless on the label. ("Organic" on a food label has a different meaning, i.e., the item was produced without the use of pesticides, or in other ways that do not damage the environment.)

Products that are burned can't be really green.

Greenhouse gases and toxic substances are always produced when organic, carbon-containing substances are burned.

Tobacco is not unique in its ability to produce airborne cancer-causing substances.

Burning coal, oil, wood, autumn leaves, candles, incense, or any other organic material will produce smoke containing cancer-causing and toxic substances.

What can you do when you see "Green"?

If your employer is deciding to go green, here are some basic tips:

- Only buy products from vendors who readily supply a material safety data sheet (MSDS) for all their products.
- Look up the ingredients in databases of groups that do not profit from sale of the product. These websites that can help you to get the best up-to-date information on various chemicals.
- Products that dissolve grease or paint on contact contain solvents, and all solvents (except water) are toxic. Do some investigation about the amount of toxic substances in a given product, and choose the least toxic ones. It takes some work on the front end, but it should provide greater protections in the long run.
- No product that is burned is good for the environment.
- No matter what products you are dealing with, green or otherwise, get all the facts. Don't ignore the MSDS, or think that the product is going to be safe for you to work with just because it is green. Evaluate each and every product, and handle all with care. Green or not, your employer needs to provide you with training, information, and proper protection to ensure your safety from exposure to chemicals.