



THE NEXT STEP Toward a Healthier Future

A BI-MONTHLY NEWSLETTER OF THE SEBASTOPOL TOXICS EDUCATION PROGRAM

As the Mold Grows

As the days shorten and the cold winds start to blow, we know that soon the winter rains will come. While nourishing for the plants, these rains can also bring increased problems with mold in our homes.

Mold, a type of fungus, is vital for recycling the organic building blocks of life. However, in our homes, it can look and smell bad, and cause **health problems**, including respiratory, sinus, and skin problems; nausea; fatigue; dizziness; headaches; confusion; memory loss; and flu and allergy symptoms. Some experts feel that exposure can also cause long-term problems and decreased tolerance of allergens and toxics. Increasingly we hear stories of people whose houses are so permeated with mold that they have to move and have their belongings professionally cleaned.

Yet one commonly-recommended solution for mold – **chlorine bleach** – is toxic and can lead to its own health problems. Plus, bleach often isn't the best or most long-lasting solution. Thankfully, there are many viable ways to prevent and clean up mold and mildew non-toxically!

■ **Reduce mold habitat.** The first step to avoiding mold is to examine where it grows in your home and what conditions



are helping it flourish. **Mold loves warm moist environments**, so it often grows in **basements** and **bathrooms**. Other activities that can encourage mold growth include **cooking, using a clothes dryer, and growing houseplants**.

If you see places in your house where hot moisture is accumulating or air isn't flowing well, look for ways to **reduce moisture by providing good ventilation** – for instance, by opening doors and windows, creating a vent to the outside, or running the fan during and after showers. Also, shake the shower curtain after use; and hang towels and other wet items to dry before putting them in the laundry basket.

You might want to get a **fan** or a **dehumidifier**. If you have a dehumidifier, be sure to keep it clean, so it doesn't harbor mold and bacteria itself! Other conditions that can encourage mold growth include: condensation; poor drainage outside; being in a moist area (e.g., a forest near a stream); a house built with a tight seal (not enough ventilation); or a house with slab construction where water can wick up onto carpets.

■ **Fix water damage quickly.** A common situation that encourages mold is water damage from storms or leaks in pipes, windows, walls, or the roof. It's important to maintain the structure of your house, and inspect for and fix water damage quickly and thoroughly. Otherwise, mold can get a foothold and spread inside your house walls. Sometimes, heaters can dry a damaged area, but it can often be preferable to remove damaged drywall, carpet, and other materials, and start fresh.

■ **Consider an air purifier.** Some people have had success reducing mold with an air purifier. Machines and situations vary, so do research first to identify a purifier that will work for you. Purifier technologies for treating mold in homes include: photohydroionization, ozone generation, and UV. Key variables to consider are: initial cost; filter costs and replacement frequency; energy costs; area treated; fan noise; claims regarding mold treatment; and evidence to support those claims. It's ideal to talk with someone with positive results in a situation like yours.

■ **Clean carpets and linens frequently.** Mold can find a home in carpets and other areas that gather dirt, so an easy solution is more frequent and deeper cleaning of carpets, towels, sheets, pillows, etc.

■ **Choose healthier cleansers.** If you have mold, or want to prevent it, you can use a variety of natural products to clean surfaces and the air. Annie Berthold-Bond, in *Clean & Green*, recommends four key mold cleaners – **tea tree oil; pine oil; borax; and vinegar**. More details about how to use these cleaners, and in what situations, are in her book. More about using diluted tea tree oil in bathrooms is also in "Got Mold?" (*The Next STEP, Issue II/3*). We'll explore a variety of mold cleaners in future issues of this newsletter.

Berthold-Bond also recommends **zeolite**, a natural mineral, which she says absorbs bacteria, mold, and other pollutants from the air. You can buy "breather bags" and put them in problem places like the fridge or to clear the house overall. They're cleaned by putting them in the sun to release what they've absorbed.

So try a few of these tips and see if they help you avoid mold problems. And please share your tips with us, so that we can share the best ones in future issues.

~ Patricia Dines

More information about dealing with mold is at www.doh.wa.gov/ehp/ts/IAQ/Got_Mold.html and www.moldinspectionsservices.com/Mold-Links.html.

Thank you to Melissa Weaver for her input to this article. Melissa is an indoor air quality educator and is helping create the Sonoma County Healthy Home Network. She can be reached at 823-3235.

BOOK REVIEW

"The House & Garden Audit: Protecting Your Family's Health & Improving the Environment," by Laurel Marcus, 137 pages

Would you like a systematic way to assess how you're doing in creating a healthy home for yourself, your family, and the environment? Then consider The House and Garden Audit, by local ecologist Laurel Marcus.

Using a fun quiz format, this book walks through your home and garden, asking how you manage pests, indoor air quality, energy and water conservation, and more. For each element, frowning faces mark harmful practices, with information describing their potential risks – and smiley faces indicate preferred practices, with information about methods and benefits.

As you go through, you can grade yourself on your current practices. And hopefully you'll be encouraged to choose the healthier options described – to reduce your use of pesticides, protect your property from erosion and fire, plan and maintain a healthy garden, conserve water and energy, and more. For further information, there are resource lists throughout.

The book is full-color and illustrated – although the design does feel somewhat hectic, with different graphic styles on the same page, lots of boxes, and a format that can be hard to sort out. In addition, readers who prefer to avoid toxics altogether might object to Marcus supporting some use of pesticides. For instance, she gives a smiley face to using herbicides "to get weed infestations under control," a goal that can be achieved using less-toxic methods.

On balance, however, this book provides extensive and valuable information in a way that cheerily encourages constructive improvement in how we care for our homes, our earth – and ourselves.

To order, send \$15 (including P&H) and your address to: Laurel Marcus & Associates, 3661 Grand Ave #204, Oakland, CA 94610. For more information or large orders call (707) 869-2760 or email <lmarcusassoc@ix.netcom.com>.

Solar Sebastopol Reduces Toxics in Our Air

Installing a solar system at your home or business helps you save money long-term, avoid energy price increases and supply disruptions, and improve air quality, by reducing the toxics that power systems put into our shared environment. **Solar Sebastopol, a new City of Sebastopol campaign, makes it even easier to buy solar.**

Launched on August 17 at the Solar Sebastopol Fair and Celebration – an event attended by an estimated 2,000 people – Solar Sebastopol has the goal of supporting the installation of 1 megawatt of new solar power in Sebastopol by 2005. This megawatt (enough to power 500 homes) will protect the Earth from 4.5 tons of nitrogen oxides, 4.6 tons of sulphur dioxide, and 2,435 tons of carbon dioxide *every year*. This is equivalent to a reduction in driving of 6.1 million miles a year in an average car, or planting 686 acres of trees (U.S. Dept. of Energy figures).

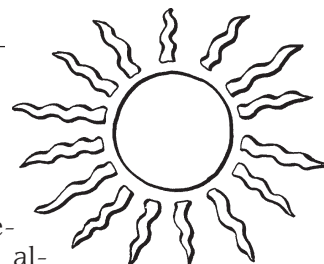
For many homes, the monthly cost of a solar system is less than current electricity bills. A solar system usually pays for itself within 10-12 years (sooner, if energy prices rise). Solar installation costs are coming down, and state and federal incentives can cut them by as much as half.

Solar Sebastopol helps homeowners and businesses take advantage of these incentives while they're still available. In addition, **to help make solar energy more affordable and easier, the City has:**

■ **Earmarked \$100,000 to carry the rebate amount of your installation costs.** This means you spend far less out-of-pocket to get your solar energy project going.

■ **Cut the cost for building permits and streamlined the process.** Instead of waiting weeks for a permit, now it's just a matter of days.

■ **Led by example,** by installing solar panels on the Fire Department and Public Works buildings. The City is exploring other possible locations for public solar installations.



Solar Sebastopol is already attracting attention as an innovative program. An Oct. 3 *San Jose Mercury News* editorial said that "the most interesting development on the solar energy front comes from Sebastopol, a community of 8,000 in Sonoma County... Given the gridlock in Washington, D.C., and Sacramento, it is encouraging to see local governments ... responding to consumers who strongly support solar energy. If all goes well, tiny Sebastopol could show the rest of the state and nation how local communities can take their energy future into their own hands."

To implement this program and help property owners with the process, the City has partnered with Cooperative Community Energy (CCE), a local solar equipment buyers' cooperative that won the contract through an open bidding process. CCE aggregates buying power to lower equipment costs by as much as 35%. For more information about Solar Sebastopol, call 829-1999 or see <www.ci.sebastopol.ca.us> or <www.ccenergy.com>.

~ Patricia Dines & Rebecca Dwan

ABOUT STEP

The Next STEP (TNS) is published six times a year by the **Sebastopol Toxics Education Program** (STEP). **STEP is a project of the City of Sebastopol**, implemented by local citizen volunteers. **STEP's mission** is to support city residents in reducing their toxic use and exposure, creating a healthier and safer Sebastopol for everyone.

Past issues of TNS are at <www.ci.sebastopol.ca.us>; look under Programs. **An ongoing index by topic** is at <www.healthyworld.org/STEPIndex.html>.

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