



COLD CLIMATE HOUSING RESEARCH CENTER

CCHRC

1000 Fairbanks St.
P.O. Box 82489
Fairbanks, Alaska 99708
(907) 457-3454
(907) 457-3456 Fax
www.cchrc.org

ENERGY FOCUS

Painting With Fewer Fumes

By CCHRC Staff

Here's a primer on how to choose more environmentally-friendly paint. Paint ingredients reflect the demands we place upon paint. Outdoor paint must withstand sunlight, heat, cold, and rain. Indoor paint is scuffed, exposed to humidity, and subject to the whims of fashion. All paint produces fumes; some are more noxious than others. Close label reading and careful selection can help you identify the best product for the job, with the fewest undesirable side effects.

The biggest toxic compound in paints was phased out decades ago – lead. But if parts of your home haven't been painted for a couple of decades, it's worthwhile to check for the presence of lead paint and remove it in a responsible way. Depending on the scope of the job, this might best be handled by a professional. Lead is particularly harmful to children and pregnant women.

Most modern paints contain volatile organic compounds (VOCs) that are not good for you. Off-gassing by these VOCs is usually temporary, but can be obnoxious until the paint dries completely. Paint with lots of ventilation and never sleep in a newly painted room. Some ingredients can be very toxic, such as formaldehyde. Paints that advertise being mildew resistant can contain biocides such as ammonia, cadmium, or cobalt. If you're using paint like this, you have a moisture problem that would better be dealt with at its source.

Latex or water-based paints will have lower VOCs than oil-based paints. Look for paints labeled "low VOC," "zero-VOC," or "no-VOC." But if you find one, make sure the paint will perform the way you need it to for a particular application. Even so-called "natural paints," which are made of substances such as linseed, soy oils, and pine- and balsam-derived turpenes can give off nasty fumes.

You may want to test a given paint in a small, inconspicuous area to see for yourself how the paint performs. If you're in a hurry, the best method is to shop at a full-service store that sells paint with knowledgeable salespersons and to ask a lot of questions. Ask if you can return the paint if it doesn't perform the way you need it to.

If you want to avoid fumes altogether and don't mind having to repaint more often, you could try milk-based paints. Lots of manufacturers produce this kind of paint commercially as a green alternative, but you can make it yourself. It's cheap this way. Milk paint is only good indoors, but uses only non-toxic

ingredients. A basic recipe generally calls for curdled milk or cottage cheese, citrus of some kind, and natural color pigments.

Finally, dispose of unused or old paint responsibly. The Fairbanks North Star Borough Solid Waste Division collects paint and other toxic fluids at each of its transfer stations and at the landfill itself.

Energy Focus articles promote energy awareness for the Cooperative Extension Service (CES) and the Cold Climate Housing Research Center (CCHRC).

For questions or comments please contact CCHRC at (907) 457-3454