

# Healthy Choices for Landlords & Homeowners: How to renovate and maintain homes using environmentally preferable products & practices

Americans spend most of their time indoors, where air quality is on average 2-5 times worse than outside air quality. More than 1 out of 5 children in Sonoma County have been diagnosed with asthma, which can be triggered by poor indoor air quality in the home. Creating a healthier home environment in rental units can help retain tenants and reduce complaints.

## Common Indoor Pollutants

### Volatile Organic Compounds (VOCs) and Formaldehyde

Health Effects: probable carcinogens, lung irritant, nausea, headaches and fatigue. These chemicals are also smog-forming.

Where they are found: Conventional adhesives, sealants, paints, manufactured wood, carpet, vinyl, particle board, laminate, furnishings and many other building and household materials.

### Mold and Dust

Health Effects: Common allergens and asthma triggers, sinus infection, lung irritation and injury. Both dust and mold can introduce toxic materials into the body.

Where they are found: Poorly designed or maintained heating, cooling and ventilation systems (HVAC), carpet, water intrusion, unvented laundry and bath rooms. Mold can occur anywhere that is dark and moist.

What can landlords and homeowners do to improve Indoor Air Quality?

- Replace old carpets with healthy flooring
- Use low VOC indoor paints
- Perform maintenance on heating, ventilating and air conditioning (HVAC) systems
- Use green cleaning methods

The city of Rohnert Park encourages all rental owners, property managers, and homeowners to utilize the following recommendations to improve indoor air quality in homes.

## Recommendations

### HVAC Maintenance

HVAC systems play an important role in trapping or ridding a home of moisture (which can cause mold), and other lung irritants like off-gassing chemicals and dust. A tight HVAC system means better heating and cooling efficiency and associated savings in energy bills.

- Change filters in ventilation system every three months; use a HEPA filter with the highest MERV rate the HVAC is designed for.
- Clean out vents and exhaust fans annually.
- Be sure to have exhaust fans to the outside for showers, furnaces, clothes dryers and range stoves. These particular measures are also in the California Building Code.
- Have a professional check the HVAC system for leaks and gaps.
- Receive PG&E rebates for sealing HVAC or replacing it with an energy efficient model. <http://www.pge.com/myhome/saveenergymoney/rebates/>. Check out PG&E's other great rebates for electricity and gas efficiency.

### Low/No VOC Paint

Low and no VOC and no added formaldehyde paints are available through most major paint manufacturers and retailers. Both premium and contractor grade can be found for little to no price increase over conventional paint.

- Be sure to clean off mold with vinegar or weak bleach solution (1 part bleach to 10 parts water) before repainting.
- Make sure the paint is low VOC and not just low odor. Some low odor paints have even more chemicals to mask the odor of VOC. Look for VOC levels of <150 g/liter non-flat finish and <50 g/liter flat finish.

## Healthy Flooring

Carpet can harbor asthma and allergy triggers, such as VOCs, dust mites, animal dander, pollen and other contaminants. Smooth surfaces like wood, tile, linoleum and laminate are easier to clean and last much longer than carpet. Consider switching to hard surfaces during your next carpet replacement.

- Carpet: Choose recycled content nylon carpet, it is lower in VOCs, more durable, more stain resistant and comparable in cost to conventional carpet. Choose carpet that meets or exceeds the CRI Green Label Plus requirements ([www.carpet-rug.org](http://www.carpet-rug.org)).
- Use low VOC adhesives and carpet pads, both easy to find at no premium. Low VOC, no adhesive carpet squares can be easily replaced if damaged without replacing the entire room's carpet.
- Natural linoleum last 3 times as long as vinyl even though it costs more initially than other options at installation. If vinyl is used in kitchens and bathrooms, try to find products that are factory off-gassed and use VOC/formaldehyde free adhesive.
- Laminates run between \$2-\$5 ft<sup>2</sup> installed, and are desirable to many tenants. Specify low VOC and formaldehyde-free laminates, sealants and adhesives if needed. Bamboos run at \$4-\$7 ft<sup>2</sup> installed. Specify either low VOC or factory finished and off-gassed products.
- Tile floors can be laid with low VOC adhesives and sealants.

## Green Cleaning Products

Conventional cleaning products can contain harmful solvents and harsh chemicals linked to long term health damage as well as lung and skin irritation. They are common allergens and triggers for asthma.

- Ask your cleaning service to use diluted vinegar or Green Seal approved products only when steaming carpets and cleaning units.
- Resources: Ecoclean, a Santa Rosa commercial janitorial and maintenance company that offers non-toxic service: [www.ecocleaned.com](http://www.ecocleaned.com) (707) 527-5400.
- Green Cleaning Products Purchasing Guide: [www.responsiblepurchasing.org](http://www.responsiblepurchasing.org).

## Local Retailers and Resources

These are just a sample of businesses and resources. Call your contractor and suppliers to discuss product choices.

No-premium low VOC paints, sealants and adhesives: Home Depot, Lowes

Premium low VOC paints: Most paint stores carry low VOC paints, including Frazee Paint (707) 585-8705, Kelly-Moore (707) 584-4012, Sherwin-Williams (707) 542-2192

Flooring: Carpet padding that has been factory off-gassed is available at Home Depot. Low VOC and no-adhesive Pergo laminate is available at Lowes. Conklin Bros. carries several types green flooring and has a recycling program. (707) 592-4981 [www.conklinbrosfloors.com](http://www.conklinbrosfloors.com). Flor, [www.flor.com](http://www.flor.com), easy to replace single carpet squares recycled content, low VOC and no adhesive. Mead Clark (707) 576-3333 carries FSC and reclaimed wood. Rugworks (707) 584-7847 offers bamboo, linoleum, CRI carpet and reclaimed wood.

Home Equity Energy Loan: Low interest rate loans are available for green upgrades through Exchange, First Community, North Coast, and Sonoma Banks. [www.greenenergyloan.org](http://www.greenenergyloan.org)

Great info on product options: [www.greenbuildermag.com](http://www.greenbuildermag.com)

Green Seal certifies less and non toxic alternative products [www.greenseal.org](http://www.greenseal.org)

Multiunit Housing green building resource: [www.stopwaste.org/home/index.asp?page=291](http://www.stopwaste.org/home/index.asp?page=291)

Green Affordable Housing Coalition: <http://frontierassoc.net/greenaffordablehousing/Index.shtml>

The City of Rohnert Park Community Development Department has resources to assist city dwellers with going green. Contact Sonia (707) 588-2240 to obtain a copy of "The Weekend Warriors Guide to Making a Greener and More Energy Efficient Home."

Prepared by Sonoma County Asthma Coalition, [www.sonomaasthma.org](http://www.sonomaasthma.org) (707) 527-5864

