



Everyday Environmental Stewardship

Painting

Key Issue: Allergic reactions to VOCs

Stewardship Opportunities:

Limit secondary impacts

Low-VOC paints

Recycled Paints

Allergic Reactions

Most paints emit volatile organic compounds (VOCs) while drying. VOCs can be toxic and cause allergic reactions because of fungicides, biocides, and spreadability agents that are in the paint. VOCs are higher in oil based paint than latex paint. Headaches can also be caused by VOC type paints. The elderly and children are more susceptible to VOCs effects, which is why we recommend the use of non VOC paint on houses where these individuals live. Health problems are mostly associated with interior painting; however exterior painting harms the environment just as much.

Stewardship Opportunity #1 — Limit Secondary Impacts

When using oil paint, spills and brushes must be cleaned with paint thinner, which itself has the secondary negative impact of polluting the ground and air. Paint thinners harm the environment. Latex paint spills and brushes, on the other hand, can be cleaned up with just warm water because latex is water based. Therefore, use of latex is more beneficial.

Stewardship Opportunity #2 — Use Low VOC Paint

Many paints on the market emit extremely low amounts of VOCs; some paints are VOC free. Overall paints and stains must not contain VOCs in excess of 200 grams per liter. Varnishes must not contain VOCs in excess of 300 grams per liter. The amount of VOC's varies among different low-VOC products, and is listed on the paint can. Any paint with VOC's in the range of 5 grams/liter or less can be called "Zero VOC", according to an EPA standard. Low VOC paints will help the environment and your health.

SO #3 — Use Recycled Paint

Unused latex paint can be remade into recycled paint. Although recycled paint still contains low levels of VOCs, it is recycled so less energy is used in the manufacturing of it. Recycled paint contains between 20-100% recycled paint. However recycled paint is unfortunately still in its infancy and can be difficult to find.

Other Painting Products

Latex and oil paints are not the only paints on the market. *Stains, varnishes and lacquers* are all fairly common types of paints that all have special purposes and attributes. Stains are able to have a wide range of colors, while also being able to show the texture of the wood. Often stains last longer than paint. Varnishes are able to accentuate the wood's natural color, while also showing its texture. Lacquers are often used on tables, both inside and out, to darken and protect them. As with paint, check the information on the can to buy stains, varnish and lacquer with the lowest amount of VOCs.

Low VOC Paints

Benjamin Moore Pristine EcoSpec - Low VOCs, under 10 grams/liter. Flat, eggshell, semi-gloss finish and primer. Ecospec maybe the easiest Low VOC paint to find because Benjamin Moore is a large national manufacturer. **AFM Safecoat** - Flat, Eggshell, Semi-Gloss interior enamel; exterior satin; primer; deck coat. **Cloverdale EcoLogic** - Low VOCs, under 10 grams/liter. Flat, Eggshell, Semi-Gloss interior. **Carver Tripp Safe & Simple** - Line of water-based stains and clear finishes that are low or free of toxics as well as low VOCs.

Related links:

http://eartheasy.com/live_nontoxic_paints.htm

No VOC Products

Devoe Wonder Pure - www.devoepaint.com **Alistagen CALIWEL (antimicrobial)** - new interior, latex-based paints eradicate mold and fungus. Available through website. (<http://www.caliwel.com> 1 866 280-0001) **AFM Safecoat** - Flat interior latex; semi-gloss interior enamel. **Earth Tech** - Interior and exterior flat, satin and semi-gloss zero-VOC paint, non-toxic clear and pigmentable finishes. (303 465-1537) **ICI Lifemaster 2000** - Flat, Eggshell, semi-gloss interior; primer (1 800 984-5444.) **ICI Decra-Shield** - Exterior zero-VOC paints. (1 800 984-5444) **Kelly-Moore Enviro-Cote** - ENVIRO-COTE line (916 921-0165) **Sherwin Williams** - new HARMONY line low-odor latex interior paints. Flat, eggshell, semi-gloss and primer. (<http://www.sherwin.com>) **Frazee Paint EnviroKote** - Line of interior zero-VOC paints: semi-gloss, flat, and primer

Low VOC varnishes

Parks Corporation, One West Street, Fall River, MA 02720

<http://www.newparks.com/profinisher.html>

Recycled Paint Availability

There are every few companies that currently remanufacture recycled paint. The companies that do manufacture recycled paint tend to only sell in quantities of over 50 gallons at a time. Hopefully as demand increases for recycled paint, more companies will be willing to sell to individuals.

Related Links:

<http://www.moea.state.mn.us/lc/purchasing/latexpaint.cfm>

<http://www.mass.gov/epp/products/paint.htm>

Oil vs, Latex

Oil based paint should be used in areas of high traffic because oil based paint is more durable than latex. The use of latex paint in these areas would require more frequent painting, which would negate the saved VOCs and also expend more energy in the additional manufacturing of paint.

Related Links:

<http://www.naturalhandyman.com/iip/infpai/inflatexvsoil.shtm>

<http://www.greenbuilder.com/general/articles/AAS.Paint.html>

Relative Advantages and Disadvantages of Latex and Oil Paints

LATEX	
ADVANTAGES	DISADVANTAGES
Fast drying.	Shrinks more when drying, creating more surface stress.
Better fade resistance.	More temperature sensitive.
More chalk-resistant.	Less adhesion to chalk and dirt.
Breathes; less blistering.	Can stain with water-soluble contamination.
Retains flexibility longer.	Softer, normally not used in high traffic areas.
Tolerant of alkaline surfaces eg: masonry.	
Will not yellow.	
Resists mildew better.	
Cleans up with water.	
Good on galvanized metal.	
OIL	
ADVANTAGES	DISADVANTAGES
Less shrinkage.	Turns brittle with age.
Low temperatures have less effect.	Slower dry than latex.
More durable in high traffic areas.	Colors fade faster.
Seals stains better.	Chalks faster than latex.
Holds rust better on steel.	Tight film blisters faster (won't breathe).
Better adhesion on dirty or chalky surfaces.	Yellows with age.
	Peels on galvanized metal.