

Green Purchasing Opportunities: Paints and Coatings



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Green Purchasing Opportunities: Paints and Coatings

HIGHLIGHTS

- Many categories of certified environmentally preferable paints and coatings are available and price competitive.
- Recycled paint is available in custom colors and low VOC and should be awarded separately.

WHY BUY ENVIRONMENTALLY PREFERABLE PAINTS? (page 1)

- Paint is a large-volume commodity purchased by all government agencies. Paints purchased in the highest volumes are indoor and exterior latex paints and primers, followed by floor paints, spray paints, stains, varnishes.
- Less toxic paints protect the health of maintenance workers and facility users.
- Purchasing recycled-content paint creates markets for paint collected by community recycling programs.

Variety and Quality

- Market demand for environmentally preferable paints has created wide availability of “green” options.
- A variety of third-party certifications ensure product performance and protect worker health

Environmental and Health Benefits

- Paints can contain chemicals known to cause cancer, birth defects, asthma, and other serious health effects. They can emit volatile organic compounds (VOCs) that contribute to poor indoor and outdoor air quality.

Economic Benefits

- Some preferable paints (e.g., low-toxicity latex or recycled paints) are cost competitive with conventional paints.
- **ENERGY STAR**-qualified reflective roof coatings can lower energy bills, particularly in warm climates.

BEFORE BIDDING (page 3)

Building a Stakeholder Team

- Convene a Paint Contract Development Team including high-use agencies and environmental program staff.

Which Products Are Needed

- Consider creating a “Green Market Basket” comprised of the products you will use most.
- Ask vendors to supply a “Preferable Paints List” of all products that meet your criteria.

What Products Are Out There?

Low-Toxicity Paint

- Ten brands of low-toxicity paints and coatings are certified under MPI’s Extreme Green standard, seven brands of low-toxicity latex paints are certified by Green Seal, and four brands are certified by EcoLogo.

Everything You Need to Know About Recycled Paint

- High quality recycled paint is most available in areas adopting producer responsibility take-back programs.
- Recycled paint is **available** with VOC content as low as 50 g/l, in custom colors, and in varying finishes.
- **Consolidated recycled paint** has at least 95% post-consumer content and tends to have higher VOCs.
Remanufactured recycled paint has at least 50% post-consumer content and tends to have lower VOCs.

Are There Useful Cooperative Purchasing Contracts?

- Certified low-toxicity paints available through WSCA’s contracts with **Grainger** and **Fastenal**).

Are There Useful Model Specifications From Other States?

- Washington, California, and Connecticut have recycled paint contracts, each with strengths and weaknesses.

GREEN CERTIFICATIONS AND STANDARDS FOR PAINTS AND COATINGS (page 7)

- Multiple-attribute, third-party certifications and standards that address toxicity, emissions, and performance: Green Seal, EcoLogo, MPI Extreme Green and GPS-2, and US EPA’s Design for the Environment (DfE).
- Single-attribute certifications and standards: ENERGY STAR; USDA Biobased; South Coast Air Quality Management District (SCAQMD); water-based.

For more, see [Green Certifications Table](#)

BID SPECIFICATIONS (page 10)

Existing Specifications and Contracts

- Washington, California, and Connecticut have recycled paint contracts, each with strengths and weaknesses.

Minimum Requirements (Specifications)

- **Recycled Latex Paints**: Consolidated: GS-43 or EcoLogo CCD-048. Remanufactured: GS-43 or CCD-048, ≤150 g/l VOCs.
- **Virgin Paints, Primers, Floor Coatings, Rust-Inhibitive Coatings, Caulks, Wood Finishes, and Stains**: Green Seal, EcoLogo, MPI X-Green, or EPA DfE, plus no nanotechnology.
- **Specialty Paints, Primers, and Other Coatings** (anti-graffiti, dry-fog, faux finish, fireproof, graphic art, industrial maintenance, metallic, multi-color, roofing primers, shellac, and wood preservative coatings): MPI-approved for performance, meets current SCAQMD VOC limits, no Proposition 65 chemicals, and no nanotechnology.
- **Field Marking Paint, Spray Paint, Tree Marking Paint**: Water-based, MPI-approved for performance, no Proposition 65 chemicals, no nanotechnology.
- **Paint Strippers, Thinners and Removers, Wallpaper and Graffiti Removers**: Water-based or USDA Biobased

Certified, disclose maximum VOC content, no Proposition 65 chemicals, no nanotechnology.

- **Reflective Roof Coatings:** ENERGY STAR-certified.
- **Paint Rollers, Trays, and Other Equipment** (drop cloths, sanding blocks, mixing cans, etc.): Minimum 10% post-consumer or 30% total recycled content, disclose amount of post-consumer and total recycled content.

Bid Strategies

- Require multiple attribute certification whenever possible.
- Ask for both consolidated and remanufactured recycled paint, as they fill different needs.
- Create a Preferable Paint Bid List OR Develop a Green “Core” or “Market Basket” list.
- Consider a “brown list” of products prohibited from the contract when plenty of preferable options are available.
- Consider using supplied Model Bid Sheet for vendor submissions.
- Consider awarding points to vendors offering full ingredient disclosure and/or health impacts for at least 3 priority items.

For more, see [Appendix 1 Definitions and Connecticut Contract Award for Paint and Related Supplies \(pg 35\)](#)

ONCE THE BIDS ARE IN (page 15)

- Consider allowing multiple awards (particularly for recycled paint) to increase product selection.
- See section details for tips on managing paint data submitted.

Before You Evaluate the Data

- Label and sort the data to help compare “apples to apples”.

Best Ways to Award

- Award recycled paint contract separately.
- Potential strategies include choosing a single vendor, multiple vendors based on best-priced core list items, multiple vendors based on best line-item price, or choosing a set of lowest prices for each line item.

Verifying Compliance

- Spot-check vendor information: Green Seal, EcoLogo, MPI X-Green, EPA DfE, GREENGUARD, MPI category number indicating paint or coating type, MPI Environmental Performance Rating (EPR), compliance with SCAQMD VOC limits.

Evaluating Performance and Price

- Compare prices of equivalent products on bid or core/market basket list: Same MPI Category (1-301) and similar MPI Performance Rating (EPR score of 0-6). Ask bidders for this information in advance.

For more, see [Model Bid Sheet](#)

VENDOR EVALUATION (page 20)

- Consider giving points to vendors offering the widest variety of ‘green’ products, a user-friendly labeling system, providing “Green Spend Reports”, or offering a mechanism for publicly available ingredient disclosure.
- Require vendors to disclose all NIH-reported asthmagens; award extra points to vendors offering products devoid of asthmagens.
- Consider requiring vendors to offer paint recycling services on your contract.

For more, see [Vendor Sustainability Questionnaire](#)

MAXIMIZE GREEN IMPACT (page 21)

- Bids can be strategically designed to generate “Recycled Paint” and “Low Toxicity Paint” lists, thereby supporting a decision-making hierarchy where end users may choose recycled paint first, choose from the “Low Toxicity Paints List” for other needs, and buy from the ‘traditional’ paints list as a last resort.
- Ask vendors to help you track “green” purchases that protect human health and the environment.
- Make your contract a cooperative purchasing agreement.
- Require same specifications for contractors on state property or state-funded painting projects.
- Choose the right quality paint for the job to avoid needing to reapply too often.
- Choosing the right quantity of paint for the job can save money; the PaintCare calculator can help.
- Choose light colors, whenever possible, to decrease energy costs associated with lighting.
- Consider other related preferable products such as recycled-content trays and rollers.
- Prioritize use of low VOC paints for indoor applications in occupied areas.
- Look for opportunities to earn green building credits by using environmentally preferable painting products.

WHAT’S ON THE HORIZON? (page 22)

- While recycled-content paint is not available in all states, supplies are expected to increase as more states adopt laws requiring paint stores to serve as community drop-off sites for leftover paint.
- On January 1, 2014, the SCAQMD will implement more stringent VOC limits for some paints. Agencies should verify at that time that products purchased meet the new SCAQMD limits.
- Requesting bidders to make product ingredients publicly accessible via Health Product Declaration forms or a Green Screen score will give agencies the information to make informed decision in the future.

WHY BUY ENVIRONMENTALLY PREFERABLE PAINTS?

All government agencies purchase paint or painting services in their building maintenance operations, and all painted surfaces must be painted at regular intervals either for aesthetic value or to protect the underlying substrate. Environmentally preferable paint can be used by in-house maintenance staff, or by contractors working on agency-owned property, or projects funded with agency dollars.

States have the opportunity to protect maintenance workers and building occupants, supporting businesses that have developed environmentally preferable paint and coating products, and saving money by adding certified “green” products to their contracts for painting supplies and services.

Variety and Quality

Because of the high demand for “low-emitting” and other environmentally preferable paints and coatings, many large manufacturers as well as smaller vendors offer a wide array of paints, coatings and other painting supplies with lower emissions of volatile organic compounds (VOCs), fewer toxic ingredients, recycled content, and other environmental attributes. Many of these products carry at least one third-party certification, and are often available in a variety of colors and finishes.

Requiring products to be certified as “green” by an independent, respected third-party organization is an easy way for states to ensure the products it procures will minimize environmental and health impacts and perform well. Some recycled and low-toxicity paint products are cost-competitive with equivalent conventional products, while others offer financial benefits over time, such as reducing electricity consumption or disposal costs.

Environmental and Health Benefits

Many paints, primers, stains, strippers and other painting products contain chemicals that can cause cancer, birth defects, asthma and other harm to people and the environment. These toxic chemicals often volatilize when exposed to air, producing some of the odors commonly associated with paint, and contribute to a product’s VOC emissions. Paints, stains, and other architectural coatings are the second largest source of VOC emissions, with vehicles being the first. These VOCs pose a particular concern for maintenance workers applying paint, and for building occupants in facilities where painting is taking place. Even after the paint has dried, it can continue to off-gas, which can further contribute to indoor air pollution. Paints may also contain other chemicals of concern such as heavy metals (lead, chromium, and mercury in pigments) or nano-particles that may be easily absorbed into the skin or lungs due to their miniscule size. Spray paints are of particular concern because they typically contain hazardous solvents and because the aerosol delivery system produces a fine mist which can easily penetrate the lungs.

Traditional oil-based paints, or alkyd paints, contain toxic solvents and emit more VOCs than their water-based (i.e. waterborne) counterparts. Waterborne paints are not only less toxic, but reduce consumption of non-renewable petroleum resources. Recycled paints have a smaller footprint because they use fewer resources and inputs to manufacture, and because they are often collected, processed, and re-sold locally.

The safe disposal of leftover paint represents a serious waste management challenge for communities across the United States. Paint often constitutes the largest volume of material collected at household hazardous waste collection facilities. While a few states have paint product stewardship programs in

place, unused paint must be managed at considerable expense by most municipalities nationwide. The procurement of recycled-content paint can help support a growing number of paint recycling initiatives by creating markets for leftover paint that is collected at community drop-off sites.

Economic Benefits

Preferable paints and coatings can be cost-competitive when it comes to the initial product price tag, and are often cost-advantageous when worker health, energy savings, and disposal costs are taken into account. The State of Connecticut was able to secure competitive (and sometimes lower) prices on several types of environmentally preferable painting products through a carefully crafted competitive-bidding process (see [Table 2](#)). Contract pricing on recycled paints is typically cost competitive or better than virgin paint equivalents (see [Table 1](#)). Furthermore, by carefully selecting a range of quality paints – enabling the purchase of higher quality more durable paint for tougher jobs – agencies can save significantly on future materials and labor.

ENERGY STAR-rated reflective roof coatings with high solar reflectance can reduce the heat absorption of a building, thereby decreasing cooling costs over time in warm climates. The Reflective Roof Coatings Institute offers [two cost savings calculators](#) to help paint users determine whether reflective roof coatings make economic sense for their applications.

BEFORE BIDDING

Building a Stakeholder Team

It is imperative to invite your environmental agency staff to participate in your contract development team along with agencies that are large users of painting supplies. Engage a committee of end users and other stakeholders during the development and finalization of criteria, bid strategy decision (single vendor versus multiple vendor), and to review proposed product selection to ensure the contract will meet their needs. This also serves as an outreach mechanism to alert end users of the new preferred products, address their concerns, and engage them in the use of the preferable options.

Which Products Are Needed?

The most important question to ask is which types of painting supplies you want to include on your contract. These products should be highlighted in the bid solicitation (e.g., on a “preferable product bid list” or a “green market basket list”) to alert the vendors of your top priority products for attractive pricing. By far, the paints purchased in the highest volumes tend to be indoor and exterior latex paints and primers. Floor paints, spray paints, stains and varnishes tend to be the next most common. However, each state should assess its own purchasing patterns so procurement officers know what to highlight in their bid solicitation. Vendors will also want to know how much of each type of paint they can expect to sell on your contract; this will help them give you a discount commensurate with expected usage.

What Products are Out There?

A growing variety of recycled and low toxicity paints and coatings are available on the market. Many products carry third-party eco-labels, or meet other environmental standards such as stringent VOC limits. Of greatest importance are multi-attribute certifications offered by Green Seal, EcoLogo, the Master Painters Institute (MPI), and US EPA’s Design for the Environment program (DfE), which verify that paints and coatings meet a wide array of environmental and performance criteria. These multi-attribute certifications are preferable to single-attribute certifications because they are based on a more complete assessment of a product’s overall environmental impacts, thereby preventing environmental and health tradeoffs.

Users do not have to sacrifice quality when using recycled or low toxicity paints since all of the multiple-attribute third-party certifications include a performance requirement, both for virgin paint and for recycled paint. Moreover, many low toxicity certified paints are available in both high-performance and standard-grade formulations.

In several categories of paints and coatings, there are no multi-attribute standards or certified products available. However, in some of these, there are products that have single-attribute certifications by organizations such as GREENGUARD (for low-emitting products), USDA (for certified biobased products), and ENERGY STAR (for energy-saving reflective roof coatings).

Low Toxicity Paints

As of November 2012, ten brands of low-toxicity paints and coatings were certified under MPI’s Extreme Green standard, seven brands of low-toxicity latex paints were certified by Green Seal, and four brands were certified by EcoLogo, although some of the EcoLogo products may not be offered in the United States since this certification organization is based in Canada.

Low toxicity paints and coatings and other supplies are available through a variety of distribution sources:

- Look for products that meet your environmental criteria on existing cooperative purchasing agreements such as the Western States Contracting Alliance (WSCA) contracts with [Grainger](#) and [Fastenal](#)
- Solicit bids with your own specifications to secure bulk pricing
- Purchase at hardware stores or directly from product manufacturers utilizing individual purchase orders when only small amounts are needed
- Incorporate environmental criteria into service agreements – consider holding products provided via this route to the same criteria as products purchased in-house.

Everything You Need to Know About Recycled Paint

Several manufacturers offer recycled paint and the number is growing as the collection mechanism for recycled paint expands. In 2008 Washington Department of Ecology published an Environmentally Preferable Purchasing Bulletin informing State agencies of the State's goal to purchase recycled paint in order to drive the market for recycled paint and calls on State agencies to use the then new contract with Metro Paint to purchase and use recycled content paint. Since then the world of recycled paint has blossomed, with more variety in colors and finishes than ever before. Some states have secured competitive or preferable pricing on recycled paint. This is particularly true in and around California and Oregon which have both adopted laws requiring paint retailers to take back leftover paint to be recycled, and where most of the paint recyclers are located. Recycled paint may not be readily available or cost-effective in all states. States without nearby paint producer responsibility laws will likely experience higher prices on recycled paint due to shipping costs for these non-local products. States should survey vendors in their region to determine product availability and cost.

Recycled Versus Low VOC

For agencies concerned about the trade-off between recycled content and low VOC content, their worries are over. Recycled paint is now available in much greater variety than ever before, as well as in low VOC formulations. Though recycled paints traditionally were available only in a flat finish and only in a few (arguably bland) colors, colors offered these days are with modern aesthetics in mind, and three of the five major recycled paint manufacturers offer custom colors, while two of them offer a variety of finishes. The traditionally high VOC content of recycled paints is also changing. By adding post industrial recycled paint made with low VOCs, or by more carefully sorting the post-consumer paint received, some companies are able to offer recycled paint with a maximum VOC content of 50 g/l, the same as the low VOC virgin paint available on the market today.

Types of Recycled Paint

There are two types of recycled paint, each offering its own benefits:

- ***Consolidated recycled paint*** contains at least 95% post-consumer paint collected in paint take-back and recycling programs and adds a maximum of 5% virgin materials to achieve desirable characteristics. These paints typically contain VOC levels between 150 and 250 g/l, but can be lower.
- ***Remanufactured recycled paint*** contains a minimum of 50% post-consumer recycled paint derived from paint recycling programs and up to 50% virgin materials to achieve desirable

characteristics. Because of the relatively high volume of virgin materials, remanufactured paint tends to be lower in VOC content than consolidated recycled paint, and typically has a maximum VOC limit of 50-150 g/l. As such, it may be a better choice for indoor applications than consolidated paint when choosing between the two types of recycled paint.

Color Range and VOC Content of Recycled Paint

Recycled paint is typically available in a range of colors and gloss levels, and with VOC limits as low as 50 g/l. For example, [Visions Paint Recycling](#) offers paints in any custom color. Interior paints come in flat, eggshell, and semi-gloss finishes, and exterior paints in flat and eggshell. [Amazon Paint](#) offers consolidated flat recycled paint for interior/exterior use in 10 standard colors, with eggshell and semi-gloss finishes available by request, and custom color matches for quantities over 200 gallons.

Table 1. Availability and Pricing of Recycled Paint

Company	Paint Type	Max VOC	Contract Price/Gal	Contract Source	Notes
Amazon (CA)	Recycled Consolidated	250 g/l	~\$10/gal	CT	Latex; flat finish. Custom colors and sheens for >200 gallons.
California Paint Recycling (CA)	Recycled Remanufactured	50 g/l 100 g/l	No information available	n/a	Latex; custom colors. Flat, eggshell (50g/l), semi-gloss (100g/l).
Metro Paint (OR)	Recycled Consolidated	250 g/l	~\$10/gal	WA	Latex; 18 colors; satin finish.
Visions Paint Recycling (CA)	Recycled Consolidated	200 g/l	\$5.50	CA	Latex; custom colors. Exterior flat finish only. For graffiti cover up.
Visions Paint Recycling (CA)	Recycled Remanufactured	100 g/l 150 g/l	\$10.99 flat \$12.99 semigloss	CA	Latex; custom colors; flat, eggshell, semi-gloss.
Visions Paint Recycling (CA)	Recycled Remanufactured	50 g/l	\$14.99 flat \$16.99 semigloss	CA	Low VOC latex; custom colors; flat, eggshell, semi-gloss
Boomerang Paint (Quebec, Canada)	Recycled Consolidated	100 g/l	No information available	n/a	16 latex colors, 4 alkyd colors, 6 stains.
Sherwin Williams	Virgin Paint, not recycled	0 g/l 0 g/l	\$11.00 flat \$11.00 semigloss	CT Contract price	Custom colors, all finishes.
Benjamin Moore	Virgin Paint, not recycled	0 g/l 0 g/l	\$15.00 flat \$36.80 semigloss	CT Contract price	Custom colors, all finishes.
Glidden Paint	Virgin Paint, not recycled	0 g/l 50 g/l	\$13.54 flat \$15.19 semigloss	CT Contract Price	Custom colors, all finishes.

Recycled Paint Contracts

The [State of California's recycled paint contract](#) from October 2012 specifies remanufactured paint with no more than 150 g/l VOC content, and MPI approved, GS-43 certified, or equivalent. Visions Paint Recycling holds this contract, making a range of paints in any custom color, three finishes (flat, eggshell, semigloss), and with as low as 50 g/l maximum VOCs.

The [State of Connecticut](#) requires recycled paint to contain no more than 250 g/l VOCs, enabling consolidated paints on the contract, which typically have higher post-consumer content but also tend to have higher VOC levels. Amazon Paints holds the contract for consolidated recycled paint, offering custom colors in a flat finish in large quantities and paint containing no more than 250 g/l VOCs. Their remanufactured paint is supplied by Visions Paint Recycling and is available in custom colors. It is offered in flat and eggshell finishes with a maximum VOC level of 100 g/l, and in semigloss with a maximum VOC level of 150 g/l. However, because there are no paint recyclers currently located in or near Connecticut, these paints cost a premium due to shipping charges. As can be seen in the price

comparison above (Table 1), when recycled paints are offered in states close to recycled paint manufacturers, the prices are competitive with virgin, low VOC, best-in-class equivalents.

The State of Washington has a recycled paint contract with Metro Paint for consolidated recycled paints meeting the Green Seal GS-43 standard. The paints on this contract are available in 18 colors of flat finish and all have a maximum VOC content of 250 g/l. It is a very low dollar value contract with minimum usage.

Are There Useful Cooperative Purchasing Contracts?

Cooperative purchasing agreements offer users the advantage of utilizing a multi-state contract that was developed by another state, including their negotiated prices, without having to go out to bid. It is important to ask the cooperative purchasing organization (or the lead state) if environmental specifications were included in the bid solicitation and whether there are a significant number of “green” products offered on the contract. If there is a core “market basket” of items eligible for the vendor’s deepest discounts, it should contain a significant number of “green” products in order to obtain the best prices on the most preferable products.

The Western States Contracting Alliance, for example, has two cooperative purchasing agreements for hardware supplies that include paints that are certified by third-party organizations:

- **Grainger** offers Green Seal- and EcoLogo-certified paints and EcoLogo-certified floor coating products. Grainger’s on-line catalog allows purchasers to click on seven different eco-logos to see products carrying each environmental certification or standard. In addition, individual products in Grainger’s online catalog are clearly labeled with a green leaf icon which, when scrolled over, identifies the environmental standards met by that product.
- **Fastenal** also offers Green Seal-certified paints as well as paints and coatings that are compliant with the VOC limits established by the South Coast Air Quality Management District (SCAQMD). Fastenal has published a *Sustainable Products Catalog*, although it does not list all products carrying eco-labels.

GREEN CERTIFICATIONS AND STANDARDS FOR PAINTS AND COATINGS

Many third-party organizations have developed standards for environmentally preferable paints and coatings (recycled and low-toxicity) with varying numbers of certified products available on the market. Refer to [Appendix 1](#) for a full list of definitions and links to each certification and standard. See the [Green Certifications Table](#) for a full table detailing common certifications available for paints, with general notes on availability and recommended criteria for each category of paint and coating listed. Purchasing environmentally preferable paints can also help a facility earn LEED (Leadership in Energy and Environmental Design) credits. For a table detailing how purchasing preferable paint can contribute to LEED certification, see [Appendix 2](#).

Multiple-Attribute Certifications and Recognition Programs

When possible, purchasers should specify products that are certified based on multiple attributes including toxicity, emissions, and performance. The most rigorous, multi-attribute certifications and standards for paints and coatings include Green Seal, EcoLogo, Master Painters Institute (MPI) X-Green and EPA's Design for the Environment (DfE). These third-party eco-labels offer the advantage of certifying for multiple attributes, documenting that the product does not contain any of the listed prohibited ingredients (list contains chemicals with known toxicity such as carcinogens, reproductive toxins, and asthmagens), verifying that it complies with either SCAQMD or California Air Resources Board VOC limits, and ensuring that it meets MPI's performance requirements. If the product category is not covered by any multi-attribute certifications (or a lack of certified products is available), consider a single-attribute certification such as GREENGUARD (emissions), USDA Biobased (bio-based materials) or ENERGY STAR (light reflectivity to reduce cooling costs). If no certifications are available, consider requiring products to comply with SCAQMD VOC limits to minimize air pollutant emissions.

The most common types of paints and coatings carrying at least one of these certifications include:

- Recycled latex paints and primers (interior and exterior), remanufactured and consolidated
- Virgin latex paints and primers (interior and exterior)
- Floor coatings
- Rust-inhibitive coatings

Green Seal (multi-attribute certification)

Green Seal includes emissions, toxicity and performance criteria.

- [GS-11 for Paints and Coatings](#) (virgin coatings: wall, anti-corrosive, reflective, floor paints, primers, undercoats)
- [GS-43 for Recycled Content Latex Paint](#) (recycled coatings: interior and exterior paints and primers)
- [GS-47 for Stains and Finishes](#) (finishes, stains, sealers, low solids coatings)



EcoLogo (multi-attribute certification)

EcoLogo includes emissions, toxicity, and performance criteria

- **CCD-047 for Architectural Surface Coatings** (virgin coatings: interior and exterior coatings, stains and varnishes)
- **CCD-048 for Surface Coatings - Recycled Water-Borne** (recycled coatings: interior and exterior paints and primers)
- **CCD-045 for Sealants and Caulking Compounds** (sealants and caulking compounds)



Master Painters Institute (multi-attribute certification)

- **MPI Extreme-Green (X-Green) or GPS-2**. GPS-2 includes maximum VOC content of 50 g/l, toxicity (restricted chemicals) and performance criteria. X-Green products must meet GPS-2 requirements plus pass the emissions testing required for CHPS (**California High Performance Schools**). Products covered: Virgin interior and exterior, architectural and high-performance and industrial paints and primers, block fillers, and epoxy-modified latex coatings. MPI X-Green and GPS-2 do not cover recycled paints or primers.



Environmental Protection Agency's Design for the Environment (DfE) Program (multi-attribute recognition)

- **EPA's DfE Program** includes emissions, toxicity, and performance criteria. Uses California Air Resources Board (CARB) VOC limits. This standard can apply to any product, but the paints and coatings "recognized" by DfE as of October 2012 include athletic field paints, floor finishes, paint strippers, and graffiti removers.



Single-Attribute Certifications

GREENGUARD

- **GREENGUARD Indoor Air Quality (IAQ) Standard for Building Materials, Finishes, and Furnishings** includes emissions criteria only. GREENGUARD limits emissions of total VOCs, formaldehyde, total aldehydes, all individual chemicals with currently published Threshold Limit Values, respirable particles, and certain odorants and irritants. In addition, all products require disclosure of carcinogens and reproductive toxins as identified by California Proposition 65, the U.S. National Toxicology Program (NTP), and the International Agency on Research and Cancer (IARC).
- **GREENGUARD For Children and Schools** includes more stringent emissions criteria than GREENGUARD IAQ (typically two to ten times more stringent). It also limits emissions of phthalates and toluene, two reproductive toxins. Products covered: Paints and finishes that are intended for use in schools, day care centers or other environments where children spend significant periods of time.



Energy Star

ENERGY STAR addresses energy efficiency, performance, and 'reasonable' payback period for any premiums paid on an energy-saving device over its conventional counterpart. Reflective roof coatings are the only paint product covered by the ENERGY STAR label. The program maintains a **list of ENERGY STAR-Qualified Products**.



USDA Biobased Certified

USDA Biobased Certified are goods composed in whole or in significant part of agricultural, forestry, or marine materials. The USDA Certified Biobased Product label assures the consumer that a product contains at least a minimum amount of plant-based ingredients. The **List of Certified Biobased Products** includes paint strippers, removers and thinners, wallpaper removers, and graffiti removers.

Other Single-Attribute Standards

South Coast Air Quality Management District (SCAQMD) Rule 1113 VOC Standard

SCAQMD sets VOC limits for paints and coatings used in its region pursuant to SCAQMD Rule 1113. Paint manufacturers across the country often offer paints and coatings meeting these standards since they are considered the most stringent in the country. For paints not covered by third-party certifications, or where a reasonable selection of certified products is not available, consider requiring products to comply with SCAQMD's VOC limits. Refer to **Appendix 3** for a current list of product categories covered under **SCAQMD's Rule 1113**.



Water-Borne Paints

When no environmental certifications or standards (e.g., VOC limits) have been established for a paint or coating category, water-based formulations may be available for some products:

- Athletic Field Paints (aerosol and non-aerosol)
- Spray paints (aerosol)
- Tree Marking Paints (aerosol and non-aerosol)
- Traffic Marking Paints (which are addressed in a separate Green Purchasing Opportunity Assessment)

BID SPECIFICATIONS

When considering issuing a bid solicitation for environmentally preferable paints and coatings, identify all the information you might want to know about each product as well as each vendor and include it in the solicitation's bid sheet.

Are There Useful Model Specifications from Other States?

If you choose to go out to bid, some other specifications may serve as models:

- **State of Connecticut, Contract Award for Paint and Related Products** (2012); see "Specifications for Environmentally Preferable Painting Supplies" starting on page 41.
 - Basic criteria: Certified by Green Seal, Eco-Logo, EPA DfE, MPI X-Green or MPI GPS-2.
 - Awarded contract to multiple vendors of virgin paint.
 - Awarded contract to two vendors of recycled paint:
 - Consolidated recycled paint (Amazon) available in 16 colors, flat finish only, VOC \leq 250 g/l.
 - Remanufactured recycled paint (Visions Paint Recycling) available in custom colors, three finishes (flat, eggshell, semigloss), VOC \leq 150 g/l.
- **State of Washington Contract Award #00207c** for Recycled Latex Paint (Interior and Exterior).
 - Basic criteria: GS-43 certified
 - Awarded to one vendor (Metro Paint), available in 18 colors, satin finish only, VOC \leq 250 g/l.
 - Expires March 2014, leaving enough time to recommend specifications to DES, form a paint end-users
 - The State of Washington elected not to have a contract for virgin paint in order to encourage the use of recycled paint. This does not appear to have worked based on the size and use of the recycled paint contract and according to the Washington Department of Enterprise Services.
- **State of California Contract award #1-12-80-10** for Exterior Recycled Latex Flat Paint.
 - Basic criteria for Exterior Recycled Paint: GS-43 certified, MPI approved, or equivalent, and \leq 150 g/l.
 - Awarded to one vendor (Visions Paint Recycling) available in custom colors, three finishes (flat, eggshell, and semigloss). Flat and eggshell contain \leq 100 g/l VOCs; semigloss contains \leq 150 g/l VOCs.
 - California's recycled paint contract is only for exterior paint in accordance with the State of California's **Green Building Executive Order B-18-12** requiring state agencies to use low VOC paints for interior applications. Because only one recycled paint manufacturer supplies recycled paint meeting the SCAQMD's 50 g/l definition of "low VOC," a request for

bids on low-VOC interior recycled paint would not yield competition, and was therefore not conducted. Although Visions Paint Recycling offers contract prices to the State of California on all their paints – in addition to the paint on the exterior paints contract – because these products are not “on contract,” State of California agencies are not permitted to buy them. See [Table 1, Availability and Pricing of Recycled Paint](#) for price details.

- State of California agencies use the WSCA contract with Grainger to purchase paints other than the products on the Exterior Recycled Paint contract.

Additional recycled paint procurement resources include:

- [CalRecycle webpage](#) on *Recycled Latex Paint*
- [King County, WA Fact Sheet](#) on *Environmentally Preferable Paint* (January 2012)
- San Mateo County, CA, Department of Environmental Health, [Sustainable Purchasing Fact Sheet: Paint](#) (March 2012) Developed by RPN
- [Portland, OR case study](#) on benefits of recycled paint

Minimum Requirements (Specifications)

A summary of recommended criteria is listed below which are expected to allow moderate to high number of available products and generate sufficient cost competition.

Category #1a: Consolidated Recycled Latex Paints and Primers

- Green Seal GS-43 or EcoLogo CCD-048
- Disclose all asthmagens as listed in the National Institutes of Health (NIH) report, [Healthy Environments: A Compilation of Substances Linked to Asthma](#), which includes products listed in the [AOEC](#) database of asthmagens.

Category #1b: Remanufactured Recycled Latex Paints and Primers

- Green Seal GS-43 or EcoLogo CCD-048
- Disclose all asthmagens as listed in the National Institutes of Health (NIH) report, [Healthy Environments: A Compilation of Substances Linked to Asthma](#).
- Maximum VOC content of 150 g/l

Category #2: Non-Recycled (Virgin) Paints, Primers, Floor Coatings, Rust-Inhibitive Coatings, Caulks, Wood Finishes, and Stains

- Green Seal, EcoLogo, MPI X-Green, or EPA DfE
- Disclose all asthmagens as listed in the National Institutes of Health (NIH) report, [Healthy Environments: A Compilation of Substances Linked to Asthma](#).
- No Nanotechnology intentionally added and not marketed as such

Category #3: Specialty Paints, Primers, and Other Coatings

- Includes anti-graffiti, dry-fog, faux finish, fireproof, graphic art, industrial maintenance, metallic, multi-color, roofing primers, shellac, and wood preservative coatings
- MPI-approved for performance

- Meets current SCAQMD VOC limits
- Disclose all asthmagens as listed in the National Institutes of Health (NIH) report, [Healthy Environments: A Compilation of Substances Linked to Asthma](#).
- Disclose all chemicals listed by [California Proposition 65](#) (CA Prop65) as “known to the State of California to cause cancer or reproductive harm”.
- No Nanotechnology intentionally added and not marketed as such

Category #4: Field Marking Paint, Spray Paint, and Tree Marking Paint

- Water-based
- MPI-approved for performance
- Disclose all asthmagens as listed in the National Institutes of Health (NIH) report, [Healthy Environments: A Compilation of Substances Linked to Asthma](#).
- Disclose all CA Prop65 chemicals
- No Nanotechnology intentionally added and not marketed as such

Category #5: Paint Strippers, Thinners, and Removers; Wallpaper Removers; and Graffiti Removers

- Water-based or USDA Biobased Certified
- Disclose maximum VOC content
- Disclose all asthmagens as listed in the National Institutes of Health (NIH) report, [Healthy Environments: A Compilation of Substances Linked to Asthma](#).
- Disclose all CA Prop65 chemicals
- No Nanotechnology intentionally added and not market as such

Category #6: Paint Rollers, Trays, and Other Equipment (e.g., drop cloths, rollers, etc.)

- Minimum 10% post-consumer or 30% total recycled content
- Disclose amount of post-consumer and total recycled content

Bid Strategies

Separating the environmentally preferable painting supplies from the conventional products will later provide a “Recycled Paints List” and a “Low Toxicity Paints List” that contract users can consult first when making purchasing decisions.

1. ***Determine your environmental criteria.*** The most rigorous standards are third-party multiple attribute certifications, which are feasible to use for most of the large-volume categories of paint. Second- and third-tier criteria are single-attribute certifications followed by single-attribute standards (such as VOC limits, and “water-based” requirements) that are not independently certified.
2. ***Consider asking for both consolidated and remanufactured paint on your contract as two separate categories so end-users can choose between the benefits and drawbacks of each.***

And because recycled paint is often available from companies that specialize in only this product, states may be able to secure more competitive bids by negotiating separate contracts for recycled paint.

3. ***Determine if you will use the market basket approach or the bid list approach.*** If using a “green” market basket or core list, choose the items you expect to purchase in the highest quantities, apply environmental and health specifications to each, and include in the bid solicitation. This is particularly useful if your contract is designed to cover hundreds of products. This list is included in your bid solicitation along with (or instead of) conventional core or “market basket” list items. By doing this, you will identify for bidders your top choice environmentally preferable products for priority pricing. When choosing products, prices would then be compared only between similar “green core” or “market basket” items that meet your minimum requirements. See [Once the Bids are In](#) section of this report for more details.
4. ***Consider creating a “brown list” of prohibited products for which there is a plentiful supply of cost-effective environmentally preferable alternatives that meet the State's needs in terms of form, function and performance.*** A “brown list” of products can be included in the bid solicitation document notifying bidders that specific types of products may not be supplied on this contract. For this product category, the “brown list” could include consumer-grade latex paint containing more than 50 g/l VOCs.
5. ***Identify all the information you will need to evaluate the products offered by vendors, and include space for all information on an electronic bid sheet that can later be sorted and evaluated.*** Asking vendors for prices on all preferable products they offer, listed separately from the “conventional” paints and coatings, will generate “Recycled Paints” and “Low Toxicity Paints” lists for easy use by purchasers and end users. Below is a snapshot of information requested on an excel-based [Model Bid Sheet](#), which is available and can be modified for your bid solicitation. Instructions to bidders on how to use this template are included in separate tab in the file.

This information can help bid evaluators determine whether products meet minimum environmental requirements, compare equivalent offering by competing vendors, and choose the best value products.

Product Description	Manuf. Name	Product Name	Product #	Gloss Level	MPI Number	MPI Quality Rating (EPR)	B. SCAQMD-Compliant?	Max VOCs	Prop 65 Chems added?	Disclose Asthmagens	Nano-particles?	Water-based?	Env. Certifications or Standards
				1-6	1-301	0-6	Yes or No	g/l	Yes/No		Yes/No	Yes/No	Select from List
Indoor Latex	Paint Co.	SuperSpec	ABC123	4	44	3	yes	50	no	Methyl Methacrylate	no	yes	GS-11, MPI X-Green

6. **Consider making the contract a cooperative purchasing agreement available to other states and local governments.** Include as many purchasing entities as possible, including educational institutions and NGOs.
7. **Consider awarding additional points to bidders supplying full disclosure of ingredients and health/environmental impacts in a publicly accessible format for at least 3 top priority market basket items.** Existing disclosure frameworks include [Health Product Declaration](#) (HPD) forms or the [Green Screen](#), which determines a hazard score for each product. Asking for full disclosure on high volume products puts the onus of information collection on the manufacturer, who can supply the data most efficiently. Having access to this toxics exposure information can help purchasers answer questions about offered products in the short term, and can assist in making more informed decisions in the future. For example, knowing the presence or absence of asthmagens in the products typically purchased can inform whether it is reasonable to prohibit asthmagens in future solicitations. Some suggested language to include in a contract may be:

“The bidder is strongly encouraged to make publicly accessible a Health Product Declaration Form (HPDs) or Green Screen score for at least three paint and coating products offered on the contract. HPDs, Green Screen Score, or other disclosure mechanism will need to be completed by the product manufacturer. It is expected that the vendor work with the product manufacturer to ensure disclosure is adequately complete prior to posting HPDs, Green Screen Scores, or other disclosure mechanisms in a publicly accessible format. If any of the posted information raises a concern in terms chemical content or potential environmental or human health impacts, the bidder, should they be awarded the contract, will work with the purchasing agent assigned to the contract to find product alternatives that reduce or eliminate such concerns while meeting performance specifications.”

ONCE THE BIDS ARE IN

Once vendors have submitted bids, products can be chosen using a variety of methods. Below are some options for evaluating the products that are bid, and the vendors that offer them, with benefits and challenges of each. We also suggest ways to assess quality so prices are compared between equivalent products. Following are steps a procurement officer can take to evaluate the bid offerings and choose products to include on a contract. This method is for use with the provided [Model Bid Sheet](#), and following the model offered in the [Bid Specifications and Strategies](#) section of this report.

Before You Evaluate the Data

Label the Data

For each vendor submission, add a column on the far left and assign each row a number corresponding with the row number. This will allow you to sort the data now, yet revert to the original order by sorting on the new first column.

Sort on Type and Quality

First, set aside all recycled paints into a separate list. Sort the remaining low toxicity products only by two fields: first by product type (identified by MPI Category number), and then by quality rating (MPI EPR score). This will allow you to compare prices of equivalent products. A product in MPI category 44 (latex, interior, gloss level 2) with a quality rating of 3 will be the closest equivalent to another brand's product carrying the same category number and quality rating, allowing a true price comparison.

Best Ways to Award

Choosing Recycled Paint Vendor(s) Separately

Companies often specialize in remanufactured or consolidated recycled paint and do not sell other types. Therefore, regardless of how other paints on a contract are chosen, it is advisable to award the recycled paint separately.

Choosing a Single Vendor for All Paint Products

Strategy: Choose bid list or “market basket” items (which includes the most common high-volume products you will be buying). Add preferable products to the “market basket” list in your bid solicitation. Compare vendor prices on these items and select the bidder offering the best combination of price and selection (including preferable products).

Benefits: Only one vendor to manage. End-users have a “one stop shop” for all items offered on the contract.

Challenges: No single vendor will have all the products needed by end users. Specialty products may need to be purchased off contract, possibly at significantly higher prices.

Choosing Multiple Vendors Based on Best Price on Bid-List or Market-Basket Items

The most important products to choose carefully are those used in high volumes. To determine the highest-volume paints and coatings, states can review their historic purchasing records. Latex indoor and outdoor paints and primers are, by far, purchased in the largest quantities. Floor paints, spray paints, and stains and varnishes tend to be the next most commonly purchased products.

Strategy: Choose core or market basket items. Compare bidder prices on these items and select multiple vendors offering the best price package.

Benefits: Offers a wider product and vendor selection. Reduces the need to purchase specialty items off contract because with multiple vendors more specialty items will be available for contracted prices.

Challenges: Procurement office will need to manage more than one contact.

Choosing Multiple Vendors Based on Best Price on Each Line Item

Strategy: Determine equivalent products for price comparison, having the same MPI number, the same gloss number (where applicable), and a similar MPI EPR quality rating (not more than one or two points different). For product categories with a range of offerings, products can be grouped into quality rating groups: low (0 or 1), medium (2, 3 or 4) and high (5 or 6).

Benefits: Absolute lowest price is ensured. Multiple vendors increase product availability.

Challenges: Not all products are equivalent, making it difficult to determine which products to fairly compare for pricing. Often prices will be extremely close, within a few cents of each other, sometimes for products that are slightly different, in which case a single lowest price approach may be limiting product selection from the perspective of the technical needs of the end users.

Choosing a Set of Lowest Prices on Each Line Item

Strategy: Develop an equation that will eliminate the price outliers and keep all the lowest price options within a range. For example, the State of Connecticut received bid responses from 5 vendors of virgin paint. A typical product – interior latex paint MPI category #44 with an EPR quality rating 3 – was offered at 5 different prices, three of which were very competitive and two of which were significantly more expensive. Connecticut used the following equation: Price Cutoff = average of lowest two prices plus 50%. This generally kept all the lowest priced paints on the contract and eliminated the outliers, which were more than 50% more expensive than the average of the two lowest-priced products.

Benefits: Offers a wider variety of products to contract users, which is especially important when products offered by different vendors are not exactly equivalent. It also allows for multiple vendors, which may satisfy end-user preferences for particular vendors or vendor locations.

Challenges: Procurement office must manage multiple vendors. Initially requires more time to evaluate bids.

Verifying Compliance

Verify the accuracy of the following data submitted by vendors by conducting spot-checks:

Third-Party Certifications. Search for the product name on the certifier's website to verify that it carries the stated eco-label. Useful sites include:

- **Green Seal.** Click on the Paints & Coatings icon (see image to the right).
- **EcoLogo.** Click link for Building and Construction Products.
- **MPI X-Green.** Click on links for products with an X-Green MPI #.
- **US EPA DfE.** Search for Industrial/Institutional Products by category.
- **GREENGUARD.** Search for products by category (e.g., Paints and Coatings)
- **MPI Category Number.** Look up the product number on the MPI website to verify the reported MPI category is correct and that the product is indeed MPI approved for performance.
- **MPI Environmental Performance Rating (EPR).** Look up the product number on the MPI website to verify that the reported MPI EPR score is correct.
- **Maximum VOC content.** Look on the manufacturer's website to verify its stated VOC content.
- **South Coast Air Quality Management District (SCAQMD).** Verify that the maximum VOC content falls within the SCAQMD's Rule 1113 limits. Note: SCAQMD also maintains a specific list of Super-Compliant Coatings offering maximum VOC limits of 10 g/l.



Evaluating Performance and Price

It is essential to compare paints and coatings of a similar quality when choosing products based on price. Low-quality paints are less durable and may require additional coats, more maintenance, and re-painting sooner than high-quality paints. For ceiling applications not regularly touched or cleaned, receiving minimal direct sunlight, and experiencing minimal overall wear and tear, lower quality paint for a lower price may suffice. In contrast, walls in an office space or public facility receiving more contact, cleaning, direct sunlight, and overall wear and tear, using a lower priced and lower quality paint may require re-painting up to four times more often than a higher quality paint, according to some maintenance staff with the State of Connecticut. Therefore, it can be cost-beneficial to spend more money on higher quality paint to minimize maintenance spending in the long run. To enable this, procurement officers must require paint vendors to indicate the relative quality of each product offered (best done by disclosing the MPI EPR score) and allow both high-quality and low-quality products to be offered on the contract(s).

Identify which products should be compared for price. Only compare products with the same MPI Category Number and a similar EPR quality rating. Because EPR ratings range from 0 to 6, one way to group them is to compare products that are not more than one point different. Alternatively, consider anything with a 0 or 1 to be “low grade”, products with a 2 or 3 or 4 to be “medium grade”, and those with an EPR score of 5 or 6 to be “high grade”, then price-compare only products within the same grade.

Environmentally preferable paints need not be more expensive. Because they are widely available, agencies can secure competitive pricing through a traditional competitive bidding process with some trademark elements, as outlined in the [Bid Strategies](#) and [Minimum Requirements](#) in this report.

The [State of Connecticut](#) was able to secure competitive or better pricing on environmentally preferable products on their contract for Paint and Related Supplies by:

- Prioritizing preferable paints and listing them first on the bid sheet in order to generate a “Recycled Paints” list and a “Low Toxicity Paints” list.
- Asking vendors to identify third-party certifications carried by their products.
- Allowing for line-item bids.
- Making the contract a cooperative purchasing agreement open to use by other agencies.

Three examples are shown below comparing the bid prices on a low toxicity product and the equivalent 'traditional' product. Best in class products are highlighted green for ease of viewing equivalent or better pricing on preferable products.

Table 2. Comparison of Prices for 'Low Toxicity' and 'Conventional' Products, State of Connecticut Paints and Coatings Contract

Product Description	Manuf.	Gloss Level	MPI Category	Meets Preferable Criteria?	EPR Quality Score	Max VOCs g/l	Price 1 gal	Price 5 gal
Interior Low-VOC Semi-Gloss Latex	Sherwin-Williams	4	43	YES	3	42	\$14.00	\$70.00
Interior Zero-VOC Semi-Gloss Latex	Sherwin-Williams	4	43	YES	3.5	Zero VOC	\$11.00	\$55.00
Interior Commercial Semi-Gloss Latex	Sherwin-Williams	4	43	No	1.5	460	\$13.00	\$65.00
Interior/Exterior Primer/Sealer	Sherwin-Williams	1	137	No	3	96	\$18.99	\$94.95
Interior/Exterior Zero-VOC Multi-Purpose Primer	Sherwin-Williams	1	137	YES	3	Zero VOC	\$19.00	\$95.00
Interior Premium Line Satin Enamel Latex	Sherwin-Williams	3	139	No	3	40	\$31.00	\$155.00
Interior High-Performance Latex	Glidden	3	139	YES	6	Zero VOC	\$25.74	\$115.99

VENDOR EVALUATION

Because vendors often offer different types and brands of paints and coatings, the number of vendors on contract may determine the variety of paint and coating products available. Below are several strategies for vendor selection. When multiple vendors offer similar products at competitive prices, consider allotting additional points to vendors offering chemical component disclosure, product take-back and recycling, delivery in alternative fuel vehicles, user-friendly green product labeling systems, “green” spend tracking and reporting, or other services that add value to the contract and assist in selection of vendors. See [Vendor Sustainability Questionnaire](#) for a *Paint Vendor Questionnaire* you may require vendors to answer to assist in gathering this type of information.

MAXIMIZE GREEN IMPACT

Whether States are developing a “green only” contract or adding preferable painting products to a conventional painting supplies contract, some best practices should be considered.

- Contracts can be strategically designed to generate three separate product lists: recycled paints, low toxicity paints and coatings, and traditional paints and coatings. Once these products are separated, end-users can easily employ a decision-making hierarchy where recycled and/or low toxicity paints are chosen first, and traditional paint is used only as a last resort. If the VOC content of the recycled paint offered are the same or lower than other low-VOC products on the contract, then they should be considered first since they offer both recycled-content and low-VOC benefits.
- Ask vendors to help you track green purchases by submitting quarterly purchase reports.
- States that secure attractive pricing for environmentally preferable paints should make it easy for municipalities, school districts and other public agencies to utilize their price agreements.
- Requiring all paints to be MPI-certified for performance will ensure high-quality products. Require vendor to include each product’s MPI number on its bid sheet submission.
- Because environmentally preferable paint products are often offered by small companies that may not have experience bidding on State contracts, States may get more offers if they proactively publicize the bid to paint suppliers in the state and to environmental certification bodies.
- Issuing a request for information (RFI) can help assess the availability of preferable and low toxicity paints and supplies in their state in advance of developing a bid solicitation.
- Holding a pre-bid meeting can help bidders understand the new green specifications in your bid solicitation and avoid submitting non-responsive bids. Giving bidders extra time to review the bid specifications and ask questions can also help increase the number of responsive bids.
- Contracts can also include recycled-content rollers, brushes, tarps and trays, low-toxicity paint removers, and other environmentally preferable products.
- States can identify products meeting their chosen specifications that are available on existing contracts they have with vendors such as Grainger, Fastenal, and other suppliers.
- Awarding contracts for high-performance paints and coatings will reduce the need for frequent repainting, particularly in high-traffic areas.
- Painting service agreements should specify environmentally preferable, low toxicity paints, coatings and other painting supplies based on criteria aligned with the procurement offices paints and coatings contract.
- Choosing light-colored paint, which reflects light better than dark-colored paint, can help users save money on electricity needed to light indoor spaces.
- Prioritizing the use of low-VOC paints for indoor applications in occupied areas can protect workers and facility users.
- Recycling unused paint can prevent environmental contamination associated with its disposal.
- Using the [PaintCare calculator](#) can help facilities control costs by reducing the amount of paint that is ordered as well as the amount of leftover paint that needs to be properly disposed.

WHAT'S ON THE HORIZON?

Using low-toxicity paints and coatings presents a range of opportunities to reduce exposure to toxic chemicals, promote paint recycling initiatives, decrease the use of non-renewable fossil fuels, and drive the market toward more responsible products.

While recycled-content paint may not be readily available in every state, as more states adopt legislation requiring paint retailers to serve as drop-off locations for leftover paint, the availability of recycled-content paint is likely to increase while its cost declines. Buying recycled paint will support existing local paint recycling programs. Because local governments are working with paint manufacturers and distributors to bring an effective paint waste management program to Washington through extended producer responsibility (EPR) legislation, Washington can expect the availability, variety, and price of recycled paint to decline in the future when this legislation takes effect.

Finally, a growing number of manufacturers are producing high-quality paint that meets stringent VOC limits established by the South Coast Air Quality Management District. Tighter SCAQMD VOC standards go into effect on January 14, 2014, by which time paint manufacturers will likely offer a variety of paint and coating products that meet this new limit. Purchasers should assess the availability of SCAQMD-compliant products at that time.

By awarding extra points to bidders who choose full public disclosure of ingredients for 3 or more typical or high-volume products, agencies will have the necessary information at their disposal to make future decisions. Currently available disclosure formats are Health Product Declaration forms or the Green Screen product scoring system. In addition to providing information on which to base future decisions, this will alert industry that agencies care about product toxicity, and it will further the pressure on manufacturers to provide responsible products with full transparency.

APPENDIX 1: DEFINITIONS



Asthmagens

Chemicals that are listed as respiratory sensitizers or other types of “Asthmagens” by the Association of Occupational and Environmental Clinics (AOEC). Chemicals that are documented “Asthmagens” that are found in some paints and coatings include but are not limited to:

- Aluminum and Aluminum compounds
- Cobalt
- Chromium (hexavalent and non-hexavalent)
- Epoxy resins (see note below)
- Formaldehyde
- Monoethanolamine
- Nickel and Nickel compounds
- Triethanolamine
- Latex (see note below)

Current AOEC Asthmagen List

Note 1: Epoxy resins are asthmagens. Therefore, any paints or coatings containing epoxy resin are not eligible for the “Low Toxicity Paints List”. However, water-based epoxy-based paints and coatings are preferable to non-water-based traditional products, and shall be identified in the conventional portion of the price schedule by indicating “Yes/No” in the “Water-based?” column on the price schedule.








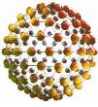
Note2: Although rubber-derived natural latex is an allergen, the American Latex Allergy Association (NLAA) states: “[The] type of latex found in latex paints is not the same type of latex found in products that trigger latex allergies. The key distinction for latex in paint it is generally synthetic (polymerized from various monomeric materials, principally vinyl acetate and various acrylates) and dispersed in water. By contrast, the latex used in other products is usually naturally derived from rubber tree sap and contains, among others, hydrocarbon polymers and proteins. In particular, the protein component in natural latex is regarded as the likely cause of allergic reactions. Because of these and other differences, consumers need not be concerned about using latex paint and developing the allergic reactions that have been associated with natural latex.” [More info](#)








EcoLogo-Certified

EcoLogo criteria for certification can be found [here](#).

Note: EcoLogo certification for both recycled and virgin paints and coatings requires

	MPI certification for performance.
	ENERGY STAR-Qualified A list of Roof Coatings carrying the ENERGY STAR label can be found here .
	EPA DfE-Recognized A list of products meeting the US Environmental Protection Agency's Design for the Environment (DfE) criteria can be found here .
	GREENGUARD-Certified GREENGUARD certification is defined as GREENGUARD Indoor Air Quality OR GREENGUARD Children & Schools. GREENGUARD's certification criteria can be found here .
	Green Seal-Certified Green Seal criteria for certification can be found here . Note: Green Seal certification for recycled paints requires MPI certification for performance. Green Seal certification for virgin paints and coatings has performance criteria, but does not require MPI certification for performance.
	Master Painters Institute (MPI) Approved for Performance The current MPI list of approved products, updated November 1, 2012, can be found here .
	MPI Extreme-Green-Certified or MPI X-Green-Certified The Master Painters Institute (MPI) Extreme Green (X-Green) Label criteria can be found here .
	MPI GPS2-Labeled The Master Painters Institute (MPI) GPS2 Label criteria can be found here .
	Nanoparticles A particle with any one of its structural features measuring on a scale of less than 100 nm. More information on nanoparticles here .

	<p>Prop 65 Chemicals</p> <p>Chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. A current list of “Prop 65” chemicals developed by the CA Office of Environmental Health Hazard Assessment pursuant to the Safe Drinking Water and Toxic Enforcement Act of 1986 is available here.</p> <p>The following Prop 65 chemicals are found in some paints coatings:</p> <table border="0"> <tr> <td>Benzene</td> <td>Lead and lead compounds</td> </tr> <tr> <td>Cadmium and cadmium compounds</td> <td>Mercury and mercury compounds</td> </tr> <tr> <td>Carbon black (respirable particles and extracts)</td> <td>Methylene chloride</td> </tr> <tr> <td>Chromium (hexavalent only)</td> <td>N-Methylpyrrolidone</td> </tr> <tr> <td>Creosotes</td> <td>Silica (crystalline)</td> </tr> <tr> <td>Dibutyl phthalate</td> <td>Titanium dioxide (respirable particles)</td> </tr> <tr> <td>Di(2-ethyl hexyl) phthalate (DEHP)</td> <td>1,1,1-Trichloroethane</td> </tr> <tr> <td>Ethyl benzene</td> <td>Toluene</td> </tr> <tr> <td>Formaldehyde (gas)</td> <td></td> </tr> <tr> <td>•</td> <td></td> </tr> </table>	Benzene	Lead and lead compounds	Cadmium and cadmium compounds	Mercury and mercury compounds	Carbon black (respirable particles and extracts)	Methylene chloride	Chromium (hexavalent only)	N-Methylpyrrolidone	Creosotes	Silica (crystalline)	Dibutyl phthalate	Titanium dioxide (respirable particles)	Di(2-ethyl hexyl) phthalate (DEHP)	1,1,1-Trichloroethane	Ethyl benzene	Toluene	Formaldehyde (gas)		•	
Benzene	Lead and lead compounds																				
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Ethyl benzene	Toluene																				
Formaldehyde (gas)																					
•																					
	<p>SCAQMD VOC Limits</p> <p>The South Coast Air Quality Management District (SCAQMD) has set limits on Volatile Organic Compounds (VOCs), pursuant to Rule 1113 (as of 1/1/1012), which are listed in Appendix 2 and can also be found here.</p> <p>The VOC content of MPI-certified products can be found on the MPI Approved Products List.</p>																				
	<p>SCAQMD Super-Compliant List</p> <p>South Coast Air Quality Management District (SCAQMD) Super-compliant coatings are defined as those coatings that have a VOC content less than the VOC content limits set forth for the current and/or future limits in the Table of Standards found in paragraph (c)(2) of Rule 1113 and specify a VOC content less than 10 g/l VOC. The SCAQMD Super-Compliant List can be found here.</p>																				
	<p>USDA Biobased-Certified</p> <p>Biobased products are goods composed in whole or in significant part of agricultural, forestry, or marine materials. The USDA Certified Biobased Product label assures the consumer that a product or package contains a verified amount of renewable biological ingredients. A list of Biobased Certified Products can be found here.</p>																				
	<p>Water-Based or Waterborne</p> <p>Water-based (also known as waterborne) coatings are those containing solids that are soluble in and dissolved in water and are able to be thinned with water.</p>																				

Appendix 2: Environmentally Preferable Paints Can Earn LEED Credits

Using Green Seal-certified paints and low-VOC coatings can help facilities earn green building credits under several of the US Green Building Council’s Leadership in Energy and Environmental Design (LEED) standards. Below is a table detailing how preferable paints and coatings qualify for specific LEED credits.

Note: paints must only meet the Green Seal criteria but they are not required to carry the Green Seal label.

LEED Credit	Preferable Paints Required to Earn Points
<p>LEED for New Construction and Major Renovations LEED for Commercial Interiors LEED for Core and Shell <i>Section: Indoor Environmental Quality</i> <i>Credit #4.2: Low-Emitting Materials—Paints & Coatings</i></p> <p>LEED for Existing Buildings Operations & Maintenance <i>Section: Sustainable Sites</i> <i>Credit #2: Building Exterior & Hardscape Management Plan</i></p> <p>LEED for Schools <i>Section: Indoor Environmental Quality</i> <i>Credit #4.2: Low-Emitting Materials—Paints & Coatings</i></p>	<ul style="list-style-type: none"> • Interior and Exterior Latex Paint: GS-11 • Anti-corrosive Coatings: GS-03 • Clear Wood Finishes, Stains, Primers, Sealers, Shellacs: SCAQMD VOC limit 275 g/l
<p>LEED for Existing Buildings Operations & Maintenance <i>Section: Materials & Resources</i> <i>Credit #3: Sustainable Purchasing—Facility Alterations & Additions</i></p>	<ul style="list-style-type: none"> • Interior and Exterior Latex Paint: GS-11 OR • At least 10% post-consumer recycled or 20% post-industrial recycled content.

APPENDIX 3: SCAQMD VOC Limits

South Coast Air Quality Management District's (SCAQMD's) current limits on Volatile Organic Compounds (VOCs) in g/L, pursuant to Rule 1113 (as of 1/1/1012), are as follows and can be found [here](#).

South Coast Air Quality Management District (SCAQMD) Current VOC Limits in g/L under Rule 1113 for Architectural Coatings

Coating Category <i>(click on a category to see the full list of definitions or simply roll your mouse over a category to see a pop-up definition)</i>	Ceiling Limit ¹	Current Limit ²	Effective Date		
			7/1/08	1/1/12	1/1/14
Bond Breakers		350			
Clear Wood Finishes		275			
Varnish	350	275			
Sanding Sealers	350	275			
Lacquer		275			
Concrete-Curing Compounds		100			
Concrete-Curing Compounds For Roadways and Bridges ³		350			
Concrete Surface Retarder		250			50
Driveway Sealer		100		50	
Dry-Fog Coatings		150			50
Faux Finishing Coatings					
Clear Topcoat		350		200	100
Decorative Coatings		350			
Glazes		350			
Japan		350			
Trowel Applied Coatings		350		150	50
Fire-Proofing Coatings		350			150
Flats	250	50	50		
Floor Coatings	100	50			
Form Release Compound		250			100
Graphic Arts (Sign) Coatings		500			150
Industrial Maintenance (IM) Coatings	420	100			
High Temperature IM Coatings		420			
Non-Sacrificial Anti-Graffiti Coatings		100			
Zinc-Rich IM Primers	340	100			
Magnesite Cement Coatings		450			
Mastic Coatings		300			100
Metallic Pigmented Coatings	500	500			150
Multi-Color Coatings		250			
Nonflat Coatings	150	50			
Pre-Treatment Wash Primers		420			
Primers, Sealers, and Undercoaters	200	100			
Reactive Penetrating Sealers		350			
Recycled Coatings		250			
Roof Coatings	250	50			
Roof Coatings, Aluminum		100			
Roof Primers, Bituminous	350	350			
Rust Preventative Coatings	400	100			
Stone Consolidant		450			
Sacrificial Anti-Graffiti Coatings		100		50	
Shellac					
Clear		730			
Pigmented		550			
Specialty Primers	350	100			
Stains		100			
Stains, Interior	250	250			
Swimming Pool Coatings					
Repair		340			
Other		340			
Traffic Coatings		100			
Waterproofing Sealers	250	100			
Waterproofing Concrete/Masonry Sealers	400	100			
Wood Preservatives		350			