

FOCUS



A Primer on the Paint and Coatings Industry



Paints and coatings play an important role in preserving, protecting, and beautifying the objects to which they are applied, and are integral to maintaining the appearance, functionality and longevity of many structures and products. Think about it: virtually everything you use has a coating.

Coatings' utility and value is limitless. Their reach extends to a variety of industries especially because their use is critical to the performance of countless products. Without protective coatings, cars, trucks, buses, farm and construction equipment would rust quickly, become dull in appearance, and have a short useful life. In sum, the "value added" by coatings to virtually every product made is extraordinary!

FACTS ABOUT THE INDUSTRY

When we talk about paint and coatings, we are not referring solely to paint used to cover walls in your home. Enamels, primers, undercoats, stains, varnishes, aerosol paint, caulks, sealants and adhesives are all coatings. The U.S. paint and coatings industry includes manufacturers, raw materials suppliers and distributors. Raw materials for paints and coatings are derived not only from fossil fuels and minerals but also from natural products, such as clays, tree saps and vegetable oils. Petrochemicals are still among the most critical raw material, and the industry is seriously affected by petrochemical shortages and price fluctuations.

"THIS ISSUE BACKGROUNDER IS AIMED AT HELPING POLICYMAKERS UNDERSTAND THE BASICS OF THE U.S. PAINT AND COATINGS INDUSTRY AND ITS PRODUCTS; THE KINDS OF ISSUES IT FACES; AND HOW NPCA/FSCT — THE INDUSTRY'S PREMIER ASSOCIATION — WORKS AS AN ADVOCATE ON BEHALF OF INDUSTRY."

The manufacture of paints and coatings is a small industry in the United States as compared with other industries, with some 42,900 workers in the paint and allied products industry. Industry facilities are located in urban areas like Chicago, Cleveland and Louisville, as well as in Northern New Jersey, throughout California, Florida, and Washington state.

The \$20.9 billion industry is made up of roughly 800 companies. The top 10 paint companies, ranging in annual sales from \$700 million to over \$3 billion, represent about 70 percent of the U.S. market, or about \$14.6 billion. The next largest paint companies, ranging in sales from \$100 million to \$700 million, represent about 10 percent of the market or nearly \$2 billion. The remaining paint companies compete for the 20 percent balance of the market, or approximately \$4 billion. Although many of the larger companies are publicly held, many — if not most — of the remaining smaller manufacturing companies are privately held and/or family businesses. →

○ Facts About the Industry

○ Types of Coatings

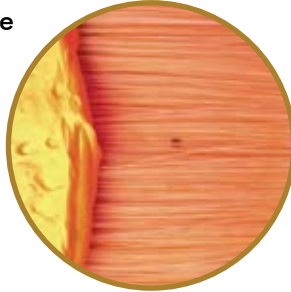
○ Regulatory Considerations

○ NPCA/FSCT and Industry Respond to Issues

TYPES OF COATINGS

To fully understand what kinds of coatings make up the industry's markets, industry categorizes types of coatings as three distinct categories

ARCHITECTURAL COATINGS are used for decoration and general maintenance of residential, commercial, institutional and industrial buildings. They include both interior and exterior paints, are either water-based or solvent-based, and are used mostly by professional painters and Do-It-Yourselfers. Architectural coatings represent over 49 percent of the volume of paint sold in the United States and account for over 43 percent of total value. It is estimated that over 85 percent of all architectural coatings are now water-based; the remaining 15 percent or so are considered solvent-based. This is in response to consumer demands for paints that are easier to apply while being environmentally friendly.



INDUSTRIAL COATINGS, or coatings that are factory-applied to manufactured goods as part of the production process, are also known as original equipment manufacture, or **OEM COATINGS**. They include finishes for automobiles, buses, transportation equipment, appliances, wood and non-wood furniture, metal building products, metal container and closure finishes, and paper. From this non-exhaustive list you can see that a host of independent and diverse industries depend on coatings, especially OEM coatings, for their production.



Finally, what is called **SPECIAL PURPOSE COATINGS** simply serve a special purpose and include marine paints, high performance maintenance coatings, automotive refinish paints, traffic and highway markings and aerosol paints. Some special purpose coatings include roof coatings, multi-color paints, metallic paints and spray paint. Specialty coatings like marine coatings used on Navy ships are designed to be 1) anti-corrosive – to maintain the integrity of ships' surfaces, and 2) anti-fouling – to keep living organisms from building up on ships, which could adversely affect critical performance characteristics, like speed.



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REGULATORY CONSIDERATIONS

While there is demand for specialty coatings, as clean air regulations are tightened, the regulatory climate is demanding that coatings formulators be even more creative in cutting ozone-forming volatile organic compound (VOC) content in their products. As a result, coatings manufacturers have worked to "do more with less," leaning hard on technology in an attempt to offer products that provide the same performance sans the VOC-loaded solvents. These lower VOC coatings seek to offer equal performance qualities demanded by Do-It-Yourselfers — like a high gloss finish, flexibility, durability and weatherability. Industry devotes a great deal of its research and development to answer the demands for lower-VOC coatings. For instance, on the industrial coatings side, automotive manufacturers are demanding better coatings that are more environmentally sound for different applications. As such, industry has responded with non-solvent coatings like powder and radiation cure coatings that are less reactive to forming ozone.

In some respects, the industry's ability to develop quality coatings while reducing VOC content has led state environmental agency officials to think that the industry can do the impossible. Industry's fear is that at some point the "law of diminishing returns" will apply as pressure for lower and lower VOC content coatings results in coatings that cannot provide the level of performance that the consumer demands.

The industry is also accommodating customers by turning out not only environmentally friendlier products, but also coatings for new applications and performance parameters. More and more often, a thin film of coating is being used to replace another material such as a plastic laminate or high performance architectural material. Coatings must also be formulated to withstand vigorous bending and fabricating in order to be suitable for something as obscure as coated metal coils, wired circuit boards and metal closures.

NPCA/FSCT AND INDUSTRY RESPOND TO ISSUES

At the federal, state and local levels, the paint and coatings industry contends with many of the same issues shared by other manufacturing industries. As mentioned, one of the greatest environmental concerns and challenges facing the industry is limiting emissions to meet clean air standards. NPCA/FSCT and its member companies were instrumental in the development of a rule that set national standards for the VOC content of architectural and industrial maintenance coatings, providing extensive coatings technology information to the U.S. Environmental Protection Agency (EPA), as well as widespread compliance support to its membership.

In the same arena, the industry faces waste management and recycling challenges and, with NPCA/FSCT, has put together a Five-Point Program for Leftover Paint, which explains to consumers how to manage their leftover paint to keep it out of landfills. For state and local hazardous waste facilities, NPCA/FSCT has created a *Guidance Manual for Paint Reuse Programs*. Also available for policymakers is the *Protocol for Management of Post Consumer Paint*.

In addition to environmental challenges, the industry also deals with a variety of hazmat transportation, and worker protection issues. NPCA/FSCT has developed a comprehensive set of health, safety and environmental management resources for its members under the banner of Coatings Care®. Coatings Care® also provides a framework for companies to incorporate health, safety and environmental decision-making into planning, operations, and practices. The detailed guidance and technical resources contained in Coatings Care® have been recognized by EPA as meeting requirements for its National Performance Track Program that rewards facilities with a proven environmental record and in-place environmental management system. NPCA/FSCT, on behalf of the paint and coatings industry, has also partnered with EPA in its Sector Strategies program, a program to improve industrial environmental performance, while simultaneously reducing the burden of environmental regulation. The partnership allows the industry to work cooperatively with the agency in an effort allowing each to teach, understand, and act in the interest of both the environment and manufacturing/business. Businesses benefit by getting an EPA industry liaison; EPA and state regulators benefit by getting better cooperation, support, and problem-solving ideas from participating industries, all of which is focused on procuring measurable environmental gains.

Responding to the new concerns surrounding chemical security, NPCA/FSCT proactively published the *Coatings Care® Security Implementation Guide*. Covering plant site, transportation and cyber security, the new Coatings Care® Security Code and guide helps paint manufacturers to meet the challenges and expectations of the public, as well as government officials. During development of the guide, NPCA/FSCT established a close working relationship with officials at the Department of Homeland Security and a number of state regulatory agencies, who have commented favorably on the scope and detail in the new guide. NPCA/FSCT is also a member of the Chemical Sector Council, which works to help industry with vulnerability assessments, real-life simulations, tabletop exercises and much more.

Preventing childhood lead exposure is another important issue for the paint industry. While today's household paints contain no lead, the paint and coatings industry continues its proactive efforts to reduce the risk of lead exposure among all segments of the population. Manufacturers, for example, removed lead from most house paints as early as the mid-1950's, well before the 1978 federal government ban on using lead in any consumer paints. For over 40 years, the industry has focused on efforts to "get the word out" about the hazards of old, lead-based paint and to demonstrate ways to prevent childhood lead exposure. Informative publications in both English and Spanish have been given widespread distribution and are available on the Internet.

In another major effort to halt childhood lead exposure, on May 12, 2003, NPCA/FSCT signed a landmark agreement with state attorneys general that established a national program under which all consumer paints manufacturers provided revised

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product labels, sticker warnings, and point-of-sale information. The point-of-sale brochures advise consumers on the proper precautions to take when doing renovation and remodeling projects where lead-based paint is found.

As a result of the exceptional positive reception to the association's community outreach efforts on lead hazard awareness and contractor education under the NPCA/FSCT-State Attorneys General Agreement, NPCA/FSCT launched a new support initiative in January 2008. Known as "the Next Generation" Program for Public Education and Outreach on Lead-Based-Paint, the program has continued to work with many state and local agencies and advocacy groups over the past 14 months, but is scheduled to sunset at the end of March 2009 as a direct result of new mandatory federal training and certification requirements for renovation and remodeling contractors. In sunsetting the "Next Generation" program, NPCA/FSCT acknowledges that the new federal requirements will result in widespread demand for certified lead-safety training, and require training providers to keep track of trained individuals and provide ongoing compliance documentation. As NPCA/FSCT cannot offer certified training and meet the new administrative requirements, our cooperative efforts will continue as we work closely with recognized university-based organizations developing innovative strategies on lead poisoning prevention.

Also of note, CLEARCorps[®], the Community Lead Education and Reduction Corps, a partnership conceived and launched by the paint industry, continues to offer a highly successful, cost-effective, feasible solution to the problem of childhood lead exposure. CLEARCorps[®] is a vital partnership involving higher education, community organizations, government agencies, industry groups and private foundations — a partnership that strengthens communities, educates families and landlords, and controls exposure to lead hazards.

Featuring comprehensive services in nine cities and two nationwide promotional projects with retail hardware stores and community (lead) screening program that serve as a national model for protection of children and families, CLEARCorps[®] combines education with effective, less costly alternatives to full abatement to help protect children and families.

For more information on the paint and coatings industry, contact NPCA/FSCT at (202) 462-6272, or visit NPCA/FSCT's web site, www.Paint.org.

CLEARCORPS[®],
a program that
strengthens communities,
educates families and
landlords, and controls
exposure to lead hazards,
features services in
the following nine cities:

Detroit
Minneapolis/St. Paul
Providence
Durham (N.C)
Newark (N.J.)
Grand Rapids
Seattle
Omaha



NPCA is a voluntary, nonprofit trade association representing paint and coatings manufacturers, raw materials suppliers and distributors. As the preeminent organization representing the paint and coatings industry in the United States, NPCA's primary role is to serve as ally and advocate on legislative, regulatory, and judicial issues at the federal, state and local levels.

