

# Chroma's Environmental Principles and Policies



Chroma Inc. is a U.S. based manufacturer of paints for the fine art, educational and decorative arts markets. Located in rural Lancaster County, Pennsylvania, in the heart of the Amish farming region, we know that our business impacts our local community and the environment at large. At Chroma, we consider the entire life cycle of a product - from the raw materials, to packaging, to shipping, to how the end user can

dispose of the item - with every item we manufacture. Because we make materials that are used to create beautiful objects, we strive to keep our world a beautiful and healthy place by focusing on creating efficiencies in energy, water, waste and emissions. Chroma's Environmental Principles and Policies are outlined below in reference to Products, Operations, and our Long Term Visions.



## PRODUCTS

### Raw and Hazardous Materials



Paint color is derived from pigments, and pigments are earth-based inorganic pigments or organic pigments made in labs. The safest pigments are utilized, as much as possible, in providing the vibrant colors that artists crave. For example, one color is made with an EnvironOxide™ pigment, which recovers iron-rich sludge from abandoned mine-shafts to create its rich tone. Heavy metal pigments such as cadmium, cobalt or any type of lead, are not used in Chroma Inc.'s manufacturing process. All attempts are made to purchase pigments and chemicals from local suppliers to reduce the need for long-distance shipping therefore decreasing emissions.

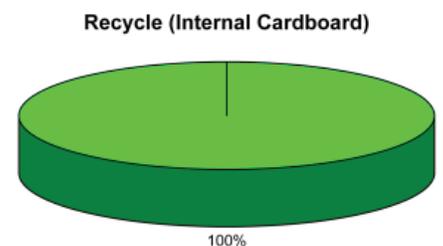
### Product Packaging



Chroma's paints are packaged in HDPE (high-density polyethylene), LDPE (low-density polyethylene), PET (polyethylene terephthalate), and PS (polystyrene) plastic tubes or bottles, which are commonly recycled in many communities. Some PP (polypropylene) and PVC (polyvinyl chloride) containers are also used and our caps are made from PP. These are not often recycled, but we encourage consumers to check with their local recycling center for information on what types of plastic can be recycled in their area. No PC (polycarbonate or polylactide) bottles, which are difficult to recycle, are used in the manufacturing of Chroma products.



For packing and shipping, cardboard made from 50%-95% post-consumer recycled content is used. This cardboard can be recycled in many neighborhoods. 100% of internal cardboard waste that is generated during the daily operation of the business is sent out to be recycled.



## Product Safety Testing

Equally as important to protecting the environment is protecting the people who use our products. Chroma products undergo extensive toxicological evaluation and testing to be granted the right to bear the certification seals of the Art & Creative Materials Institute (ACMI). ACMI works in conjunction with a consulting team of toxicologists at Duke University Medical Center who review the complete formulas, packaging and labels of products. The toxicologist requires cautionary labeling on products when appropriate. All products certified as non-toxic by ACMI are non-toxic for both children and adults because the evaluation is based on the use and misuse (such as ingesting a material) of the product by a small child.



Conforms to  
ASTM D 4236

The AP (Approved Product) Seal identifies art materials that are safe and certified by a medical expert to contain no materials in sufficient quantities to be toxic or injurious to humans, including children, or to cause any acute or chronic health problems.



Conforms to  
ASTM D 4236

The CL (Cautionary Label) Seal certifies that a product is properly labeled for any known health risks with information provided on the safe and proper use of the product.

All products are certified by ACMI to be labeled in accordance with the Chronic Hazard Labeling Standard, ASTM D 4236 and the US Label of Hazardous Art Materials Act (LHAMA). ACMI also tests lead levels in products to make sure that they meet the requirements set forth by the Consumer Product Safety Act. A review of each product is required by ACMI every 5 years.

For sale in the state of California, all products must meet labeling requirements as stipulated under the Safe Drinking Water and Toxic Enforcement Act of 1986, better known as Proposition 65. Prop 65 requires businesses to notify Californians about significant amounts of chemicals in the products that they purchase. By providing this information, Prop 65 enables Californians to make informed decisions about protecting themselves from exposure to these chemicals. All Chroma products meet the requirements of California's Prop 65 initiative.



## OPERATIONS

### Ecosystem



Every attempt is made to protect the ecosystem of the land and community surrounding Chroma's manufacturing facility through proper waste disposal methods, recycling programs and procedures that reduce our carbon footprint. In an effort to help reduce carbon emissions put into the air and the ecosystem, employees are encouraged to participate in a Ride-Share Program, use public transportation and use alternative methods of transportation such as bicycles.



Chroma complies with all laws of US federal, state and local agencies including laws relating to employment, discrimination, environmental and health and safety. We seek to do business with customers who share our commitment to the environment, health and safety and social responsibility.

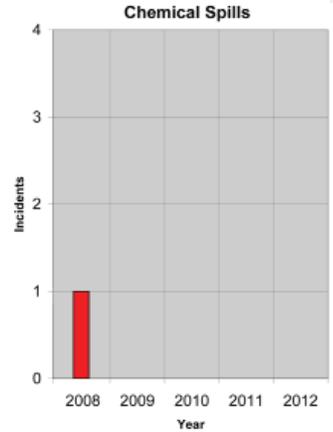
Continual assessment of environmental and safety procedures and programs, as well as monitoring of progress in achieving our long-term goals and visions is a top priority.

## Handling of Chemicals

Safety procedures are in place to handle chemical spills, and we are proud to report that we have not had a spill since 2008. All hazardous materials are listed on file with the proper local emergency responders. Material Safety Data Sheets are maintained and accessible at all times for every pigment and chemical used in our manufacturing process.

## Lab Safety

Chroma believes it is prudent to minimize all chemical exposures. Improving the health and safety of employees and the public by providing guidance regarding the safe handling of chemicals that are present in the laboratory is our goal. Chemical standard operating procedures are followed by our laboratory workers, and others entering the lab areas are also briefed on these procedures. Proper lab attire is utilized for safety and to minimize exposure to the chemicals being used. These include aprons, respirators, shoulder-high gloves, and ear plugs.



Chroma provides a safe work environment with effective programs and initiatives in place to prevent accidents and injury and to minimize exposure to health risks. Every employee assumes responsibility for following proper procedures. The well being of our company, our workers and the environment that we impact depends on all employees working together to keep safety, health, and environmental awareness an important part of all of our daily activities.

## Energy



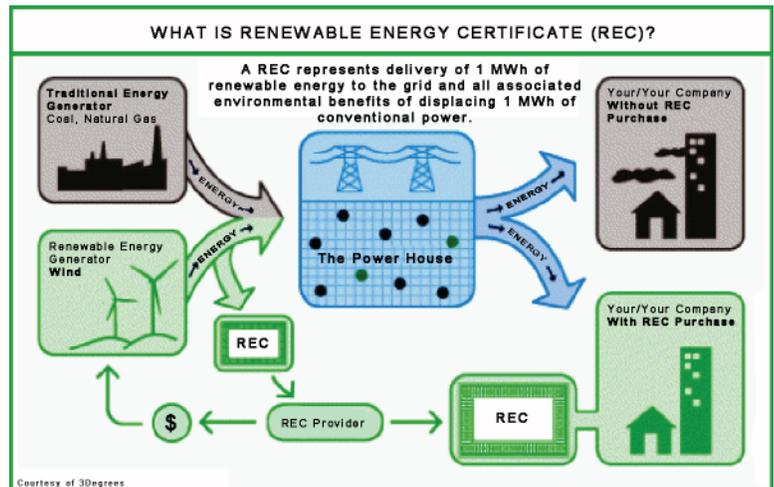
Our electric energy provider, Liberty Power, uses 100% renewable resources such as solar, wind or hydroelectric - no coal or natural gas produced by hydraulic fracturing (fracking). Liberty Power is a large supplier of Renewable Energy Certificates (RECs) to major corporations and other companies across the country. RECs represent the environmental attributes of the power



produced from renewable energy projects and are sold separately from commodity electricity.

Choosing clean, green energy through purchasing renewable energy certificates (RECs) encourages the growth of eco-friendly power production businesses and helps support further development of renewable energy technologies. The potential expansion of the green energy market is enormous as is the potential for providing thousands of green jobs. An added benefit is increased energy independence, which could lead to greater economic and social security.

Clean Energy From Renewable Energy Certificates (RECs)

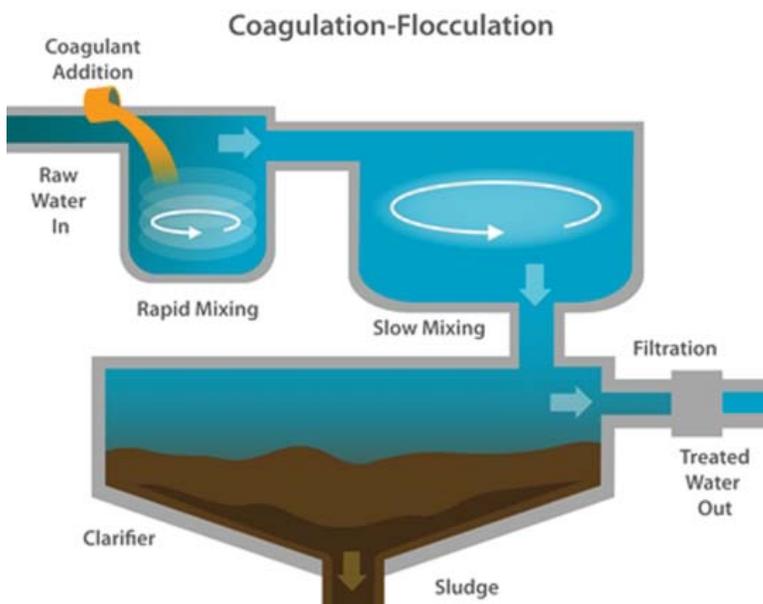


## Waste and Water Disposal



The Susquehanna River is America's largest river lying entirely within the United States that drains into the Atlantic Ocean and Chroma's facility in Lancaster County, PA lies within the Susquehanna River Watershed. With this in mind, Chroma is committed to the responsible use and disposal of water, one of the earth's most precious resources. Waste water is recycled and reused whenever possible. Our entire line of Green Series Tempera is made with the wash water that is collected and recycled during the manufacture of Chroma's other brands of paints. Containing virtually no detergents, the manufacture of Green Series Tempera requires approximately

25% less energy than is needed to make a standard tempera, reducing its carbon footprint.



For all waste water that cannot be recycled, a process called flocculation is used to separate the solids from the waste water. The remaining remnants, called sludge, are stored in a pit for proper processing and removal. The storage pit is drained approximately 2 –3 times per year by certified processors. Thorough records are kept of all sludge that is disposed of. The only waste water that goes down the drain is the water left after the solids have been removed, which does not contribute to ongoing eutrophication of the Susquehanna River. A sprinkler system with water retention controls and a retention pond to keep run off from going into the public sewer system are utilized. All underlying drainage areas have no direct access to the public sewer system.

When waste is produced, the manner in which it is disposed should have the least negative impact on the environment as possible. Wastes generated from small manufacturing businesses such as Chroma have stricter disposal regulations than waste that is generated at a household level. All regulations set forth by state agencies and local authorities for proper waste and water disposal are strictly adhered to.



A recycling program for paper and plastic water/soda bottles is being used. Good's Disposal Services, Inc. has been providing commercial trash and recycling services in Lancaster County, PA for over 35 years. Good's has a goal in PA to recycle 33% of the waste stream in an effort to save land, trees and materials for the next generation. As a result of this commitment to the environment, Chroma has chosen to partner with Good's Disposal Services, Inc. for its trash removal and recycling.

## Environmental Impact/ Carbon Footprint



For large shipments within a 500 mile radius, local shipping companies are used to minimize carbon emissions. We also support shipping companies such as A. Duie Pyle, which has purchased environmentally friendly equipment; **FedEx**, which operates the largest fleet of hybrid commercial trucks; and **UPS**, which uses alternative fuel and advanced technology vehicles.



A. Duie Pyle has made great strides in their environmental initiatives. All drivers have been trained on the “no idling” policy and have programmed the electronic control modules on engines to automatically shut down if a tractor idles more than five minutes. Auto assist transmissions have been purchased to reduce the consumption of

fossil fuels. 100% of company owned equipment with sleeper berths are outfitted with Auxiliary Power Units, which are designed to eliminate the need to idle trucks for heating, cooling and electric. The company has implemented a Hazardous Waste Reduction Strategy to help employees handle freight in a way that minimized damage and potential for spills that could effect the environment.



FedEx is integrating cleaner vehicles into its fleet. 43 all-electric vehicles have been deployed around the world. It has 330 hybrid-electric delivery vehicles, an all-hybrid station in New York City, biodiesel trucks and hybrid electric trucks are used in Washington D.C., and more than 500 forklifts and 1,600 ground equipment units at airports are electric and alternative fuel supported.



UPS operates one of the largest private alternative fuel fleets in the industry. It includes more than 2,200 compressed natural gas, liquefied natural gas, propane, hydrogen fuel cell, electric and hybrid electric vehicles. To date, UPS has invested over \$15 million to deploy significant numbers of alternative fuel vehicles in the fleet.

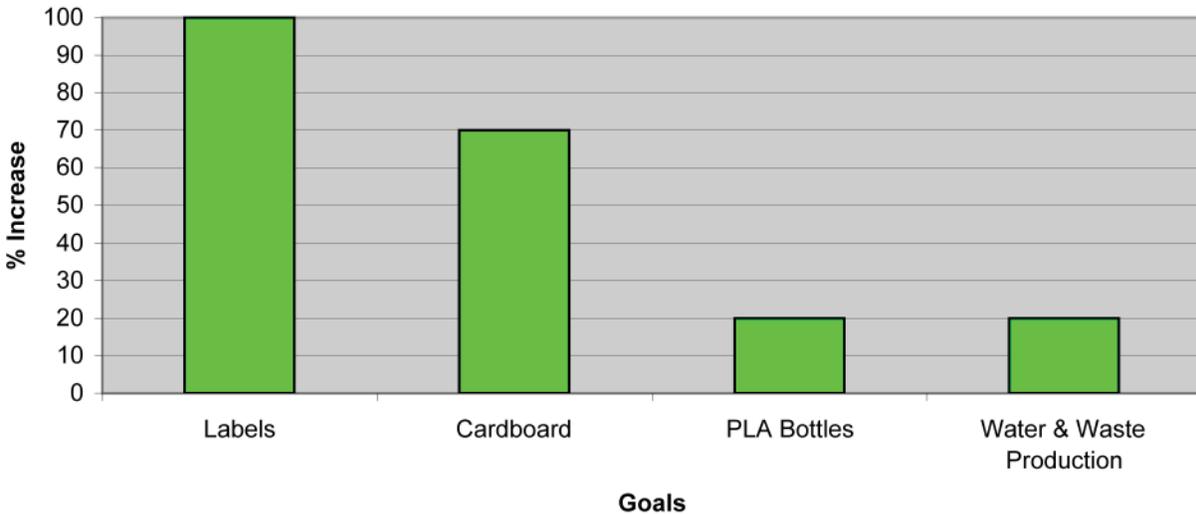
## Our Long Term Vision

With an eye on the future and long-term sustainability, our vision is to implement the following green goals by **2017**:

- ✓ *Using 100% recycled labels, printed with soy based inks*
- ✓ *Increase our use of recycled cardboard to 70% post consumer waste*
- ✓ *Increase our use of PLA bottles by 20%*
- ✓ *Reduce our water and waste production by 20%*
- ✓ *Designing products that consumers enjoy while reducing the impact that those products have on the environment*



### Green Goals By 2017



Anyone with questions regarding Chroma's commitment to the environment or the health and safety of the products being manufactured, please contact **Mr. Jody Hirneisen** at 1-800-257-8278 ext. 219 or by email at [jhirneisen@chromaonline.com](mailto:jhirneisen@chromaonline.com).