

NASSCO Environmental Instruction #6:

Environmental Requirements for Polyester Resin and Fiberglass Work

Polyester resin application and associated solvent usage, and fiberglass machining (like sanding, grinding, and cutting) are strictly regulated by the San Diego Air Pollution Control District (APCD). Therefore, NASSCO carefully controls all polyester and fiberglass operations within NASSCO facilities.

For questions about the requirements listed below or environmental regulations, please contact NASSCO's Environmental Engineering Department at 619-544-7506.

Before You Begin

NASSCO Approval

All contractors must first obtain authorization from the Environmental Engineering Department to perform fiberglass layup, use polyester resins, or perform operations which create fiberglass dust at any NASSCO facility. To request authorization, submit a signed and completed copy of "**NASSCO Environmental Form #6: Request for Authorization to Use Polyester Resins or Fiberglass Work**" to the NASSCO Environmental Engineering Department at Envreports@nassco.com. If approved, your company will be authorized for the period of time listed on the form. Each new scope of work that includes polyester resin or fiberglass layup/machining must have a separate authorization from NASSCO.

Permits

Applying more than 20 gallons of polyester resin per month or machining fiberglass require a Permit to Operate from the APCD. Permits contain conditions like monomer content limits and required air pollution control equipment to reduce air emissions in San Diego County. If your scope of work requires at least one of the two conditions listed previously, your company is required to obtain and maintain a valid APCD Permit. For more information about San Diego County's permitting program, contact the APCD at 858-586-2600, or visit www.sdapcd.org.

If your scope of work requires establishing a designated workstation for machining of fiberglass within NASSCO's facility, you must contact SDAPCD to determine if a permit will be required. If so, you must also first obtain the permit before beginning work at NASSCO. Small, incidental fiberglass trimming, grinding, cutting, and sanding operations (using hand tools) conducted aboard vessels and outside of designated workstations will not require a permit, however, the dust emissions from these operations must be controlled.

If applicable, as part of the authorization request, you will be required to provide a current, unexpired copy of your APCD Permit to the NASSCO Environmental Engineering Department. Some polyester resin applications are exempt from needing an APCD Permit, such as using less than 20 gallons per month of polyester resin materials. Note that your company is responsible for maintaining any documentation that demonstrates exemption.

Air Pollution Regulations

In addition to the conditions outlined in an APCD Permit, polyester resin application must comply with the requirements specified in APCD Rule 67.12.1. This rule contains specific monomer (styrene, for example) content limits by type of resin material and solvents, as well as specific material handling and recordkeeping requirements. Your company is responsible for complying with these rules by purchasing products that comply with the VOC and/or monomer limits and training employees in the selection and use of compliant materials and recordkeeping.

Each company that applies polyester resins in San Diego County must maintain and provide documentation from the product(s) manufacturing that demonstrate monomer limit compliance to the APCD.

Safety Data Sheet Product Review

The NASSCO Safety and Environmental Departments review and approve all chemical products (including resins, gel coats, cleaning materials, and solvents before they are used onsite at a NASSCO facility. To submit a product for review, provide a current Safety Data Sheet (SDS) and Review Form to the Safety Department. You may also be required to submit additional documentation (like Product Data Sheets) to demonstrate a product's VOC/monomer content. For more information on how to submit a product SDS and Review Form, please contact NASSCO's Safety Department at 544-8444.

Work Practices

Contractors are responsible for educating employees and subcontractors on the applicable environmental requirements associated with polyester and fiberglass operations, including the following:

Closed Containers

All persons who handle paints, solvents or other VOC-Containing material must be trained on NASSCO's Paint and Solvent Container, Best Management Practice #202. APCD Rule 67.17 and NASSCO policy requires that any container holding resins, gel coats, solvents, wastes, or other VOC-containing material be kept closed unless in-use (actively mixing, working, or disposing). All in-use containers must be within line of site of the person using the container.

Container Management

NASSCO's Best Management Practice #401 on Container Labeling requires that all containers of resin, gel coats, solvents, and other hazardous materials are clearly and correctly labeled with their contents at all times. Remove containers that become damaged such that they no longer be seal properly or risk the release of vapors when not in-use. The contents may be transferred to an appropriate secondary container that seals completely and labeled with a new product safety label (available from the NASSCO Safety Department). All secondary containers must be capable of being completely sealed and compatible with the material being stored. Intentional damage to containers, such as puncturing the lids, is prohibited. Send all empty containers to a hazardous waste collection area.

Fiberglass Machining

Permitted fiberglass machining at a fixed location requires adherence to the conditions of an APCD permit, like working in a sealed enclosure equipped with air pollution control equipment. Incidental fiberglass machining using hand tools aboard a vessel still requires process controls like enclosing the operation and using vacuum devices, water spray, or other techniques to prevent generating of dust.

Recordkeeping

Polyester resin operations require maintaining documentation as specified in Rule 67.12.1 Section (f)(1) through (f)(2). Examples include: a current list of each resin material, including cleaning and surface preparation products, manufacturer-provided information such as the VOC, monomer, and CFC content, and daily records of the amount and type of each material used.

Waste Management

Properly dispose waste resins, gelcoats, solvents, and contaminated work materials (paint brushes, rags, consumables, etc.) Unless otherwise specified, NASSCO will provide hazardous waste containers and labels to its direct subcontractors. Master Ship Repair (MSR) Companies and third parties (AITs, ship's force) are responsible for providing waste containers and labels for their own activities and for those of their subcontractors. All contractors are required to follow all applicable laws as well as NASSCO procedures for handling and disposal of hazardous waste. For additional information regarding hazardous waste disposal, refer to "***Environmental Instruction #7: Generation, Disposal, or Transportation of Hazardous Waste.***"

Spills or Environmental Releases

In accordance with NASSCO's BMP #102, NASSCO employees and contractors must immediately report spills and releases of chemicals, including resins and solvents, to NASSCO Security at 619-544-8401.

After the Work is Completed

Compliance Certification and Monthly Usage Reporting

At the end of each month that your company applied polyester resin or machined fiberglass at a designated work station with control equipment, you must certify their environmental compliance status on a "Title V Monthly Air Compliance Certification Form." In addition, you must submit a summary of the month's polyester resin and solvent usage to the NASSCO Environmental Engineering Department using the provided reporting form. Submit the completed reports to envreports@nassco.com.

For polyester resin and fiberglass machining operations at non-NASSCO facilities, the information listed above must be submitted to that entity's Environmental Department each month