

NASSCO Environmental Instruction #1:

Environmental Requirements for Abrasive Blasting

Abrasive blasting operations are strictly regulated by the United States Environmental Protection Agency (EPA), California Air Resources Board (CARB), San Diego Air Pollution Control District (APCD), and Department of Toxic Substances Control (DTSC). Therefore, NASSCO carefully controls all abrasive blasting activities conducted within NASSCO facilities.

For questions about the requirements listed below or environmental regulations, please call 619-544-7506.

Before You Begin

Authorization to Work at NASSCO

All contractors must first obtain authorization from NASSCO's Environmental Engineering Department to perform abrasive blasting. To request authorization, complete and submit a signed copy of "**NASSCO Environmental Form #1: Request for Authorization to Perform Abrasive Blasting at NASSCO Facility**" to the NASSCO Environmental Engineering Department at envreports@nassco.com. You may not begin abrasive blasting until approval has been received from the Environmental Engineering Department. When approved, your company will be authorized for the period of one year or the period of time listed on the form. Each new scope of work that includes blasting must have a separate authorization from NASSCO.

Permits

Operating abrasive blasting equipment solely within San Diego County requires a Permit to Operate from the APCD. Abrasive blasting operations can alternatively be registered with the CARB portable equipment registration program (PERP), which authorizes statewide operation of abrasive blasting equipment. Contractors are responsible for obtaining and maintaining the appropriate permit or registration for operating abrasive blasting equipment, as required. For more information about San Diego County's permitting program, contact the APCD at 858-586-2600, or visit www.sdapcd.org. For information on CARB's PERP, contact the Statewide Registration Program Information Line at (916) 324-5869 or visit www.arb.ca.gov.

As part of the authorization request, you will be required to provide current, unexpired copies of your equipment permit(s) or registration(s) to the NASSCO Environmental Engineering Department.

Some abrasive blasting operations are exempt from needing an APCD Permit, such as equipment with capacities less than 100 pounds or 1 cubic foot of media. Refer to APCD Rule 11 for a comprehensive list of exempt activities and equipment. Note that your company is responsible for maintaining any documentation that demonstrates exemption for one or more of your abrasive blasting operations.

Air Pollution Regulations

In addition to the conditions outlined in an abrasive blasting equipment's Permit or Registration, abrasive blasting operations must comply with the requirements outlined in California Code of Regulations (CCR) Title 17, Subchapter 6- Abrasive Blasting (Sections 92000-92530) and with SDAPCD Rule 71.

The regulations require that operators use certified abrasive materials when not using steel shot or grit and establish the prohibition against visible emissions from abrasive blasting operations.

Safety Data Sheet Product Review

The NASSCO Safety and Environmental Departments review and approve all chemical products (including abrasive blast media) 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. Requests for abrasive materials other than steel shot or grit must also include certification from the California Air Resources Board (CARB) per CCR Title 17, Subchapter 6, Section 92530. For more information on how to submit a product SDS and Review Form, please contact NASSCO's Safety Department at 544-8444.

Abrasive Blast Media

It is NASSCO Policy that all abrasive blast media used under a NASSCO contract be new material. Environmental Engineering will request documentation from your company to demonstrate material is new.

Prior to the use of the blast media your company must submit analytical results (CA Title 22-STLC and TTLC by EPA Method 6010B, 700 Series) of a representative sample of the media to Environmental Engineering to demonstrate that the metals levels are within acceptable levels and align with the values stated in the SDS. The sample must be analyzed by a laboratory accredited by the State of California's Environmental Laboratory Accreditation Program (ELAP). The laboratory results must include Quality Assurance (QA)/Quality Control (QC) data and a copy of the Chain of Custody (COC).

NASSCO reserves the right to reject new blast media showing results with substantial higher levels above the SDS on file.

Removal of Heavy Metals

There are additional safety requirements for abrasive blasting operations that remove paints and coatings containing heavy metals such as hexavalent chromium lead, and cadmium. Before beginning such work, verify that your operation is not restricted by your Permit or Registration and contact the NASSCO Safety Department for additional guidance.

Work Practices

All contractors are responsible for educating employees and subcontractors on the applicable environmental requirements associated with abrasive blasting, including the following:

Permit and Contact Information Posting

Each piece of abrasive blasting equipment must have clear and visible labels with your company's name and point of contact (POC) information (name and phone number). In addition, a legible copy of the equipment's ACPD permit or CARB registration must be posted on, or within 25' of the equipment. Your company is also responsible for maintaining and making available any other documents or records required by your permit or registration when requested, this may include documentation of filter efficiency, maintenance records, and CARB certification of media.

Pollution Prevention

Your company must maintain all blasting equipment and containment, and monitor the activity to prevent the release of dust and grit into the air, onto the ground, or into the Bay. It is your company's responsibility to have controls in place to prevent dust clouds during the abrasive loading process. Equipment, containment, and scaffolding shall be free of abrasive grit before it is dismantled and or removed for blasting operations areas. NASSCO enforces the Best Management Practices (BMPs) related to abrasive blasting, which include but are not limited to:

- **BMP #201 Abrasive Blast Containment, Cleanup, and Storage:** Establishes general containment procedures for abrasive blast material and associated waste.
- **BMP #203 Shrouding:** Requires erecting sturdy and protective shrouding to prevent release of abrasive grit and waste into the Bay.
- **BMP #310 Over-Water Protection:** Establishes containment requirements for operations conducted over water.
- **BMP #313 Sally Port Screening:** Requires containment measures to prevent releases of material through sally ports when working on the Floating Drydock.

Recordkeeping

Throughout the duration of your approval, your Company must maintain the total amount and type of abrasive blast media and any control methods employed. By the 10th of the following month, contractors must submit a summary of the month's abrasive blasting activities on the provided reporting form to the Environmental Engineering Department.

Waste Management

Once blasting activities have begun, NASSCO contractors must follow instructions provided by NASSCO Environmental Engineering on providing representative samples of the waste for analysis and characterization, as required.

When blasting is complete, the blasting company is responsible for removing the waste and containing it for proper disposal. Unless otherwise specified, NASSCO will provide waste containers and labels for blasting waste. Containers larger than fifty-five gallons, such as super sacks or roll-offs, can be arranged with advanced notice to the Ship Manager. Do not dispose spent abrasive grit or dust into the normal trash and do not mix the waste with other wastes.

NASSCO subcontractors are prohibited from removing spent abrasive blast media from the shipyard or jobsite.

Master Ship Repair (MSR) companies and third parties (AITs, ship's force) are responsible for providing their own waste drums/containers and labels to their employees and subcontractors and for final removal and legal disposal of their wastes.

For additional information regarding hazardous waste disposal, refer to “**Environmental Instruction #7: Generation, Disposal, or Transportation of Hazardous Waste**”, which covers applicable laws as well as NASSCO procedures for handling, transporting, and disposing 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 abrasive grit/dust, to NASSCO Security at 619-544-8401. Any visible emission of dust from a dust collector, blasting process, or containment structure (shrouding) must be stopped immediately and then reported. If you are working at any other shipyard or any Naval Installation on behalf of NASSCO, you are responsible for following that facility’s spill/release reporting procedures.

After the Work is Completed

Compliance Certification and Monthly Usage Reporting

At the end of each month that your company is authorized to conduct blasting operations, you must certify your environmental compliance status on a “Title V Monthly Air Compliance Certification Form.” In addition, you must submit a summary of each month’s abrasive grit usage to the NASSCO Environmental Engineering Department using the provided reporting form (or approved equivalent). Submit the completed reports to envreports@nassco.com.

For blasting at non-NASSCO facilities, the information listed above must be submitted to that entity’s Environmental Department each month in accordance with Standard Items 009-02 Section 3.3.