

# SANDBLASTING

## BENCHMARK

Require the capture of particulates to the maximum extent practicable given current technology, minimizing escape and/or buildup of particulates outside the containment structure. In order to contain the particulates, the containment screen must meet the following minimum specifications:

Tensile Strength (ASTM D-1682 grab method)	Warp: 420 lbs.    Fill: 210 lbs.
Burst Strength (ASTM D-3786)	465 lbs./ square inch
Apparent Opening Size (#60-70U.S. sieve)	0.245-0.212mm
Water Flow Rate	20 gal/sq. ft./minute
Weight (ASTM D-3776)	6.4 oz./square yard

## SANDBLASTING BMPS

The particulates and dust generated when sand blasting boats may contain metal compounds including copper, lead or other heavy metals that are toxic to marine life and may be considered hazardous waste. Sandblast dust should not be allowed to leave a containment area.



Ideally, sandblasting should occur indoors within a walled booth that ensures the containment of the blasting material and the residue. If unable to conduct sandblasting indoors, all sandblasting will be performed over surfaces (concrete, plywood, plastic, etc.) which

will prevent sand or residue from washing or falling into the water, inter-tidal zone or onto the soils. Screens or tarps should be installed around the area to be sandblasted and must completely enclose the work area. They should be securely fastened all around including fastened to the deck in order to contain the maximum amount of residue possible.

Boatyard Bob Says. . . .

“Use alternative or recyclable blasting media, reducing the volume and cost of disposal.”

“Keep records of the volume and type of wastes generated to help you identify waste.”

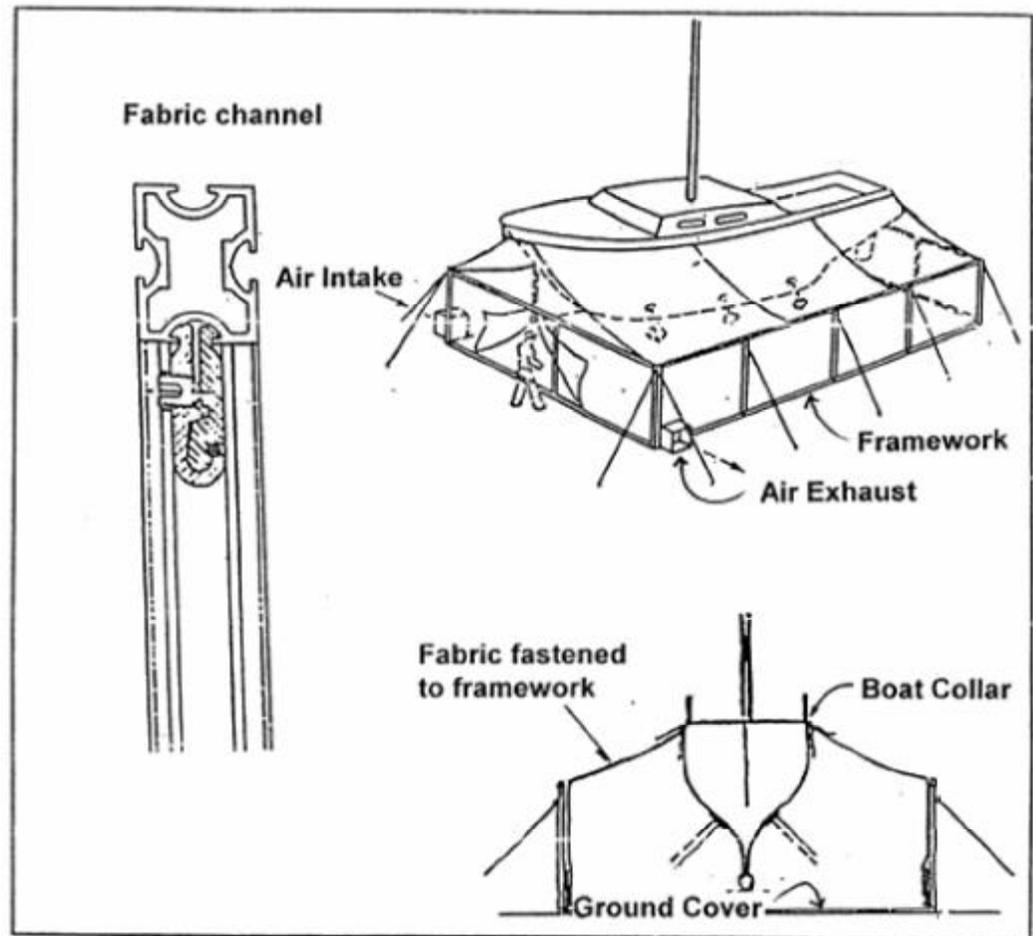


Tarpping for sandblasting  
Photo credit: Rockland Marine

The tarps should trap 95 % or more of all sanding dust emission. On windy days, the blasting should either be stopped or be closely monitored to prevent residue from escaping the



containment area. During the sandblasting operations the screens and/or tarps must be checked and adjusted as needed for maximum containment.



Example of sandblasting/ spray painting shield system.  
Source: Pier Pressure Marine Systems, Inc.

#### CLEAN-UP

Clean-up immediately at the end of the sand blasting activity, at the end of the day or before a predicted rainstorm by sweeping or vacuuming the work area and disposing of the waste appropriately..

#### DISPOSAL

The collected spent grit and residue must be securely stored in a covered and labeled container and saved for proper disposal.



A representative sample of spent grit and residues must be collected for testing by a qualified laboratory. The required analysis is TCLP - Toxicity Characteristic Leaching Procedure for RCRA Metals (EPA test method 1311, 6010-B or 7000). Proper



characterization of this waste usually requires a minimum of one sample composited from each boat project or one composite sample per 100 cubic yards of waste if more than 100 cubic yards are generated from any one project. If the results of the analysis indicate the waste is hazardous, then the waste must be disposed of as a hazardous waste. If the results indicate it is non-hazardous, then the waste must be disposed of as a special waste. Keep records that document the volumes of waste material generated on site and the level of toxins contained.

## LEGAL REQUIREMENTS

The following summaries of Federal and State laws and regulations are for general reference only and do not represent the laws fully. For a complete review of the pertinent laws and regulations use the references below to find either the complete text of the law or regulation or a detailed and complete summary in Section 2.

### **GENERALLY**

Discharge of Pollutants to Water - 38 M.R.S.A § 413

Section 413 prohibits discharging (spilling, leaking, dumping) of pollutants into state waters without a license from the Department of Environmental Protection. See page 3-33 or the Brightwork CD for more detailed regulatory information.

For additional information: Bureau of Land and Water Quality, Maine Department of Environmental Protection, 17 State House Station, Augusta, ME 04333, phone # (207) 287-2111.

Discharge of Pollutants to the Air - 38 M.R.S.A § 592-A (1) and § 590

Section 592-A prohibits the particulates soiling property, including your own, that is accessible to the public and the creation of a nuisance condition. A nuisance condition can be roughly described as airborne particulates resulting in 20% opacity, or enough particulates in the air to reduce visibility by 20%. Section 590 prohibits the discharge of over 10 lbs. an hour or over 100 lbs. per day of particulates, before containment, without a license.

For additional information: For additional information: See page 3-39 or the Brightwork CD for more detailed regulatory information. Bureau of Air Quality Control, Maine Department of Environmental Protection, 17 State House Station, Augusta, ME 04333, phone # (207) 287-2437.



## **SPENT SANDBLAST GRIT AND OTHER WASTE DISPOSAL**

Hazardous Wastes Regulations - Maine Hazardous Waste Management Rules  
Chapters 850-857.

These rules are the State's equivalent to the Federal Resource Conservation and Recovery Act (RCRA) and provide for "cradle to grave" management of hazardous waste. All facilities that generate hazardous wastes (see glossary) must manage any waste identified as "hazardous" in accordance with the rules and standards. Sand blast grit must be tested utilizing the TCLP test for RCRA metals to determine if it is a hazardous waste. If found to be a hazardous waste, the sand blast grit must be managed and disposed of in accordance with the Hazardous Waste Management Rules. When sand blasting paints that contain lead or other heavy metals, the resultant sandblast grit is frequently hazardous waste.

For additional information: See page 3-40 or the Brightwork CD for more detailed regulatory information. Contact information below.

Solid Waste Regulations - CMR Chapter 400 (1) III, Nnn

If the sand blast materials have been determined to be non-hazardous wastes then the Solid Waste Regulations specify their appropriate disposal. Sandblast grit is specifically identified as a special waste unless a representative test indicates that it fails the toxicity characteristic (see hazardous waste above).

For additional information: See page 3-40 or the Brightwork CD for more detailed regulatory information. Bureau of Remediation and Waste Management, Maine Department of Environmental Protection, 17 State House Station, Augusta, ME 04333, phone # (207) 287-2651.

*We understand that compliance is work and that it does have a price, but we are reminded over and over by businesses like yours that clean water is god for business.*

