



# The NASSCO Tidepool

A Collection of Environmental News from the Shipyard and Our Community

## Environmental Engineering Mission Statement

General Dynamics NASSCO Environmental Engineering is dedicated to maintaining an Environmental Management System that continually strives to go beyond regulatory compliance.

General Dynamics NASSCO Environmental Engineering is committed to conducting all operations in a manner that safeguards the health and safety of all employees and the public, preserves natural resources, and protects the environment. This commitment to protecting the air, water, and land is carried out through energy conservation initiatives, recycling programs, and on-going process improvements.



## Air Quality Corner – Part 4



Shipyard processes and equipment produce air emissions that can affect the environment. NASSCO is committed to continuously evaluating our operations to identify Pollution Prevention opportunities.

Best Management Practices (BMPs) are cost effective means of improving air quality. BMPs are low cost, low technology, common sense measures that result in improved housekeeping and the prevention of air pollution. Benefits include improved employee health, safety, environmental awareness and cost savings via waste minimization.

### Air Quality BMP's – Abrasive Blasting

Abrasive blasting is a mechanical surface preparation method used to remove contaminants on metal surfaces so that paint will adhere to the surface. Common contaminants include old paint, rust, scale, salt or dirt. Shipyard abrasive blasting operations are performed in a cabinet, in enclosures, or outdoors.

Cabinet or booth blasting equipment is used to prepare small parts, beams, or plates prior to the application of paint. Abrasive blasting outdoors is used on larger structures prior to the application of coatings. This is typically done in a designated area like a dock or onboard a ship.

Blasting operations are performed by using compressed air to propel blast media at high speeds toward a surface. This action breaks up surface contaminants. The primary source of air pollution emissions from grit blasting operations is particulate matter or dust.

### Ways to Reduce Emissions From Abrasive Blasting

- Use containment methods such as shrink wrapping, shrouding or screening when appropriate.
- Use alternative surface preparation methods such as hydro-blasting or slurry blasting when possible.
- Use certified abrasive blast media to reduce visible emissions.
- Curtail blasting operations during high wind speed conditions when possible.
- Use localized surface preparation methods for small jobs such as grinding or sanding.
- Encourage blasting of small parts in a booth.
- Sweep up any spilled abrasive media immediately to prevent the wind from carrying the grit into the air, storm drain or the bay.
- For preventative maintenance, inspect all abrasive blast equipment and control equipment daily for leaks.

An additional Operational Control to ensure that all Air Pollution Control District permit conditions are met is the designation of Air Coordinators who maintain daily compliance of the following:

- Dave Samudio – New Construction & Prime Line #1 Abrasive Blasting Operations
- Rich Trayford – Prime Line #2 Abrasive Blasting Operations
- Frank Reyes – Maintenance of New Construction & Prime Lines #1 & 2 Blasting Equipment
- Robert Davis – Pipe Shop Abrasive Blasting Operations
- Marc Metzler – Repair Subcontractor Abrasive Blasting Operations

Refer to General Dynamics NASSCO BMP #105 – ABRASIVE BLAST CONTAINMENT, CLEANUP & STORAGE for additional information on the handling of spent abrasive media.

### Recycle Waste Media to Reduce Waste

In order to reduce the amount of spent abrasive blast media, NASSCO switched from single-use copper slag media to reusable steel shot media that may be used several times. This reduced the amount of waste grit on just one ship from 23 tons to just 2 tons. Additionally, when the grit becomes no longer usable we transfer it to a cement manufacturer who recycles it in feed stock in their manufacturing process.

## 100 Percent Compliance!



*The Steel Erection crew invited the environmental engineers to join them for a pizza party luncheon to celebrate this milestone on January 12.*

Launchmaster Wayne Stevenson and his crew invited Environmental Engineering to join them in celebrating an entire year of 100 percent hazardous waste drum compliance in their Housekeeping Area. The area includes Ways 3 and 4, Tool Repair, and the Graving Dock.

Each week, NASSCO Environmental Engineers inspect each of the 400 orange hazardous waste drums in the shipyard. Metrics are kept on the compliance rates of these drums by Housekeeping Area. When this process began in 2001 as part of the Hazardous Waste Process Improvement Team, the overall compliance rate for the yard was 53 percent. This rate has improved to 97 percent yard-wide. "Steel Erection has done a remarkable job of maintaining 100 percent compliance for the entire year of 2006," said Kacey Christie, Environmental Engineering Specialist.

## 2007 Creek to Bay Clean-up



*Last year NASSCO volunteers removed 1,605 pounds of debris from Chollas Creek, including a shopping cart and five tires.*

I-Love-A-Clean-San-Diego's 5th Annual Creek to Bay Clean-up will be held on Saturday, April 28 from 9 a.m. to noon. This county-wide clean-up event is sponsored by NASSCO annually. It will conclude with a BBQ and volleyball game at Cesar Chavez Park for all volunteers. For more information, call Kacey Christie at (619) 544-7963.