



GENERAL DYNAMICS
NASSCO

The NASSCO Tidepool

A Collection of Environmental News from the Shipyard and Our Community

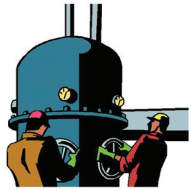
Environmental Engineering Mission Statement

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 5

By Kacey Christie, Environmental Engineering Specialist



A boiler is a closed vessel that contains water and is combined with a heat source. Water is changed into steam when heated under controlled conditions. In a boiler, energy from fossil fuels are converted into thermal energy. Thermal energy heats the water contained in the boiler tubes to make steam. This steam is used for various processes in the shipyard, including supplying auxiliary power

for a ship at berth, generating electricity and powering heating and air conditioning systems.

Air pollution emissions from a boiler are determined by the type of fuel used, the size and type of the boiler, loading practices and the level of equipment maintenance. Emissions from diesel boilers include oxides of nitrogen, sulfur, carbon monoxide and particulate matter.

Ways to Reduce Boiler Emissions and Prevent Pollution:

- Ensure correct operating and maintenance procedures are followed to ensure safe and efficient operation. A properly operated and maintained boiler will keep air pollutants to a minimum.
- Set-up a preventive maintenance program for boilers.
- Water treatment must be performed on feed water before it can be used in the boiler.
- Blow-down should be performed to remove water impurities that can cause corrosion and scaling, leading to early boiler failure.
- Soot blowing should be performed to remove soot and ash for more efficient combustion.
- Employee Training: Boilers are complicated systems. Maintenance persons must be properly trained on all aspects of the boiler equipment.



At NASSCO, boiler maintenance is performed by Joe Zimolzak. Joe has been specially trained to perform water quality testing on each of our boilers daily. In addition, he provides the Navy with weekly water quality reports whenever NASSCO is providing steam for their vessels in our yard. Joe is also responsible for maintaining the California Department of Safety and Health permits for our boilers. Keep up the good work, Joe!

Chollas Creek Clean-up Committee meets with Ground Work Planners



On February 2, the Chollas Creek Cleanup Committee hosted a picnic luncheon for Ground Work Chollas board members and graduate students from Cal Poly. The students received a grant to conduct a study of Chollas Creek as part of their Masters of Landscape and Architecture Thesis Program. NASSCO's Chollas Creek Clean-up Committee members shared their ideas with the students assigned the task of developing the landscape plan for Chollas Creek.

2007 Creek to Bay Clean-up



Chollas Creek before the 2006 clean-up.



Chollas Creek after the 2006 clean-up.

Keeping Chollas Creek trash free is a constant effort. The next cleanup event is Saturday, April 28, from 9 a.m. to noon. To sign up, call Kacey Christie at (619) 544-7963.