



The NASSCO Tidepool

A Collection of Environmental News from the Shipyard and Our Community

4TH QUARTER, 2003

12/05/03

Environmental Engineering Mission Statement

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

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.

NP2W (National Pollution Prevention Week) 2003

By John McFadden, Production Associate, Environmental Engineering Rotation



For the second year in a row NASSCO celebrated National Pollution Week from Sept 15th through the 19th. Here's a brief summary of the events:

P2 (Pollution Prevention) Training for all NASSCO Personnel – September 15 – 19, 2003

Throughout the entire week, all employees at NASSCO received E-Gram (Environmental Gram) P2 Training. Topics included P2 at Home, P2 on the Roadways, and P2 in the Shipyard. E-Grams are typically presented to employees at their daily gang-box meetings and provide a format for open discussion. E-Grams are distributed on a monthly basis throughout the year. Additionally, P2 articles have appeared in the Environmental Engineering Department's newsletter, *The NASSCO Tidepool*, throughout the year.

Customer, Team Member, Supplier, & Subcontractor Training – September 16 & 19, 2003

NASSCO's Environmental Engineering Department provided training to key customers, suppliers, and subcontractors on regulatory compliance and P2 in accordance with NASSCO's Environmental Management System. Over 100 organizations received this annual training.

Annual Environmental Performance Review's (AEPR) were conducted for these subcontractors and suppliers for the second straight year. This evaluation program provided organizations with a means of measuring their success in meeting NASSCO's Commitment to Our Environment. Organizations that actively pursue P2 were awarded a 10-point bonus on their AEPR.



NASSCO Hosts Two San Diego and Imperial County P2 Groups – September 16, 2003



NASSCO hosted a joint meeting of the San Diego and Imperial Counties P2 Committee and the San Diego Area Green Business Program. At this meeting were representatives from several organizations such as the County of San Diego Air Pollution Control District, the County of San Diego Department of Environmental Health, Department of Toxic Substances Control from California EPA, and the Cities of Chula Vista and Poway.

These groups were given a tour of the yard and a meeting was held where NASSCO's Environmental Engineering Department discussed our P2 programs and equipment.

This meeting also served as an open forum where ideas about pollution prevention were introduced and discussed between these various environmental agencies.

(Continued on page 7)

Crane Projects Results in Reduced Air Emissions

By Dina Torgerson, Environmental Engineering Specialist, ext. 8764

NASSCO is committed to being the *Neighbor of Choice* for Barrio Logan; as a result last year NASSCO voluntarily decided to re-power cranes 10, 11, 12, and 14 with the help of an SDAPCD (San Diego County Air Pollution Control District) grant. Jim Quagline, Engineering Specialist in the Facilities Department, headed the crane re-powering project.

The project involved changing out the old crane engines and replacing them with new engines. The new engines are state-of-the-art engines that are certified by the US Environmental Protection Agency for meeting low air emissions for pollutants such as oxides of Nitrogen, Carbon Monoxide, particulate matter, and unburned hydrocarbons. Cranes 10 & 11 have identical Cummins diesel fired 680 HP turbo-charged and after-cooled engines. Cranes 12 & 14 have identical Cummins diesel fired 1030 HP turbo-charged and after-cooled engines.

The project involved installing air pollution control equipment on each of the four cranes to further reduce the air pollutants emitted from the engines. The air pollution control equipment consists of a diesel particulate filter and a selective catalytic reduction system (SCR). The SCR utilizes urea to aid in the chemical reaction that converts the air pollutants into their elemental forms such as Nitrogen, Oxygen, etc.

The Environmental Engineering Department coordinated a test of the air emissions from the new crane engines with representatives from the SDAPCD. Among the air pollutants that were tested were oxides of Nitrogen (NOx) and Carbon Monoxide. Test results showed that the air pollutants from the cranes have been reduced significantly due



Crane # 12 with the new engine (in the left enclosure) and the air pollution control equipment on the platform.

to the new engines and the air pollution control equipment. To illustrate the reduction of NOx emissions: for every 1000 gallons of diesel fuel burned, the old engines generated 229 lbs. of NOx emissions. The new crane engines generate just 10 lbs. of NOx emissions for every 1000 gallons of diesel fuel burned.

Since oxides of Nitrogen are contributors of smog formation in the atmosphere, projects such as this reduce the impact to the environment and are consistent with NASSCO's overall environmental goal to go beyond regulatory compliance to prevent pollution.

Regional Water Quality Control Board (RWQCB) Inspection A Success!

By Hugo Bermudez, Environmental Engineering Specialist, ext. 7780

Paul Richter of the RWQCB conducted an inspection on Nov. 3-4, 2003 to ensure all areas were in compliance with all Water Quality Environmental Regulations and our Best Management Practices (BMPs) prior to floating out the Alaskan Frontier.

On Monday, November 3rd, he focused his attention on the Graving Dock floor to ensure it was clean and that there weren't any visible pollutants or contamination on the floor such as oil stains, loose metals or debris that could potentially enter the Bay with the float-out of our first BP tanker, the Alaskan Frontier.

He returned on Tuesday, to inspect the Graving Dock after it was flooded to 10 feet to ensure

that pollutants weren't visible floating on the surface of the water. Mr. Richter did not identify any violations or concerns. In fact, he stated that the Graving Dock looked very clean and NASSCO personnel had done a great job cleaning and maintaining the dock floor.



Internal inspections a week prior to Mr. Richter's inspection were coordinated and conducted by Environmental Engineering, Rodd Whitley, Hugh Magreehan, Wayne Stevenson and Juan Gomez. These inspections were key to the success of this regulatory inspection by the RWQCB.

Thank you all for your efforts in making this a successful inspection and

for keeping NASSCO in compliance.

West Nile Virus . . . Reality or Myth???

By John McFadden, Production Associate, Environmental Engineering Rotation

If you are like me, you enjoy outdoor activities but at the same time hate those little pesky bugs, better known as mosquitoes, that can cause a week's worth of scratching and discomfort. But did you know that besides being annoying, mosquitoes can also be harmful to your health? The health issue that I am referring to is none other than the West Nile Virus.

The West Nile Virus is an illness that is transmitted by mosquitoes. The first documented U.S. case occurred in 1999. Mosquitoes become infected with this virus after biting an infected animal, usually birds. The mosquitoes then transmit the virus to humans when they bite us. But don't fret, even if you get bitten by an infected mosquito, the chance that you will get sick is low. On the odd chance that you do get sick from one of these mosquitoes, the symptoms may include a mild fever, body aches, and headaches. In the worst case scenario, some people, particularly those over 50, may experience encephalitis (swelling of the brain) or meningitis (swelling of the brain and spinal cord).

You may ask, how can I protect myself and my family from the West Nile Virus? There are a couple of things that you can do. These include:

- ◆ wearing long pants and long-sleeved light colored shirts when outdoors, especially at dawn and dusk.
- ◆ wearing insect repellent that contains the active ingredient DEET (N,N-diethyl-m-toluamide).

◆ making sure your doors and window screens are tight fitting.

You can also stop the spread of the virus by cutting off the source. You can stop mosquitoes from breeding by removing sources of standing water around your house.



These can include:

- ◆ neglected pools
- ◆ plant saucers
- ◆ decorative ponds
- ◆ spare tires
- ◆ boats
- ◆ clogged rain gutters

In the case that you do have decorative ponds and don't want to get rid of them, you can stock these ponds with mosquitofish. These fish feed on mosquito larvae and can significantly reduce the mosquito population near your home. These fish are available free of charge from the County of San Diego, Department of Environmental Health by calling (858) 694-2888.

California Native Plants: A Smart Alternative

By Dan Carney, Landscape Architect, Water Resources Management Program, City of San Diego, Water Department



California native plants can be a smart alternative if you want to have a beautiful garden and save water and money while you're at it. Whether plants are native or not, they need to be watered efficiently. The difference with native plants is that they

use less water than traditional garden landscapes, because they are already growing in their natural habitat and are used to the drier conditions.

Lower water usage can equate to lower utility bills. Additionally, native plants help attract many species, such as birds and insects, which are dependent on the native vegetation.

There is a wide range of native plants,



so choosing the right plants for your garden will depend on location, climate, and soil. Winter is the best time to plant natives. Here are some ways to research, explore and experience the beauty of native plants in San Diego:

- ◆ Visit the Water Conservation Garden at Cuyamaca College, for examples of California native plants and free garden seminars. Log onto www.sandiego.gov/water and click on the "Water Conservation" link.

- ◆ An online resource guide about native & drought tolerant plants is available through the Southern California Metropolitan Water District's website. Log on to <http://www.mwd.dst.ca.us/> and click on "Conservation" link to access the Southern California Heritage Landscape page.
- ◆ The California Native Plant Society promotes the understanding of California's native flora and the importance its preservation. Visit <http://www.cnps.org/> find out about the San Diego Chapter's field trips, meetings, plant sales, and other fun activities.

For more information about Water Conservation, visit www.sandiego.gov/water or call 619.515.3500.

The 2002-2003 NASSCO Environmental Star Awards

Lee Downing - NASSCO Environmental Star Employee



“Mr. Lee Downing, Ship Manager in NASSCO’s Repair Dept., is a continual leader in Environmental Protection. He is always ready to provide solutions in ways to protect the Environment at NASSCO. He currently provides load vessels with identification of solutions to prevent hydroblast sludge from entering the Waste Water Treatment Facility by using a specially designed plastic rig to stop the flow of sludge from entering the sump on the NASSCO Floating Dry-dock. Mr. Downing has taken pride in his job and the protection of the Environment and Mission, Vision, Values & Guiding Principles at NASSCO.”

Fred Flores - NASSCO Environmental Star Employee

“In his role as pier coordinator for the LHA/LHD program, Fred Flores has consistently demonstrated a high regard for environmental concerns. He frequently spends extra effort working with our team members, ship’s force, and subcontractors to ensure that HazMat is handled properly and that all appropriate steps are taken to prevent spills and protect the environment.”



Arturo Valadez - NASSCO Environmental Star Employee



“Arturo Valadez has the responsibility for operating the new blast and primeline situated in the shape-processing bay, which is part of Steel Stage One. He not only consistently meets the housekeeping standards required for his area week after week, he was instrumental in its initial setup. His area of operations has the highest standards of housekeeping, which is a model for our 5S program, and his record keeping is always up-to-date and accurate.”

NASSCO Energy Team - NASSCO Environmental Star Team Award

“NASSCO’s Energy Team manages a \$5.5 million energy cost program through its Energy Action Program. This team has managed to save over \$500,000 to date and is aggressively going after more savings. The Energy Awareness Program, Lighting & Power Control, Leak Tag Program, and Compressor Utilization Programs have proven to be very successful tools in managing the energy costs at NASSCO.”

Members of the NASSCO Energy Team include: Jorge Atondo, Kerry Golding, Jaime Gutierrez, Mary Herman, Christian Lange, Gene Martinelli, Jason Mitchell, Frank Russell, Richard Severs, and Dina Torgerson.



The 2002-2003 NASSCO Environmental Star Awards

SOC 3 Assembly - NASSCO Environmental Star Department Award

"SOC 3 Assembly was the first department to initiate an aluminum can and beverage bottle recycling program. In addition to this, SOC 3 has also worked hard in their recycling program of shop towels. All who participate continue to encourage others to do the same. Finally, this has been a team effort that is evident from team members all the way up to the supervisors. A job well done."



International Paint, Inc. - NASSCO Environmental Star Organization



"Once more, I would like to place our paint supplier, International Paint, into nomination for the Environmental Star Award. I do this for the following reasons:

- The continued support and refinement of JIT (Just In Time), so that only the paints that are needed are at the job location.
- The support of plural component equipment with drums for the continued reduction of 5-gallon containers.
- Their combined effort with the NASSCO Blast, Paint, and General Services Department to test single coat technology, solvent free products, low VOC's, and high solids."

St. Madeleine Sophie's Center NASSCO Environmental Star Organization

"This group is doing a great job in cleaning our parking lots. They pick all the paper, cans, and anything else that should not be there. They have been seen to remove recyclables from the trash as well. I nominate these individuals for an award. They always have a smile on their faces."



Quarterly Air Inspections by the San Diego Air Pollution Control District (SDAPCD)

By Dina Torgerson, Environmental Engineering Specialist, ext. 8764

On August 14th Randy Stegen and Peter Crane, Compliance Inspectors with the San Diego Air Pollution Control District, visited NASSCO for a quarterly site inspection. As in the past, the inspection was unannounced. The inspection lasted all day and covered the entire yard including the following areas/equipment: Paint Pit, Paint storage area, New solvent recycling equipment, fiberglass machine & room, Compressors, Operations on Berth 5/6, PCI's adhesive usage, Cranes 15 & 16, New Shapes Line, and the Wheelabrator's equipment.

During this inspection, the APCD inspectors questioned the New Shapes Line's and the Wheelabrator's operators (Arturo and Moya) and asked them permit compliance related questions. The operators answered all their questions correctly.

On October 1st Randy Stegen, Compliance Inspector with the San Diego Air Pollution Control District, returned to



NASSCO for another surprise quarterly air inspection. The APCD inspector inspected the following: Plasma Cutter Machine 3.1, North Robotic Plasma Cutter equipment, New Shapes Line, Wheelabrator equipment, and the paint cans that were in use at both the New Shapes Line and the Wheelabrator Line.

The inspectors did not find any violations of the air regulations during both of these inspections. This marks the first time in recent history where we have had zero air compliance violations in back-to-back APCD inspections. This is an incredible achievement. Keep up the good work and let's try to make it three in a row!

The next quarterly inspection could occur at anytime within the next three months, which is why it is so important to maintain compliance at all times. One of the most common air compliance violations is Open HazMat Containers, so let's do our best to *Keep A Lid On It!*

Western Regional Pollution Prevention Network Conference

By Kacey Christie, Environmental Engineering Specialist, ext. 7963



NASSCO was invited by the Western Regional Pollution Prevention Network to present at their annual conference during the week of October 13th. The Western Regional Pollution Prevention Network is a cooperative alliance of pollution prevention

(P2) programs throughout the region. The network focuses on regional P2 issues through researching, consolidating, and disseminating P2 information. Members represent Federal, State, local regulatory agencies, businesses, and community groups from Arizona, California, Hawaii, Nevada, Tribal Lands and Trust Territories.

NASSCO's Environmental Engineering Department was invited to prepare presentations for two separate tracks: P2 Business Successes and Environmental Justice. For the P2 Business Successes presentation, I described NASSCO's P2 programs including the skip tub waste segregation, crane re-powering project, shop towel recycling, and reusable steel grit. During the Environmental Justice presentation, I described the work of the Barrio Logan Environmental Justice Pollution Prevention and Compliance Assistance Task Force with the assistance of Ellen

Schulte, of the County of San Diego, Department of Environmental Health, Hazardous Materials Division.

I received a great deal of positive feedback from those in attendance. Many attendees described our pollution prevention programs as "inspiring". Additionally, a representative from the California Environmental Protection Agency, Department of Toxic Substances Control attending the conference, selected NASSCO as just one of three companies that will be featured on their website (www.dtsc.ca.gov/PollutionPrevention/p2program-overview) as a having an exemplary NP2W program. Congratulations to all NASSCO employees, customers, team members, subcontractors, and suppliers that are making Pollution Prevention a Reality!



Ellen Schulte, Pollution Prevention Specialist, County of San Diego, Dept. of Environmental Health, HMD at the San Diego County Booth.

NP2W (National Pollution Prevention Week) 2003

(continued from page 1)

NASSCO Environmental Star Awards – September 17, 2003

Environmental Engineering, for the second consecutive year, sponsored NASSCO's Environmental Star Awards. In August 2003, NASSCO employees nominated those individuals, teams, departments and organizations who demonstrate environmental excellence in their processes, attitudes, and actions.

The Compliance Assurance Committee chose the winners in each category and Mr. Vortmann presented those awards during a Pizza Party Luncheon where all nominees were recognized for their Commitment to Our Environment.

The nominees for the 2002-2003 E-Star Awards were:

E-Star Employee Nominees:

Tony Beale, Kacey Christie, Chris Dlugokecki, Lee Downing, Steve Dykeman, Fred Flores, Wally Futala, Bruce Hagan, Victor Kayler, Jim Sanders, Arturo Valadez, Carl Whitacre, Karen Wilson, and Chuck Zumwalt.



E-Star Department Nominees:

HazMat, Reclamation, Repair, SOC-3, and Transportation.

E-Star Team Nominees:

2002 Chollas Creek Cleanup Committee and NASSCO Energy Team.

E-Star Organization Nominees:

BP, Clean Harbors, International Paint, Inc., Management Alternatives Limited, Merchants, Pacific Ship Repair and Fabrication Inc., SIPCO Services, Inc., and St. Madeleine Sophie's Center.

Marine Coating Pollution Prevention (P2) Workshop – September 19, 2003

In NASSCO's continual effort to promote environmentally friendly business practices to local businesses, NASSCO hosted an NP2W workshop on marine coating operations. The Barrio Logan Environmental Justice P2 and Compliance Assistance Task Force, led by NASSCO, coordinated a multimedia (Air, Land, Water) compliance assistance and P2 workshop for local waterfront painting operations.

The San Diego Air Pollution Control District (SDAPCD), the County of San Diego, Department of Environmental Health, Hazardous Materials Division, NASSCO's Blast, Paint, and General Services Department, and NASSCO's Safety Department all provided presentations during this training session.



Kevin Heiss, SDAPCD Small Business Assistance Specialist

A total of 41 individuals representing 26 companies participated in this workshop which included a variety of marine coating operations and commercial boat shipyards; such as Knight & Carver Yachtcenter, Driscoll Boats, and Hydrodynamics.

(Continued on page 8)

NP2W (National Pollution Prevention Week) 2003

(Continued from page 7)

Chollas Creek Cleanup – September 20, 2003

NASSCO joined with I-LOVE-A-CLEAN-SAN DIEGO to participate in the 19th Annual California Coastal Cleanup Day sponsored by the California Coastal Commission. Some forty-eight volunteers cleaned the Chollas Creek bed area and the surrounding NASSCO parking lots. The total amount of trash, debris and recyclables collected weighed in at 699 pounds.



Joining the NASSCO employees, family and friends were representatives from Fryer-Knowles, Inc., Southwest Marine, Inc., and the San Diego Urban League. Representatives from the following regulatory agencies also participated; the City of San Diego, Storm Water Division, and the County of San Diego, Department of Environmental Health, Hazardous Materials Division.

Moody's Lunch Service donated the food for the BBQ, which included an "I Love A Clean San Diego" cake. The unenviable task of grilling up all the food for all the hungry volunteers went to the family of Martin Espinoza, Jr.



The San Diego County Board of Supervisors declared 9/20/03 **National Steel & Shipbuilding Company Day** in San Diego County in recognition of our commitment to protect Chollas Creek and San Diego Bay through our annual participation in Coastal Clean up Day and Operation Clean Sweep.

This newsletter is generated by the NASSCO Environmental Engineering staff and is intended for the enjoyment of its readers by providing information on a variety of environmental topics. Information and/or opinions expressed herein reflect the knowledge and opinions of the author and not necessarily the entire Environmental Engineering Department, NASSCO or General Dynamics.

If you are interested in submitting an article of environmental interest, or would like us to address one of your questions/concerns, please contact us at Environmental Engineering, Mail Stop 22A.

Editor: Kacey Christie Layout: Chad Haza

Contributors: Hugo Bermudez, Dan Carney, John McFadden, Dina Torgerson, Ken Wright