



Environmental Times

A newsletter for Coast Guard environmental management and compliance

Cape May Training Center Balances Training and the Environment

Reprinted in part from "Coast Guard to Balance Training Mission, Environment" written by Richard Degener, The Press of Atlantic City, September 18, 2002

The U.S. Coast Guard can train more than 5,000 recruits a year and still protect the environment at its base on the east side of Cape May, NJ. That is the main finding of a report done voluntarily by the Coast Guard in cooperation with the U.S. Fish and Wildlife Service and the New Jersey Division of Fish and Wildlife. The report calls for a number of improvements to the environment at the 300-acre Coast Guard Training Center Cape May. These include planting native species, replacing an old fuel-oil boiler with natural gas, reducing disturbances on a beach where three endangered species of birds nest, and allowing some lawns to grow back into fields.

Chris Hajduk, Chief of the Coast Guard's Environmental Protection and Safety Section, said the report shows the two main goals at the base can be met. "The goal is to protect the environment and not affect the training of our recruits. We're doing as much as we possibly can," Hajduk said.

The report, prepared by Engineering Environmental Management Inc. of Fairfax, Va., looks ahead five years, beginning with federal fiscal year 2003 and ending in fiscal year 2007.

A law called the Sikes Act requires military bases under the U.S. Department of Defense to conduct

these environmental assessments, Hajduk explained. Because the Coast Guard is under the U.S. Department of Transportation in peacetime, it did not have to do the report. The Coast Guard is the first agency under the DOT to do such an assessment.

Environmental groups such as the Sierra Club have been filing lawsuits to force the military to be better stewards of the environment, and especially to designate critical habitat for endangered species, and this has hurt training programs at some bases.

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Environmental Management Systems (EMS): Coming Down the Road

Submitted by T.J. Granito, G-SEC-3

Heads up, a relatively new environmental requirement is coming down the road and should be knocking at your door soon. But not to worry, if you're like many Coast Guard units, you probably already have the majority of the core elements for an EMS in place. The EMS is a mechanism that helps you organize and integrate environmental issues with operational activities and mission requirements.

One of the requirements of Executive Order (EO) 13148 "Greening the Government through Leadership in Environmental Management" is that all "appropriate facilities" shall implement an Environmental Management System (EMS) by Dec 2005. We all know that the Coast Guard is committed to a sound and efficient environmental management program. EMSs are an excellent tool to achieve compliance and satisfy environmental requirements related to our multi-mission activities. G-SEC-3 will soon be providing EMS policy, guidance, and direction based primarily on the ISO (Standards of International Organization) 14001 concept and framework of integrated environmental management.

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We're trying to be proactive. The plan is to get in front of this critical habitat designation. It also creates a template for how we'll manage our resources for the next five years," Hajduk said.

The conclusions of the report result in a "Finding of No Significant Impact," also known as a FONSI, and this allows the training programs to continue.

The report recommends all future plantings be native trees, shrubs, and plants. Additionally, plants that require less water will be sought.

Another goal is to reduce air pollution by replacing a centralized heating system that uses fuel oil and releases about 1,000 tons of air emissions per year. Hajduk said natural gas would reduce emissions as much as 99 percent (*See article below.*). The report also lists the beach area as a distinct "Land Use Management Unit," or LMU. The 11-acre beachfront hosts three birds that are endangered in New Jersey, including the piping plover, least tern and black skimmer.

While the Sikes Act has forced cleanups at some military bases, Hajduk said the Coast Guard has already cleaned up oil contamination at the base.

The report lists "no loss in training function" as the first goal, but after that it sets down seven environmental goals. They include minimize habitat fragmentation; protect native species and discourage non-native exotic species; protect rare and ecologically important species, unique, or sensitive environments; maintain or mimic natural processes; protect genetic diversity; rehabilitate ecosystems; monitor biodiversity.

The report shows there is a diverse habitat at the base with 46 acres of forest, 27 acres of wetlands, 11 acres of beach and more than 100 acres of open space that is either mowed or used for outdoor recreation.

The report is currently under review by state and federal environmental officials.

For more information contact: Chris Hajduk, Chief, Environmental Protection and Safety Section, Cape May, NJ at (609) 898-6889.

The Clean Air Act and the Cape May Central Heating Plant

Submitted by Chris Hajduk, TRACEN Cape May

The U. S. Coast Guard Training Center (TRACEN) Cape May, NJ currently has a Title V operating permit under the Clean air Act. TRACEN is considered a major facility due to the amounts of air pollutants it is capable of emitting. TRACEN has the capability of emitting over 1,000 tons of air emissions and actually emits close to 100 tons. The Central Heating Plant is the primary source of the pollutants. It has four large boilers and burns #6 fuel oil. Being a Title V facility has considerable regulatory oversight from Federal and State environmental agencies. The operating permit has over 250 measurable compliance issues attached to it.

In an effort to minimize the regulatory burden and to replace the aging Central Heating Plant and steam distribution infrastructure, a construction project has been recently awarded by FD&CC LANT. The "Steam Plant De-centralization" project will install individual natural gas fired boilers and domestic hot water heaters in all buildings currently served by the Central Heating Plant. Construction is to start the summer of 2002 and continue through 2003.

Upon completion of the project, TRACEN will reduce its potential to emit by 95% and actual emissions by 90%. Completion of the project will also significantly reduce the regulatory burden associated with being a Title V facility.

Environmental Management Systems: Coming Down the Road

(Continued from page 1)

The following list identifies the 53 units that have been determined to be the most “appropriate facilities” for the initial thrust of the EMS program. Selection is based on the types of mission maintenance activities, industrial processes performed, and potential for significant environmental impact. The underlined facilities have established EMS programs or are in the planning, developmental or implementation stages.

1. A/S Atlantic City
2. A/S Barbers Point
3. A/S Borinquen
4. A/S Cape Cod (NPT* Member)
5. A/S Clearwater
6. A/S Miami
7. A/S Port Angeles
8. A/S Sacramento
9. A/S Sitka
10. A/S Traverse City
11. Activities NY
12. Base Key West
13. Base Mayport
14. Base Mobile
15. Base San Juan
16. GRU Astoria
17. GRU Charleston
18. GRU Corpus Christi
19. GRU Fort Macon
20. GRU Galveston
21. GRU Humboldt Bay
22. GRU Long Island Sound
23. GRU Lower Mississippi Rv
24. GRU Milwaukee
25. GRU Moriches
26. GRU North Bend
27. GRU Philadelphia
28. GRU Portland
29. GRU San Diego
30. GRU San Francisco
31. GRU Sandy Hook
32. GRU Sault Ste. Marie
33. GRU Southwest Harbor
34. GRU St. Petersburg
35. GRU Woods Hole
36. ISC Alameda
37. ISC Boston
38. ISC Honolulu
39. ISC Ketchikan
40. ISC Kodiak
41. ISC Miami
42. ISC New Orleans
43. ISC Portsmouth
44. ISC San Pedro
45. ISC Seattle
46. ISD South Portland
47. S/C Elizabeth City
48. Academy
49. ATC Mobile
50. RTC Yorktown
51. TRACEN Cape May
52. TRACEN Petaluma
53. CG YARD – ISO 14001 Certified

Although EMS seems to be a new requirement, it is really a fine-tuning and integrating of a number of existing environmental programs at your facilities, so it shouldn't be a heavy lift for most facilities listed. In fact a number of these Coast Guard units have already begun to develop and successfully implement EMSs. Other units are also encouraged to establish mini-EMSs, as this is the most effective and efficient means of managing environmental issues. For more information please log on to EPA's EMS website www.epa.gov/ems or contact Mr. T.J. Granito, G-SEC-3 at (202) 267-1941 or e-mail to tgranito@comdt.uscg.mil

*NPT- National PerformanceTrack Program (EPA)

Health Effects of Diesel Engine Exhaust

*Submitted by Hari B. Bindal, P. E.,
Engineering Logistics Center, Coast Guard
Yard*

Background

A diesel engine has been a vital workhorse powering many large trucks, buses, farm, railroad, construction equipment, and marine engines, including the Coast Guard boats. It is expected that the use of diesel engines will increase due to the superior performance characteristics of the engine. Diesel engine exhaust, however, contains large quantities of harmful pollutants in a complex mixture of gases and particulates. Human exposure to this exhaust comes from both on-road as well as from the non-road uses of the diesel engine.

EPA started regulating the gaseous emissions from the heavy-duty highway uses of diesel engines in the 1970s and particles in the 1980s. The standards issued in 2000 will bring about large reductions in exhaust emissions for model year 2007 heavy-duty engines used in trucks, buses and other on-road uses. EPA has also developed similar stringent regulations for diesel engine used in marine environment, which will be in effect starting January 2004. (*Continued on page 3*)

EPA is also partnering with state and local agencies to retrofit older, dirtier, engines to make them run cleaner and to develop model programs to reduce emissions from idling engines. In addition, EPA and local authorities are working to ensure early introduction of effective technologies for particulate matter control and low sulfur fuel where possible in advance of the 2007 requirements. Today, at least one engine manufacturer is producing new engines with particulate traps that when coupled with low-sulfur fuel, meet 2007 particulate emission levels. The EPA expects significant environmental and public health benefits as the environmental performance of diesel engines and diesel fuels improve.

The particulate fraction of diesel exhaust and its composition is very important in understanding the health issues and the assessment. The amount of exhaust particulate from on-road engines has been decreasing in recent years and is expected to decrease

90% from today's levels with the engines designed to meet the 2007 regulations. The composition of the exhaust particulate matter and the gases also will change

Health Effects

According to a recent EPA publication 'Health Assessment Document for Diesel Engine Exhaust', the health long-term (i.e., chronic) exposure to diesel exhaust is likely to pose a lung cancer hazard, as well as damage the lung in other ways depending on exposure. These conclusions are based on exposure to exhaust from diesel engines built prior to the mid-1990s. Short-term (i.e., acute) exposures can cause transient irritation and inflammatory symptoms, although the nature and extent of these symptoms are highly variable across the population. The publication states that evidence is emerging that diesel exhaust exacerbates existing allergies and asthma symptoms. This publication recognizes that diesel engine exhaust emissions, as a mixture of many constituents, also contribute to ambient concentrations of several criteria air pollutants including nitrogen oxides, sulfur oxides, fine particles, as well as other hazardous air pollutants.

The document is prepared by the National Center for Environmental Assessment (NCEA), EPA's Office of Research and Development. The draft contents of this publication were used as the scientific basis for developing EPA's regulation of heavy-duty highway engines in December 2000. This publication also provides understanding of the public health implications of exposure to diesel engine exhaust and the public health benefits of taking regulatory action to control diesel emissions. EPA believes that the assessment conclusions in this Health Assessment Document apply to the general use of diesels today; however, as cleaner diesel engines replace a substantial number of existing engines, the general applicability of the conclusions in this document will need to be reevaluated.

For further detail visit NCEA's Web site <http://www.epa.gov/ncea>. A limited number of CDs and paper copies of the Health Assessment Document for Diesel Engine Exhaust (EPA/600/8-90/057F, May 2002) are available from EPA's National Service Center for Environmental Publications (NSCEP). To obtain copies, please contact NSCEP by telephone (1-800-490-9198 or 513-489-8190) or by mail (PO Box 42419, Cincinnati, OH 45242-0419).

Coast Guard Decommissioning of Historic 180-Foot Fleet and Disposal of National Historic Landmark, *FIR*

Submitted by Kebby Kelley, G-SEC-3

By the 1990s, many of the Coast Guard's vessels that were built in the 1940s were 50 years old or greater. It soon became apparent that replacing the equipment, including entire fleets of buoy tenders, would be necessary to maintain the Coast Guard's missions to a level of adequacy and excellence. It also became apparent that many of the vessels were considered historic under the National Historic Preservation Act (NHPA) because of their age (50 years or greater) and their participation in the maritime history of the nation. This was a unique situation in the Coast Guard where an entire fleet of vessels built in the 40s could be considered eligible for the National Register of Historic Places. The Coast Guard, and, specifically, the Environmental Management Division (EMD) in the Office of Civil Engineering, developed the Vessel Disposal Environmental Planning Team (VDEPT) to solve this complex challenge that crossed multiple Coast Guard program areas.

Several Coast Guard programs had a stake in the decommissioning and/or the disposal of these vessels. The Office of Cutter Management (G-OCU) managed active cutter assets and determined when to take a vessel out of service. The Office of Financial Management (G-CFM) controlled the disposal process for the vessels as personal property. The Director for International Affairs and Foreign Policy (G-CI) managed the Foreign Military Sales Program to transfer unused Coast Guard vessels to foreign governments. The EMD managed the Vessel Disposal Environmental Planning Project, coordinating with various customers and stakeholders and providing advice and assistance on meeting appropriate environmental requirements. The Office of Law Enforcement (G-OPL) provided information on the possible environmental effects of the decommissioning and transfers on protected living marine resources. The Historian in the Office of Public Affairs (G-IPA) provided expertise in Coast Guard maritime history and artifact preservation. The Office of Naval Engineering (G-SEN) provided a history of the vessels' physical modifications and expertise in removal of hazardous materials in preparing the vessels for transfer. The Office of

Environmental Law (G-LEL) advised on meeting the uncertain legal requirements to clean up the vessels prior to transfer. The Office of General Law (G-LGL) advised on the legal requirements of transfer.

The disposal of such a large number of historic vessels constituted a unique situation. There were no other similar experiences in the Federal government to use for guidance. The Maritime Administration within the Department of Transportation (DOT), the Department of the Navy and the National Oceanographic and Atmospheric Administration were working through similar issues. Therefore, the VDEPT had to develop its own unique plan for compliance without the benefit of existing templates within the Coast Guard or from other Federal agencies. The VDEPT decided to take a programmatic approach to meeting environmental requirements. Under the direction of the EMD staff, the group prepared a programmatic environmental assessment (PEA) under the National Environmental Policy Act (NEPA) and a Programmatic Agreement (PA) under the National Historic Preservation Act (NHPA) to ensure efficient and timely compliance with these two key environmental laws and other related environmental mandates. This programmatic approach allowed the Coast Guard to save time and money by ensuring that separate redundant analyses under NEPA and NHPA would not have to be prepared for individual vessels when it was not merited. Additionally, the Coast Guard worked closely with the State Historic Preservation Officers (SHPOs) and the Advisory Council on Historic Preservation (ACHP) to develop a workable process. With the ACHP's help the Coast Guard was able to have the programmatic agreement ratified concurrently by states rather than consecutively. The States assisted the Coast Guard by helping to determine how to treat vessels in a regulation designed for immobile structures like buildings (e.g., they helped resolve which State had lead jurisdiction on a mobile historic resource such as a 180 vessel.) The VDEPT decided to partner with the National Park Service (NPS) to document the 180-foot fleet with photographs and historic narratives rather than use an expensive contractor. The EMD developed an Memorandum of Agreement between the Coast Guard and the NPS that allowed the Coast Guard to obtain the historic documentation at low cost and high quality.

Even though preservation covenants that protect a historic vessel in perpetuity are not possible for personnel property such as the 180-foot cutters, and though the Coast Guard does not control the majority of the Federal personnel property disposal process,

the VDEPT attempted to protect one of the 180s, the USCGC Sundew, in a separate MOA by agreeing in that MOA to act as a broker between the appropriate SHPO and any proposed donee interested in obtaining the USCGC Sundew. The donee would be encouraged to sign an MOA with the SHPO protecting the historic nature of the vessel in perpetuity. Such an MOA would require that the donee negotiate another MOA with similar protections with a potential new owner if he decides to transfer ownership of the vessel at any point in the future. While there are limitations to this mitigation (e.g., the Coast Guard can implement the MOA only if the disposal process allows the Coast Guard to exercise its own donation authority, the SHPO must agree to be the enforcer of protections on the vessel, and the donee must except the conditions for protecting the historicity of the vessel), the VDEPT came up with a unique and creative idea to try and ensure that one 180-foot vessel would have a greater possibility of having its historic nature preserved.

The Coast Guard, 15 states, and the public now have the history of the 180s and the lighthouse tender, FIR, preserved for future reference and education as part of America's maritime heritage.

News You Can Use

Questions about Storm Water Sewer Systems You Were Afraid to Ask

Submitted by Mark Zill, G-SEC-3

What is a municipal separate storm water sewer system (MS4) and how do MS4s relate to storm water permitting?

According to 40 CFR 122.26(b), an MS4 is a conveyance or a system of conveyances --including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches man-made channels, and storm drains that are:

- Owned or operated by the state or local authority;
- Designed or used for collecting or conveying storm water;
- Not designed to accept wastewater; and
- Not part of publicly owned treatment works.

Most permits for storm water discharges require applicants to notify their MS4 operators that the applicant intends to discharge storm water to MS4 conveyances. Applicants that do not discharge storm

water to an MS4 do not need to file this notice with the MS4 operator. Specific general or individual permit language identifies those applications that must notify their MS4s of storm water discharges to their conveyances or systems. HQ (COMDT G-SEC-3) is working on guidance for the field.

How are municipal separate storm water sewer systems (MS4s) classified?

According to 40 CFR 122.26(b), MS4s are generally classified according to the population that the system serves. There are large, medium, and small MS4s in the United States. Large MS4s are those systems that are located in incorporated places with populations of 250,000 or more. Medium MS4s are systems that are located in incorporated places with populations of more than 100,000 but less than 250,000. Small MS4s are systems that are located in places with populations less than 100,000. Population size can be determined from the last decennial census (2000).

Currently, only large and medium MS4s are subject to storm water (NPDES) regulations. However, beginning in 2003, the regulations will apply to small MS4s as well. Military facilities are included under small MS4 provisions.

How does the implementation of Phase II regulations impact my small municipal separate storm sewer system (MS4)?

With the promulgation of Phase II storm water regulations in December 1999, small MS4s may be required to apply for a permit for storm water discharges by March 10, 2003. EPA has established criteria in 40 CFR 122.32 to help operators of small MS4s determine if a permit is required.

Small MS4s must apply for permit coverage if they are either located in an urban area (40 CFR 122.32(a)(1)) or if the EPA or the NPDES permitting authority designates the small MS4 as requiring storm water permit coverage (122.32(a)(2)).

EPA has provided for waivers from applying and obtaining coverage under a storm water discharge permit for select small MS4s that qualify under certain conditions.

Resource Conservation Challenge

EPA kicked off its "Resource Conservation Challenge", a campaign encouraging Americans to boost the national recycling rate, and curb the generation of 30 harmful chemicals normally found in hazardous waste. The Challenge comprises 68 projects whose hallmarks are flexibility, partnership

and innovation. EPA also announced 12 new innovative projects that will test creative approaches to waste minimization, energy recovery, recycling and land revitalization. EPA will support this initiative by establishing partnerships and alliances; providing training, tools and technology assistance for businesses, governments and citizen groups. To learn more about the Challenge please visit: www.epa.gov/epaoswer/osw/conserv/index.htm

Greening Government: "Green Meetings"

EPA's Environmentally Preferable Purchasing program has developed tools and a website for "greening" meetings and travel. The site is designed for meeting planners and attendees, as well as hosts and suppliers of meeting services. "Green meetings" help meet planning needs while minimizing negative impacts on the environment. To learn about ways to make conferences "greener", please visit EPA's Green Meeting site at: www.epa.gov/oppt/greenmeetings

EPA Finalizes Plans to Reduce Pollution from Non-Road Vehicles

The U.S. EPA adopted new standards to reduce pollutants from several groups of non-road engines including large industrial engines, snowmobiles and all-terrain vehicles. When fully implemented, these standards will remove more than two million tons of pollution each year, including more than one million tons of hydrocarbons and nitrogen oxides and 1.3 million tons of carbon monoxide, equivalent to removing the pollution from more than 32 million cars every year. To view the rule and supporting documents, please visit: www.epa.gov/otaq/cleanrec.htm

Clean Water Act Effluent Guidelines Program Plan

On August 27, 2002, the U.S. EPA published its Effluent Guidelines Program Plan for 2002 and 2003, which describes the agency's ongoing effluent guidelines development efforts, and which took effect Sept. 26, 2002.

Under the Clean Water Act (CWA), EPA establishes national regulations, termed "effluent guidelines" to reduce pollutant discharges from industrial facilities to surface waters and publicly owned treatment works. Federal facilities involved in aquatic animal production, electroplating and metal finishing, and builders and developers engaged in construction, development and redevelopment are potentially affected by the forthcoming guidelines. The rule and

other documents can be viewed at: www.epa.gov/waterscience/guide/plan.html

National Compliance Assistance Providers Forum

EPA, with co-sponsor Texas Commission on Environmental Quality, will hold its annual National Compliance Assistance Providers Forum Dec. 3-6 at the Adam's Mark Hotel in San Antonio, Texas. The Forum, themed "Optimizing Resources for Environmental Results", will include panels, workshops, training, and information sessions on a variety of topics including: partnering with trade associations, lenders, insurers and industry leaders; pollution prevention, environmental management systems; Internet-based tools; the role of compliance assistance providers in Homeland security; and marketing and measuring program effectiveness. The Forum is open to federal, state, local, and tribal compliance assistance providers, as well as industry, trade associations, consultants, academia and nonprofits. There is no fee to attend, but registration is required by Dec. 2. Reservations for government rate hotel rooms must be made by Nov. 4. To view a tentative agenda, or register, please visit: www.mng-ltd.com/cfide/website/ncapf02/index1.htm

Environmental Extras

Hello from G-SEC's New Environmental Intern

My name is Christine Degliumberto. For three months, I will be interning in the Environmental Management Division (G-SEC-3) under Mr. Ed Wandelt. I am a senior at Indiana University working towards my Bachelor of Science and Public Affairs in environmental management. Since I began work in September, Dr. Ken Malmberg, my mentor, and the whole SEC team have exposed me to various sides of the Coast Guard from attending meetings on topics such as brownfields, ozone depleting substance, Executive Order 13148, and Environmental Management Board to riding in the new Homeland Security rescue boat to working on historical lighthouse nominations; and even having a hand in the America Recycles Day preparations, I am seeing all sides of the Coast Guard's environmental management tactics and am piecing them all together. (And I've only been here a month!) I look forward to the next two months ahead and thank everyone around the building for making me feel so welcome.

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<p><i>In support of our environmental mission and goals for a paperless office, if you are currently receiving a paper copy of the publication and are capable of receiving it electronically, please notify Martin Nguyen.</i></p>		

The Environmental times is a quarterly publication designed to keep Coast Guard personnel apprised of environmental issues impacting Coast Guard facilities, operations, planning, and policy making. We encourage you to share your stories and successes as environmental stewards.