



NAVAL BASE, CHARLESTON Environmental Cleanup Program

This fact sheet is one of a series to inform interested citizens about the environmental investigations and cleanup actions at Naval Base, Charleston. Distribution is coordinated through the Public Affairs Office at Naval Facilities Engineering Command, Southern Division, (843) 820-5771.

PROJECT UPDATE 2002

At the beginning of 1993, Naval Base Charleston was a vibrant, active naval facility with thousands of civilian and military personnel working in all corners of the 2800-acre base. 1993 was the year the base was tapped for closure, and activity began to slow down. In 1996, the base was officially closed. For the next few years, most of the activity on the base was devoted to changing the property back into an economic engine - cleaning up the land and courting new businesses. In the last three years, the property has become busier and busier as new businesses and industries have begun moving onto the former naval facility. Community members watching the progress have seen employment rise as old buildings, once used for supporting the Navy and its Atlantic fleet, became used again for manufacturing, private repair for large and small naval vessels, offices and even relocated government agencies.

Work to evaluate the environmental conditions of the base began soon after the closure was announced. Environmental restoration is required before any property can be transferred. After extensive studying and recent cleanup activity, much of the base has received a clean bill of health.

A large part of the former Navy base is now being used for non-military activities. Companies that manufacture electric motors, make industrial components out of steel and package large goods for export have all found a part of the base that suit their needs. New government agencies, like the Border Patrol's training group, have moved into old Navy office and training complexes. Some of the old Navy facilities are being used again for their same purposes: old shipyards have been reborn to accommodate large and small boat repair, and old workshops house new and different shops, providing employment.

Other parts of the property have been transferred completely to the local Redevelopment Authority, charged with finding new uses for the former Navy base. All of the property is being prepared for transfer so, bit by bit, the entire facility will leave the Navy's hands and become revenue-generating businesses that hire local workers and support the local economy.

UPDATE ON PROPERTY TRANSFER

In 1995, the Navy began leasing small parcels of land and buildings to the local Redevelopment Authority. These were the first pieces of property made available for local redevelopment. All together, the Navy and the Redevelopment Authority have leased out over 80% of lease-able facilities. This means that approximately 6 million square feet of space are being used again, employing approximately 5400 people.

The first property was transferred to the local Redevelopment Authority in mid-2000. A second major area of land and facilities was transferred in 2001. So far, 495 acres have been transferred. The first portion of the base - 207 acres - included lands with no environmental issues, or environmental issues that were easily addressed. The second parcel - 288 acres - included buildings and property that required more direct action.

Other parcels of land will be put together in a third large block of property. The sites must be evaluated and considered environmentally suitable for transfer (no health-related environmental issues remain, such as when environmental cleanup work is complete), before they can be transferred. Once the environmental issues are resolved, the property can be transferred to the Redevelopment Authority. Property ownership is the key for redevelopment and a precursor for investment by the private sector.

It is important to note that, once property is transferred, environmental conditions may still require the Navy to maintain cleanup or monitoring systems on the property for several years. In these cases, the Navy will retain the ability to enter the property when needed to fulfill its environmental obligations. However, property will never be transferred if there are environmental conditions that could pose undue risk to workers at the site.

REUSE ACTIVITIES

Nearly 400 buildings have been leased for positive economic uses. This equates to approximately 6 million square feet of 'recycled' property, some of which the Redevelopment Authority owns through transfer and some of which is under long-term lease from the Navy until environmental activities can be completed. There are approximately 4200 people employed in these buildings: 2600 people working for private companies and 1600 working for the federal government. The Redevelopment Authority projects that reuse activities will eventually employ more than 7,000 workers.

In every case where private or public groups have moved onto the base with employees, the Navy has evaluated and reviewed the site for environmental hazards. State and federal environmental agencies must agree that environmental conditions are not going to be damaging to the health of workers or occupants in those facilities.

ENVIRONMENTAL STUDIES

The entire naval base was divided into ten geographic "zones," listed A through K, based on the former uses of the property. A separate zone (Zone J) was designated for the water bodies like creeks, ponds and even sewer systems. Zones were approached separately, and some investigations are more complete than others:

Zone	% Complete*	Zone	% Complete*
A	95	F	95
B	100	G	90
C	100	H	95
D	100	I	100
E	85	J	75
		K	95

* March 2002 estimates

ENVIRONMENTAL CLEANUP ACTIVITIES

The Navy is using innovative cleanup strategies at the Naval Base Complex in an effort to reduce costs. Contaminated soil can be addressed using technologies that help natural processes (bioremediation). Some contaminants can be removed from groundwater by simply heating the groundwater to near boiling. Cleanup to levels for the planned reuse of the property ensures cost effective cleanup and quicker turnover for community reuse.

Here are some examples of these new technologies:

- *Bioremediation* - This is a technique that uses the contaminant-eating behavior of natural bacteria to eliminate contamination where it sits. Scientists have developed ways of providing oxygen to the bacteria under the ground surface. Feeding oxygen to the bacteria enables to bacteria to multiply as long as there is food to eat. Some kinds of contaminants (like petroleum and volatile organic compounds) are food to bacteria. Bacteria will eat as much food (contamination) as they can as long as oxygen is available.
- *Electrical Resistance Heating/Soil Vapor Extraction* - This technology heats up the soil and “boils” contaminants out. This only works for certain kinds of chemicals, but it can be relatively fast and effective. As the chemicals vaporize, they are removed from the soil using an elaborate vacuum system and cleaned from the air in a filter. This is being used at a former dry-cleaning facility where groundwater contamination could not be effectively treated in other ways.

Many sites on the former base have been cleaned up.

- All underground storage tanks have been removed, and over half of these sites may not require further action.

COMMUNITY INTERACTION

From the beginning, the Navy has made information and staff accessible to the community. There are several instances where community members have brought issues before the Navy, usually through the established Restoration Advisory Board (see last section). In each case, the Navy has attempted to work with the community members to resolve the issues within the Navy’s legal authority.

Building 225: In 2000, environmental investigations pointed to an old dry-cleaning building where groundwater (water underneath the ground) had been impacted by dry-cleaning chemicals. During further study, contractors found that the area of groundwater with chemicals extended under another nearby building. The other building was the new home of several mothers and their children. The Navy and its contractors tested air in and around the residential building and found that there was no problem for those families. However, to clean up the groundwater contamination, the families had to move. The Navy worked with the residential program, extending their lease two times, to give them time to relocate the families. Once the families were moved, the groundwater cleanup was able to begin.

Chicora Tank Farm: In 1995, the Navy was going to move forward with closing a 23-acre site where six very large fuel storage tanks were located. Navy policy stated that, if no local entity was interested in the property, they would close the tanks in place without demolishing them. This option would have left six very large mounds of concrete, making the site very unattractive for reuse. Local community members approached the Navy and, working together, they found that the Charleston County School Board was interested in the property. Because of this cooperative work, the Navy’s plans for the site changed. The Navy eventually demolished the tanks and created an almost flat surface at the site. This arrangement is much more attractive for future development.

As part of the project's commitment to the local economy, Navy contractors have reached into the local community to find companies that can help with the work. In the last two years alone, over a dozen companies with local connections have taken part in the environmental work at the base.

PUBLIC PARTICIPATION/PUBLIC COMMENT

The Navy established a Restoration Advisory Board (RAB) in 1993 to work with the Navy on environmental investigation and restoration activities. The RAB is a volunteer organization, jointly staffed by community members and official representatives from the U.S. Navy, U.S. Environmental Protection Agency, S.C. Department of Health and Environmental Control, and other agencies. The RAB meets regularly (currently every second month) to discuss the environmental progress at the former base. All meetings are announced to the media and open to the public. Comments and questions from the public are always encouraged.

At times, documents in the process are made available for public review and comment. These documents are announced in the *Charleston Post and Courier* along with instructions on how to submit comments.

For more information on the Naval Base Charleston environmental program or the Restoration Advisory Board, please contact Mr. Jim Beltz, Public Affairs Officer, Naval Facilities Engineering Command, Southern Division - in Charleston at (843) 820-5771.

Reports and other documents relating to the environmental program are available for public viewing at the Project Team House, 1895 Avenue F in North Charleston, on the Naval Base Complex. Please call (843) 743-2062 or 743-2063 to schedule a time to view the documents.

**PUBLIC AFFAIRS OFFICE
NAVAL FACILITIES ENGINEERING COMMAND
SOUTHERN DIVISION
P.O. BOX 190010
N. CHARLESTON, SC 29419-9010**

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