

**COMMANDER, NAVY REGION SOUTHWEST**  
**2003 SECNAV ENVIRONMENTAL RESTORATION INDIVIDUAL**  
**NOMINATION**  
**TERESA MORLEY**

**BACKGROUND:** Theresa Morley, Environmental Engineer, Commander, Navy Region Southwest

**POSITION DESCRIPTION:** Theresa is responsible for the investigation and remediation of over 80 Leaking Underground Storage Tank (LUST) sites and 35 Installation Restoration (IR) sites. She coordinates environmental clean up activities at six critical Navy bases, including Naval Station San Diego (NAVSTA), Naval SUBASE Point Loma, Fleet Antisubmarine Warfare Center (FASW), Navy Fuel Farm Point Loma, Fleet Combat Training Center Pacific, and Space and Warfare Command and manages the salary and support Installation Restoration



Theresa Morley

budget for regional commands. As the regional IR coordinator, Theresa facilitates quarterly Project Status Meetings with regulators, contractors, and other Navy personnel to review project status, address issues and generate proactive solutions to ensure quality project completion on time and within budget as well as numerous internal meetings to keep the program on track. Theresa is the Restoration Advisory Board (RAB) co-chair for Naval Station San Diego and has developed a nationally recognized Community Relations Program. Until recently, Theresa stood in as the IR Program Coordinator and RAB co-chair for Naval Weapons Station Detachment, Concord (NWS Concord) for 18 months.

**AWARDS AND SERVICES:** Theresa was recently awarded the highly prestigious Navy Civilian Meritorious Service Medal for her outstanding contributions to the IR program. She was also given a Certificate of Excellence by the Concord RAB Members after the 18 months of hard work and dedication she displayed in bringing the RAB to a functional status.

**ACCOMPLISHMENTS:** Ms. Morley is naturally gifted for interpersonal relations. An excellent communicator and listener, she has gained the respect of all she comes in contact with. Always courteous, her pleasant and positive personality greatly enhances interpersonal communications. Her professionalism is exemplary.

Lessening impacts to base operations and supporting the military mission has been important to the IR program. This attention to operations has made for successful working relations between impacted tenants, public works staff and the IR team. A current example of this is when the 23-acre Site 2 was divided into subsites to maintain

military readiness by only working on one of the seven subsites at a time. This left the rest of the Mole Pier free for base use. After the remedial action at Subsite 2a, a memorial for POWs was built and a vegetative strip to capture storm water runoff from the newly created forces afloat parking lot was planted around the site.

**Accelerating Cleanup/Reducing Risk to Human Health and the Environment:**

Theresa has increased the regulatory closure percentage rate for contaminated sites from 13% to 55% within 18 months by expediting contractor services and using in-house forces, thereby ensuring environmental compliance, favorable relations with regulators, and positive community perception of the Navy. IR Site 13, the Sandblast Grit Storage Area is a success story that involved using the Public Works Center (PWC) Environmental in-house forces to do a majority of the work. The geologists at PWC were able to complete a Removal Site Evaluation work plan, field sampling and an RSE report for \$200,000. The same work under a CLEAN contract would have been considerably more. The CLEAN contractor did team with PWC to complete the risk assessment. Additionally, by working with the regulators, the team was able to negotiate cleanout of the vault, the only contaminated portion of the site, as tank maintenance under County regulations. This saved millions of dollars by eliminating the expensive and time-consuming California Environmental Quality Act (CEQA) process and the numerous work plans and reports that would have been required for a removal action for 250 cubic yards under CERCLA.

Another example of using in-house forces to streamline work and save money was at FASW Site 5. Theresa worked with the regulators to be able to excavate contamination found at the site during the trenching portion of the investigation phase. Due to this agreement, 7,500 cubic yards of material were excavated and treated in less than three months at a cost of \$550,000 and the site is now scheduled for closure. Under the normal CERCLA timeline, this site would have taken around four to five years and would have run into the millions. The regulators agree with Theresa that addressing the problem and reducing risk is sometimes more important than paperwork. Also, PWC in-house forces have completed the remediation of a 35,000 gallon plume in seven months and at a cost of less than \$600K, an enormous savings when compared to a recent to remediate a 13,000 gallon plume that took 2 1/2 years at a cost of nearly \$3M.

**Stakeholder Involvement:** Theresa works closely with her colleagues at the Naval Facilities Engineering Field Division, Southwest Division; PWC; contractors; and base personnel involved with, or affected by, the IRP. The Commanding Officer of NAVSTA actively participates in the program and attends most RAB meetings. In addition, the NAVSTA Public Works Officer takes an active role with the team. The IR professionals manage each challenge as a team.

Theresa pursues a cleanup program that uses innovative technologies and community involvement as its cornerstones. NAVSTA has mailed semi-annual newsletters (updates) and fact sheets in English and Spanish to more than 300 nearby residents and businesses and 1,000 fact sheets and newsletters were sent home with students of the nearby Kimball, Perkins, and National City Elementary Schools. The latest update, Fact Sheet 9,

was printed in its entirety in the local newspaper. Theresa worked with a woman-owned, small business to develop a middle and high school curriculum that was approved by the San Diego Unified School District to teach children about the Navy's remediation program. Techniques promoted by Theresa for use in increasing public participation have been incorporated into tri-service teaching modules.

A huge achievement for Theresa has been the success with the NWS Concord RAB. Theresa took over as co-chair for this group when it was dysfunctional, litigious and unruly. There was no trust between the public and the Navy or the regulators. The meetings usually lasted four hours and would dissolve into shouting matches and walk-outs. Reasonable RAB members were threatening to quit and potential members were refusing to join due to the hostile meeting environment. Theresa came on board and due to her patience, honesty, integrity, conscientious effort and persistence, was able to bring the RAB under control, increase membership and establish trust with the community in 18 months. The RPMs, public, and regulators were extremely vocal in their gratitude and presented Theresa with a Certificate of Excellence and party when she turned the RAB over to the person hired to take her place. Some of the RAB member still call her today as they consider her a trusted friend and documents are moving forward again at the base.

Another notable achievement in the community relations program is the outreach effort at the Murphy Canyon Housing area, IR Site 6. During the 5-year review of IR Site 6, an Unexploded Ordnance (UXO) site, NAVSTA discovered that although the private community was familiar with the work that had been done and the dangers of UXO, the military community was not. Due to high turnover in the housing area, many families were not aware they were living on a UXO site. The Navy, in conjunction with the Army Corps, developed an informational pamphlet to inform the residents about the UXO and proper notification procedures in case they discovered any. The pamphlet included refrigerator magnets, a data sheet for adults and a *Larry the Lizard* coloring book for children. In keeping with the environmental compliance theme, the crayons were non-toxic! Also, a contractor data sheet was prepared and copies were given to the public works contracting staff to pass on to any contractors digging in the area.

**Regulatory Coordination:** Theresa has worked hard with regulators to reduce report review delays and expenses by presenting key report recommendations prior to the review cycle and to analyze and resolve potential regulator concerns. Over-the-shoulder review sessions expedited the review process and involved regulatory agency representatives, Navy personnel, and related contractors. Theresa initiated a storyboard concept to familiarize regulators with the document by posting key portions of the overall document around the room and giving a presentation of the main points of the report or work plan. This allowed regulators to ask questions while the information, Navy, and contractors were present. Following this, the regulators took their reports and returned comments quickly, usually within 30 calendar days thus shortening the review period by a few months. This innovative review process also resulted in fewer written comments that required formal responses, which saved time and money. Another time saving measure was to send reports and responses to comments to the regulators ahead of a Program Meeting, then discuss the reports at the meeting. Another partnering measure

has been to bring a stenographer to team meetings to transcribe exactly what was said instead of having the contractor prepare meeting minutes. This has helped to clarify exactly what was said so there are no misunderstandings later. It also ensures commitment to maintain review schedules and highlights action items.

Theresa created a groundwater monitoring well maintenance database in conjunction with PWC Environmental. There are over 400 wells on the six bases that are in the GIS formatted database along with well compliance details such as boring logs, date last inspected, well casing details and photographs showing well locations and integrity. The County now uses the well compliance program as an example for military and private sector sites to follow and does not inspect the base's wells any longer.

Knowing the site history at NAVSTA Site 1, Theresa decided to go directly to the RI stage, saving millions in sampling, work plans and reports. During team review of the Draft RI Work Plan, SPAWAR initiated a preliminary diver inspection and video camera survey of the quay wall adjacent to the site. This survey demonstrated that no structural failure of the quay wall was observed, and that a healthy and diverse aquatic community of plants and animals was observed on the wall, within feet of the IR site. The video was well received by agency partners, so much so that agency partners requested copies of the video for presentation to staff not affiliated with this specific project.

**Cost Avoidance:** At NAVSTA Site 8 the bioslurping system had been working well for three years and had removed approximately 15,000 gallons of JP5 and diesel. However, the system was too slow for the amount of fuel present so Theresa used the SCAPS rig to characterize the 14-acre site with 80 borings in five days. Since the site's main contaminant was petroleum, she received regulator concurrence to move the site out of the CERCLA program. The petroleum exclusion allowed NAVSTA to execute a removal action under the auspices of the State Regional Water Quality Control Board, saving time and money. The PWC team was able to remove 35,000 gallons of free product and 8,000 cubic yards of contaminated soil in three weeks.

Theresa has worked with research companies to implement numerous innovative technologies in the IRP. A new ultrasonic sensor was developed for the free product recovery system at the 32<sup>nd</sup> Street Gas Station to accommodate tidal fluctuations up to 1.6 feet. The sensor measures the tide and turns the recovery system on at low tide. This allows the system to recover and treat only fuel and dissolved product instead of thousands of gallons of groundwater. Another innovative technology is the addition of Oxygen Reducing Compound (ORC) for the high benzene concentrations in the 28<sup>th</sup> Street Gas Station plume. The benzene levels in seven wells have dropped to half the former levels in two monitoring quarters. Lastly, the Subsurface Characterization and Analysis Penetrometer System (SCAPS) team is used often to expedite site characterization. SCAPS can perform approximately 30 real-time borings in one day as compared to 10 borings per day using standard investigation methods. Additionally, since the data is in real time you don't have to wait for sample results to come back from the lab to determine where additional investigation is required.

**Other Benefits:** Initiated Geographic Information System (GIS) to map IRP data, natural resources, storm drains, USTs and other data for use in assessing impact of IR cleanups. The system also catalogues the coordinates and condition of all monitoring wells on base. This system ties into RSIMS and RSIP link, the two GIS based systems that facilities uses for planning.