

## Refrigerant Projects:

### **Client: Naval Facilities Engineering Command Southwest Division**

Dr. Schwerdtfeger served as PM for eighteen ozone depleting substance (ODS) surveys and elimination plans over a 6-year period. Dr. Schwerdtfeger directed projects at these installations or served as senior reviewer:

Marine Corps Base (MCB) Camp Pendleton  
Marine Corps Air Station (MCAS) Camp Pendleton  
MCAS Miramar  
MCAS El Toro  
Naval Air Station (NAS) North Island  
Naval Aviation Depot (NADEP) San Diego  
Shore Immediate Maintenance Activity (SIMA) San Diego  
MCAS Yuma  
Naval Air Facility (NAF) El Centro  
NAS Fallon  
Naval Outlying Field (NOLF) Imperial Beach  
Naval Amphibious Base (NAB) Coronado  
Naval Auxiliary Landing Field (NALF) San Clemente Island  
Naval Postgraduate School (NPS) Monterey  
Survival, Evasion, Resistance and Escape (SERE) Camp Warner Springs  
Marine Corps Logistics Base (MCLB) Barstow  
Marine Corps Air Ground Combat Center (MCAGCC) Twentynine Palms  
Cannon Air Defense Complex

The Navy and Marine Corps installations were under an aggressive schedule to comply with requirements from the Secretary of the Navy to eliminate Class I ODSs by December 31, 1999. Dr. Schwerdtfeger surveyed thousands of heating, ventilation, air conditioning and refrigeration (HVAC&R) and total flooding fire suppressions systems to determine the use of Class I and II ODSs in tactical and non-tactical operations. She also evaluated the use of ODSs in aerosol sprays, paints, coating and degreasing chemicals under a fugitive source category called "miscellaneous material use".

As part of the ODS Elimination Plan, Dr. Schwerdtfeger identified four options for each piece of equipment based on its age, condition, and refrigerant: run as-is, retrofit, replace or remove from service. She developed cost estimates for military construction (Milcon) budget requests using Form 1391 to justify each expenditure.

Dr. Schwerdtfeger also conducted a compliance assessment of each installation to compare current activities against those required in 40 CFR 82, Protection of Stratospheric Ozone. She verified that properly trained individuals and equipment were being used, as well as SNAP approved alternatives.

### **Client: Marine Corps Installations West**

Dr. Schwerdtfeger assessed the status of eight bases within MCIWEST to prepare a compliance plan and equipment inventory to satisfy new requirements promulgated by the California Air Resources Board as the Regulation for the Management of High GWP Refrigerants. This project included development of an equipment database and web-based tool to track releases and leak testing activities by facility personnel.

### **Client: EM-Assist**

Served as the subject matter expert for creation of a computer-based training course for the users of the Refrigerant Management Webtool. This course will be posted on MCI West's Learning Management Portal and provide training to all personnel who have responsibility for refrigeration management.