

Sustainability Project Descriptions:

Client: Marine Corps Base (MCB) Camp Pendleton

Dr. Schwerdtfeger served as PM to evaluate the base's progress towards the DOD's Measures of Merit. (This was the DOD's policy for its first sustainability program that contained numerical goals.) The key performance indices (KPIs) addressed: hazardous waste generation, release of toxic chemicals, disposal and recycling of non-hazardous waste, and acquisition of alternatively fueled vehicles. Dr. Schwerdtfeger collected data to quantify and assess the ongoing practices at the base. She demonstrated for the first time that the base was exceeding the waste reduction goals mandated by the DOD. MCB Camp Pendleton has received numerous awards from the Secretary of Defense for its environmental stewardship.

Client: Marine Corps Installations West (MCI WEST)

Dr. Schwerdtfeger completed a Gap Analysis for Executive Order (EO) 13423: Strengthening Federal Environmental, Energy and Transportation Management. This was the federal government's first policy that was issued in 2007 that contains metrics on sustainability. The EO covers: use of alternative vehicles, petroleum conservation, use of alternative fuels, energy efficiency, GHGs, renewable power, building performance, water conservation, procurement of environmentally-sound goods, electronics management (recycling and Energy Star), environmental mgmt systems.

For the magazine, Environmental Management:

Dr. Schwerdtfeger completed an inter-industry benchmark survey to determine the use of information systems in tracking and reporting sustainability metrics. She created a web-based survey and collected results on-line from companies over a two-month period. The respondents were responsible for over 44,000 sites in the United States and Canada, with annual revenues ranging from \$231 million to \$179 billion. Forty-eight percent of the respondents were on the Fortune 1000 list of companies. Based on the results of this study, Dr. Schwerdtfeger published "A Benchmark Study of Current Practices and Tools for Sustainability" in *Environmental Management*, a publication of the Air & Waste Management Association in October 2008.

For UC Irvine:

As an instructor in the Sustainability Leadership Certificate Program, Dr. Schwerdtfeger, created an online course for University of California Irvine called "Sustainability Reporting: Drivers, Protocols and Quantitative Methods" which was taught in the Summer 2009.

For Northrop Corporation:

As the first step in Northrop Corporation's sustainability program, Dr. Schwerdtfeger developed a comprehensive waste management program which advocated a proactive 90% reduction of hazardous waste and toxic air emissions within 6 years. She created a policy statement and corporate-wide goals which were signed by the CEO and approved by the Board of Directors. She prepared a detailed financial analysis and regulatory/business justification which convinced Northrop's management of the benefits of sustainable business practices. She also developed a simple reporting protocol which allowed the tracking of results on a quarterly basis. Within 6 years, Northrop had exceeded its goals and received numerous state and federal awards for its innovation and environmental stewardship.

The second step in Northrop Corporation's sustainability program was to institute paper recycling measures for the corporate office and track non-hazardous waste recycling efforts in California. Dr. Schwerdtfeger worked with the public relations department to create a colorful coffee mug with the logo, "Northrop is Proud to Recycle, Reuse and Reduce". She also developed an employee communication plan with a series of articles and pictures in the *Northrop News* featuring the CEO, herself and other employees involved in these sustainable business practices.