

## **Greenhouse Gas Inventory and Compliance Project Descriptions**

### **Client: ExxonMobil and XTO**

Dr. Schwerdtfeger assisted with the creation of data collection systems and tools for over 30,000 onshore oil and natural gas production and processing facilities to support reporting to EPA under Subpart W of the GHG mandatory reporting rule. Her role has been to: provide senior level and quality assurance review of the data collection forms and equations; and assist with preparation of the GHG Management Plans.

### **Client: EPA's Laboratories**

For the labs located in Research Triangle Park, Dr. Schwerdtfeger evaluated the use of laboratory chemicals, research gases and refrigerants with high global warming potential. She quantified the use of each chemical for reporting under EO 13514.

### **Client: Jerry Leigh Apparel (JLA)**

Dr. Schwerdtfeger quantified and reported Scope 1 and 2 GHG emissions for submittal to the Carbon Disclosure Project to assist with meeting the requirements of Walmart's Supplier Sustainability Program. Calculated GHG intensities going back to 2008 as a function of annual units sold and number of employees in order to assess overall performance and identify GHG reductions.

### **Client: Hexacomb Corporation**

Dr. Schwerdtfeger completed a greenhouse gas (GHG) assessment to verify that the facility falls below the 25,000 metric tonne threshold for reporting under Assembly Bill (AB) 32. Dr. Schwerdtfeger calculated carbon emissions from stationary combustion sources and indirect electricity usage using emission factors and draft regulations proposed by the California Air Resources Board (CARB).

### **Client: Marine Corps Installations West (MCIWEST)**

Dr. Schwerdtfeger prepared a comprehensive GHG inventory and strategic plan for eight bases in the Southwest United States. The objective was to create a stream-lined technical approach for quantifying GHG emissions and determine whether reporting is required under AB 32 or EPA's MRR. This project also identified applicable early action measures, future GHG reductions and previous GHG reductions. She created a GHG Inventory Management Plan for the Las Pulgas Landfill. Dr. Schwerdtfeger co-presented her findings on this project with MCIWEST personnel at the 2009 Federal Environmental Symposium.

### **Client: Plains All American Pipeline**

Dr. Schwerdtfeger served as a team member to assess the GHG impacts of a new pipeline and AST construction project. Dr. Schwerdtfeger identified the GHG assumptions and oversaw the completion of the detailed calculations. She also performed an analysis to determine the current regulatory requirements and upcoming actions from the Governor's Office of Planning and Research (OPR) under Senate Bill 97 pertaining to the California Environmental Quality Act (CEQA) and establishing GHG significance levels.

### **Client: Confidential**

Under attorney-client privilege, Dr. Schwerdtfeger identified several options to offset the carbon emissions from a large new construction project in the Southern California area. She evaluated the cost, technical feasibility, public relations impact and risks of each option. Detailed analyses were completed for: an urban tree planting program, photovoltaic systems, and purchase of carbon offsets through a broker.

### **Client: Port of Los Angeles**

Dr. Schwerdtfeger provided third party senior reviewer on the San Pedro Waterfront project to review GHG estimates, assumptions and mitigation measures in the Draft Environmental Impact Report (DEIR). This project is

being proposed by the Port of Los Angeles to improve the public waterfront and open space areas, expand the cruise ship facilities and operations, expand commercial development and improve local transportation and parking. The construction is expected to take 7 years.

**Client: Confidential**

Dr. Schwerdtfeger served as the regulatory analyst for a confidential company to participate in CARB workshops on GHG reductions and AB32 implementation. Dr. Schwerdtfeger listened to the regulatory proposals and opinions, feedback and questions from other participants, summarizes the regulatory actions and technical issues, and develops a summary report to identify potential impacts to the client's operations and future plans.

**Client: Department of the Interior**

For DOI's Office of Environmental Policy and Compliance (OEPC), evaluated the GHG emissions from fugitive sources including landfills, refrigeration systems, SF<sub>6</sub> and wastewater treatment from nine bureaus and wrote portions of the GHG Inventory Management Plan for:

- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Ocean Energy Management, Regulation and Enforcement
- US Fish & Wildlife Service
- National Business Center
- National Park Service
- Office of Surface Mining, Reclamation and Enforcement
- Bureau of Reclamation
- US Geological Survey