ENVIRONMENTAL STUDIES PROGRAM: Ongoing Studies

Region: Atlantic

Planning Area(s): North, Mid, and South Atlantic

Title: Synthesis, Analysis, and Integration of Air Quality and Meteorological Data for the Atlantic Region (M11PD00238)

BOEM Cost: $320,827 **Period of Performance:** FY 2011-2013

Conducting Organization(s): ICF-Incorporated, LLC

BOEM Contact: Angel McCoy

Description:
Background: Federal and private organizations have collections of meteorological, air quality and emissions data for the Atlantic Region. These data can be used to support various air quality related data analyses and modeling activities. A data synthesis study can assemble all available data from a variety of resources into a single dataset so that an integrated analysis of the data can be conducted and a baseline for the Atlantic Region can be drawn. This study is to be similar to GOMR studies; 2009-055, 2009-056, 2009-057 and 2009-058.

Objectives: The objective of this analysis is to prepare an integrated dataset that can be used to provide the basis for an improved understanding of the relationships between meteorology, air quality and emissions in the Atlantic region; and to support future regulatory data and modeling analyses related to ozone, fine particulate matter and regional haze. The data synthesis study will also include some basic analysis of the data to ensure the integrity and usability of the dataset, and to provide new information about meteorological and air quality conditions in the Atlantic region.

Importance to BOEM: The Atlantic region is lacking baseline data for the purposes of environmental analysis, modeling, state regulatory compliance, and siting.

Current Status: Awarded on September 23, 2011. The contractor has hosted multiple webinars over the past year to demonstrate the capabilities of the Atlantic Region Air Quality Database (ARAQDB) which contains both meteorological and air quality data and analysis tools. The contractor has also provided Offshore and Coastal Dispersion version 5 (OCD5) files so that offshore air emissions can be modeled for the Atlantic Region. The contractor has begun statistical analysis using the Classification and Regression Tree (CART) method to compile summary tables indicating the

meteorological conditions and parameter ranges for various pollutants. Next, the contractor will refine ARAQDB by including county-level emissions. They will also complete the calculation of meteorologically adjusted air quality trends and prepare additional data analysis products. The project manager expects the study to be completed early.

Final Report Due: September 22, 2013

Publications: None.

Affiliated Web Sites: None.

Revised Date: December 17, 2012

ESPIS: Environmental Studies Program Information System

All *completed* ESP studies can be found here:
http://www.data.boem.gov/homepg/data_center/other/espis/espisfront.asp