# A Pilot Study for Coastal Ambient Air Quality Monitoring in the Gulf of Mexico Region: Progress Update

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## Abstract

BOEM's activities authorized under the Outer Continental Shelf Lands Act (OCSLA) require activities to comply with the National Ambient Air Quality Standards (NAAQS) to the extent that activities significantly affect the air quality of any State. Most monitoring stations are in urban areas with a high population density and high emitting onshore point sources. Thus, BOEM wants to conduct a pilot study to assess the need to expand the spatial and temporal monitoring coverage in the coastal areas of the Gulf States. Additional coastal air quality monitoring stations may help BOEM gain a better understanding of offshore air pollutant transport and its impacts and help in evaluating modeling predictions and satellite observations. A mobile monitoring station was built and placed at Grand Chenier, Louisiana. This station is currently collecting trace level carbon monoxide (CO) measurements by infrared radiation absorbance, nitrogen oxides ($NO_x$) by chemiluminescence, nitrogen dioxide ($NO_2$) by chemiluminescence with a photolytic converter, photolysis rate of nitrogen dioxide ($jNO_2$) by filter radiometer, ozone ($O_3$) by UV absorption, and total reactive nitrogen ($NO_y$) by chemiluminescence with a heated molybdenum converter. Also, the station is collecting wind speed (ultrasonic three-dimensional), relative humidity, barometric pressure, and differential temperature (at 2 and 10 meters) measurements. The station's monitoring is ongoing. This presentation provides an overview of the study and its progress.