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Proposed FY13 Physical Sciences Studies

Discipline	Title
AQ	NAAQS Exemption Level Study
AQ	Year 2014 Gulf-wide Emissions Inventory Study
AQ	Enhancing the Capability of a New Meteorological Model for Air Quality and Other BOEM Applications in the Gulf of Mexico
PO	Coral Reef Ocean Acidification Sentinel Site in the Flower Garden Banks National Marine Sanctuary
PO	Testing Chang and Oey's (2011) Gulf of Mexico Oscillator Hypothesis: A Field Program

Offshore Air Quality

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NAAQS Exemption Level

- Background
  - Industry's exploratory drilling or producing plans include data to estimates air emissions as required by OCS Lands Act.
  - These emissions estimates are compared to an exemption level to determine if the plan has impacts to onshore air quality and is therefore approved or denied.
  - This exemption level must assure that the plan's emissions would have no impact to onshore NAAQS standards.
  - Presently the exemption level is calculated using 33.3xD, where D is the distance to shoreline in statue miles. If a plan's emissions are under this exemption level, the plan is approved.

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NAAQS Exemption Level

- **Relevance to BOEM**
  - To ensure BOEM is complying with the updated standards by using an appropriate exemption level
- **Objectives**
  - To verify the existing exemption level or to determine a new one if necessary to be used by BOEM in its review of submitted plans to ensure that sources do not impact the onshore air quality.

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NAAQS Exemption Level

- **Methods**
  - The contractor shall perform several modeling episodes using an approved USEPA model from “Guideline on Air Quality Models” to verify or calculate a new exemption level in the Gulf based on distance to shoreline.
- **Products**
  - Modeling Files
  - Report

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NAAQS Exemption Level

- **Cost Breakdown**
  - ~$80K to run a model for different scenarios and meteorological conditions
  - ~$40K to set-up the scenarios, gathering meteorological data, and writing the report
  - ~$20K to update our current model to run in new Windows
  - Total Cost-~$140