March 16, 2017

Via Electronic Mail to BOEMFOIA@boem.gov

BOEM FOIA Officer
Bureau of Ocean Energy Management
45600 Woodland Road
Sterling, VA 20166

RE: Freedom of Information Act Request
Air Quality Modeling in the Gulf of Mexico Region (Study no. GM-14-01)

Dear FOIA Officer,

One of the Bureau of Ocean Energy Management's ("BOEM") Environmental Studies Program's current studies is the "Air Quality Modeling in the Gulf of Mexico Region" (Study No. GM-14-01)[1]. Attached hereto is the study's monthly status letter for the period October 1 – October 28, 2016. Section 5.0 of the attached status letter contains Table 1. GOMR AQ Modeling Study Task Deliverable Summary and Schedule ("Table 1"). Pursuant to the Freedom of Information Act, 5 U.S.C.§ 552, and implementing regulations promulgated by the Department of the Interior at 43 C.F.R. Part 2, as amended, the Offshore Operators Committee (OOC) and the National Ocean Industries Association (NOIA) hereby request any and all documents delivered to BOEM as set forth in the "Deliverable to BOEM or Internal Project Milestone" column in Table 1, including:

- Post-Award Meeting
  - Material for Post-Award Meeting due September 24, 2014
  - Follow-up Meeting Notes due October 10, 2014
- Task 1: Science Review Group (SRG)
  - Finalize SRG member list with input from BOEM due October 14, 2014
- Task 2: Modeling Protocol for Dispersion Modeling
  - Final memorandum assessing existing WRF datasets due December 23, 2014
  - Final WRF modeling protocol due March 17, 2015
  - Final Exemption Level Formula Modeling Protocol due April 7, 2016
  - Equivalency Demonstration – draft or final document if available
- Task 3: Modeling Protocol for Photochemical Modeling

[1] The study summary document is available at https://www.boem.gov/GM-14-01/.

    - Draft CAMx/CMAQ modeling protocol to support impact analyses due February 20, 2015
    - Final CAMx/CMAQ modeling protocol to support impact analyses, if available
    - Draft CAMx/CMAQ modeling protocol to support exemption level analyses due October 6, 2015
- Task 4: Air Quality Modeling
    - Base year emissions inventory final protocol due December 15, 2015
    - Receive 5-year planning information from BOEM due July 1, 2015
    - Future year emissions inventory scenario final protocol due March 11, 2016
    - Final WRF files and memorandum documenting the configuration due June 1, 2015
    - Emission inventory preparation (SMOKE) for impact analyses: Base year modeling due August 1, 2015 – January 15, 2016
    - Emission inventory preparation (SMOKE) for impact analyses: Future year scenario modeling due December 30, 2015 – March 29, 2016
    - CAMx/CMAQ modeling to support impact analyses: Base year modeling and model performance evaluation due November 1, 2015 – March 1, 2016
    - CAMx/CMAQ modeling to support impact analyses: Future year scenario modeling due April 1-29, 2016
    - AERMOD modeling to support exemption level formulas due June 1, 2015 – May 15, 2016
    - CALPUFF modeling to support exemption level formulas due June 1, 2015 – May 15, 2016
    - CAMx/CMAQ modeling to support exemption level formulas due December 3, 2015 – May 15, 2016
- Task 5: Assessing Current and Determining New Exemption Level Formulas
    - Process AERMOD, CALPUFF and photochemical modeling results due May 1 – September 15, 2016
    - Assess existing exemption level formulas due May 15 – October 18, 2016
    - Memo presenting results and recommendations due October 18, 2016
    - Develop new exemption level formulas due November 18 – December 19, 2016
    - Present results of analyses in draft report due December 19, 2016
    - Present results of analyses in proof report due January 26, 2017
- Task 6: Cumulative and Visibility Impacts Analysis
    - Post-processing to support impact analyses due December 23, 2015 – July 1, 2016
    - Present results of analyses in draft report due July 29, 2016
    - Present results of analyses in revised draft report due August 31, 2016
- Task 7: Report Preparation and Final Deliverables
    - Draft modeling files due January 3, 2017
    - Draft project report due January 3, 2017
    - Cumulative and Visibility Report due May 6, 2016
    - WRF Model Performance Evaluation due November 1, 2016
    - Photochemical Model Performance Evaluation due January 3, 2017
    - Draft technical summary due January 3, 2017

In your response, please include the documents requested and any attachments, addenda, or appendices associated with them.

These documents are being requested for commercial use. OOC and NOIA agree to pay all fees chargeable under the regulations, 43 C.F.R. §§ 2.37, *et seq*., for searching, reviewing, and duplicating the requested documents. However, if such fees exceed, or are anticipated to exceed, $3,000.00, please contact Greg

Southworth at greg@offshoreoperators.com before you proceed any further with responding to this request.

Please notify me in writing at the above address (preferably by e-mail) of the determination as to whether this request will be granted. If you deny any or all of this request, please cite each specific exemption you believe justifies your refusal to release the information and notify me of the appeal procedures available under law. Any reasonably segregable portion of a responsive record must be provided after redaction of any allegedly exempt material. 5 U.S.C. § 552(b). For any document that is redacted or withheld on the basis that the document is privileged and/or confidential or on the basis that the document is covered by an exemption to disclosure set forth in the FOIA, we request that you provide an index that generally describes the document redacted or withheld and sets forth the basis for the assertion of privilege or application of the FOIA exemption.

If possible, please provide responsive records in electronic format and send to Greg Southworth, Associate Director, Offshore Operators Committee. If you have any questions about this request, please contact me at greg@offshoreoperators.com. Thank you in advance for your time and prompt cooperation.

Respectfully submitted,

Greg Southworth
Associate Director
Offshore Operators Committee

Randall Luhti
President
National Ocean Industries Association

Attachment

All information taken directly from Table 1. GOMR AQ Modeling Study Task Deliverable Summary and Schedule as detailed in each monthly status letter from ERG to BOEM.

0341.00.001

November 11, 2016

Ms. Holli Ensz
Bureau of Ocean Energy Management
Division of Environmental Studies
45600 Woodland Road, VAM-OEP
Sterling, VA 20166

Dear Holli:

Enclosed is the monthly status letter for the period of October 1 – October 28, 2016 for BOEM Contract No. M14PC00007 entitled "*Air Quality Modeling in the Gulf of Mexico Region*."

If you have any questions or comments on the report, please call me at (919) 468-7860.

Sincerely,

Darcy Wilson
ERG Project Manager

DW\jt

Enclosures

cc: Paige Shin, BSEE Contracting Officer
Chief, Division of Environmental Sciences
Kelly Loomis, ERG/Chantilly
Project File M14PC00007 MPR Oct 2016.doc

Project Title:	Air Quality Modeling in the Gulf of Mexico Region
Reporting Period:	October 1 – October 28, 2016
BOEM Contract No.	M14PC00007
ERG Contract No.	0341.00.001
ERG Program Manager: Phone Number:	Darcy Wilson 919-468-7860
BOEM Contracting Officer's Representative:	Holli Ensz
Phone Number:	703-787-1629
Prepared for:	Bureau of Ocean Energy Management Division of Environmental Studies 45600 Woodland Road, VAM-OEP Sterling, VA 20166
Prepared by:	Eastern Research Group, Inc. 1600 Perimeter Park Drive, Suite 200 Morrisville, North Carolina 27560
Date Submitted to BOEM:	November 11, 2016

1.0 INTRODUCTION

The Bureau of Ocean Energy Management (BOEM) holds the oil and natural gas leasing rights for platforms in the Gulf of Mexico Outer Continental Shelf (OCS) west of 87.5 degrees. The Outer Continental Shelf Lands Act requires that BOEM comply with the USEPA's National Ambient Air Quality Standards to the extent that OCS offshore oil and gas exploration, development, and production sources do not significantly affect the onshore air quality of any state. The Gulf of Mexico Region (GOMR) OCS area of possible influence includes the states of Texas, Louisiana, Mississippi, Alabama, and Florida.

In this study, photochemical and dispersion modeling will be conducted for the GOMR to assess the OCS oil and gas development pre- and post-lease impacts to the states. The information will be used by BOEM pre-lease in the National Environmental Protection Act (NEPA) Environmental Impact Statement (EIS) cumulative analysis, and post-lease in the exemption level threshold analysis. This study also encompasses all facets associated with the necessary modeling, including development of the meteorological and emissions data sets.

2.0 PROGRESS

In this reporting period, under Task 2 (Modeling Protocol for Dispersion Modeling), the ERG team (Environ) continued preparing the Model Justification document. The goal of this subtask is to replace the use of the Offshore and Coastal Dispersion (OCD) model with modeled meteorology (WRF), processed with MMIF, to provide direct meteorological inputs to the AERMOD dispersion model.

Under Task 5 (Assessing Current and Determining New Exemption Level Formulas), ERG began to populate the final modeling input files with information from the emissions database (including lat/lon coordinates and stack parameters) and receptor information for each location. Alpine also transfered the 5-year WRF data to ERG.

3.0 WORK TO BE PERFORMED IN THE NEXT PERIOD

Under Task 2, Environ will submit the Model Justification document to BOEM and the

USEPA for review and discussion. Under Task 5, ERG will finalize the modeling input files, test the files, and initiate modeling.

4.0 PROBLEMS AND SITUATIONAL FACTORS

None at this time.

5.0 PROJECT SCHEDULE

Table 1. GOMR AQ Modeling Study Task Deliverable Summary and Schedule[a]

Task/Subtask	Deliverable to BOEM or Internal Project Milestone	Deliverable or Milestone Date
Contract Award/Start Date	Notification of award	August 26, 2014
Post-Award Meeting		
Provide material for Post-Award Meeting	Deliverable to BOEM	September 24, 2014
Post-Award meeting	Deliverable to BOEM	October 1, 2014
Follow up meeting notes	Deliverable to BOEM	October 10, 2014
Monthly status reports	Deliverable to BOEM	October 10, 2014; continue every month
Task 1: Science Review Group (SRG)		
Submit proposed list of SRG members	RFP element	May 14, 2014
Finalize SRG member list with input from BOEM	BOEM approves after Post-Award Meeting	October 14, 2014
Task 2: Modeling Protocol for Dispersion Modeling		
Draft memorandum assessing existing WRF datasets	Deliverable to BOEM	November 14, 2014
Final memorandum assessing existing WRF datasets	Deliverable to BOEM	December 23, 2014
Draft WRF modeling protocol	Deliverable to BOEM	January 5, 2015
30 day comment period	Deliverable to BOEM	January 5 – January 25, 2015
Final WRF modeling protocol	Deliverable to BOEM	March 17, 2015
Develop new WRF dataset	Deliverable to BOEM	March 17 – June 1, 2015
Draft exemption level formula dispersion modeling protocol	Deliverable to BOEM	October 6, 2015
30 day comment period	BOEM review period	October 6 – November 6, 2015
Final Exemption Level Formula Modeling Protocol	Deliverable to BOEM	April 7, 2016
30 day comment period	BOEM review period	May 9, 2016

Table 1. GOMR AQ Modeling Study Task Deliverable Summary and Schedule[a]

Task/Subtask	Deliverable to BOEM or Internal Project Milestone	Deliverable or Milestone Date
Equivalency Demonstration	Internal project activity	TBD
Task 3: Modeling Protocol for Photochemical Modeling		
Draft CAMx/CMAQ modeling protocol to support impact analyses	Deliverable to BOEM	February 20, 2015
30 day comment period	BOEM review period	February 20 – March 20, 2015
Final CAMx/CMAQ modeling protocol to support impact analyses	Deliverable to BOEM	TBD
Draft CAMx/CMAQ modeling protocol to support exemption level analyses	Deliverable to BOEM	October 6, 2015
Task 4: Air Quality Modeling		
Base year emissions inventory draft protocol	Deliverable to BOEM	June 12, 2015
Comment period	BOEM/SRG review period	June 12 – June 19, 2015
Base year emissions inventory final protocol	Deliverable to BOEM	December 15, 2015
Base year emissions preparation/QA	Internal project activity	December 1, 2014 – October 1, 2015
Receive 5-year planning information from BOEM	Deliverable from BOEM	July 1, 2015
Future year emissions inventory scenario draft protocol amendment	Deliverable to BOEM	December 11, 2015
30 day comment period	BOEM review period	December 11, 2015 – January 11, 2016
Future year emissions inventory scenario final protocol	Deliverable to BOEM	March 11, 2016
Future year emissions inventory scenario preparation/QA	Internal project activity	July 1 – December 30, 2015
Final WRF files and memorandum documenting the configuration	Deliverable to BOEM	June 1, 2015
Emission inventory preparation (SMOKE) for impact analyses: Base year modeling	Internal project activity	August 1, 2015 – January 15, 2016

Table 1. GOMR AQ Modeling Study Task Deliverable Summary and Schedule[a]

Task/Subtask	Deliverable to BOEM or Internal Project Milestone	Deliverable or Milestone Date
Emission inventory preparation (SMOKE) for impact analyses: Future year scenario modeling	Internal project activity	December 30, 2015 – March 29, 2016
CAMx/CMAQ modeling to support impact analyses: Base year modeling and model performance evaluation	Internal project activity	November 1, 2015 – March 1, 2016
CAMx/CMAQ modeling to support impact analyses: Future year scenario modeling	Internal project activity	April 1 – April 29, 2016
AERMOD modeling to support exemption level formulas	Internal project activity	June 1, 2015 – May 15, 2016
CALPUFF modeling to support exemption level formulas	Internal project activity	June 1, 2015 – May 15, 2016
CAMx/CMAQ modeling to support exemption level formulas	Internal project activity	December 3, 2015 – May 15, 2016
Task 5: Assessing Current and Determining New Exemption Level Formulas		
Process AERMOD, CALPUFF and photochemical modeling results	Internal project activity	May 1 – September 15, 2016
Assess existing exemption level formulas	Internal project activity	May 15 – October 18, 2016
Memo presenting results and recommendations	Deliverable to BOEM	October 18, 2016
30 day comment period	BOEM review period	October 18 – November 18, 2016
Develop new exemption level formulas	Internal project activity	November 18 – December 19, 2016
Present results of analyses in draft report	Deliverable to BOEM	December 19, 2016
30 day comment period	BOEM review period	December 19, 2016 – January 19, 2017
Present results of analyses in proof report	Deliverable to BOEM	January 26, 2017
30 day comment period	BOEM review period	January 26 – February 26, 2017
Present results of analyses in final report	Deliverable to BOEM	March 12, 2017

Table 1. GOMR AQ Modeling Study Task Deliverable Summary and Schedule[a]

Task/Subtask	Deliverable to BOEM or Internal Project Milestone	Deliverable or Milestone Date
Task 6: Cumulative and Visibility Impacts Analysis		
Post-processing to support impact analyses	Internal project activity	December 3, 2015 – July 1, 2016
Present results of analyses in draft report	Deliverable to BOEM	July 29, 2016
15 day comment period	BOEM review period	July 29 – August 12, 2016
Present results of analyses in revised draft report	Deliverable to BOEM	August 31, 2016
Task 7: Report Preparation and Final Deliverables		
Draft modeling files	Deliverable to BOEM	January 3, 2017
Draft project report	Deliverable to BOEM	January 3, 2017
Cumulative and Visibility Report	Deliverable to BOEM	May 6, 2016
WRF Model Performance Evaluation	Deliverable to BOEM	November 1, 2016
Photochemical Model Performance Evaluation	Deliverable to BOEM	January 3, 2017
Exemption Level Formula Report	Deliverable to BOEM	February 12, 2017
Draft technical summary		
30 day comment period	BOEM review period	January 3 – February 2, 2017
Proof project report	Deliverable to BOEM	March 4, 2017
Proof technical summary	Deliverable to BOEM	March 4, 2017
30 day comment period	BOEM review period	March 4 – April 3, 2017
Final report (review version) and modeling files	Deliverable to BOEM	April 29, 2017
Final project report, plus:	Deliverable to BOEM	June 23, 2017
Final technical summary	Deliverable to BOEM	
PowerPoint presentation	Deliverable to BOEM	
Report cover graphics	Deliverable to BOEM	
Letter discussing how all BOEM and SRG report comments were addressed	Deliverable to BOEM	
Camera-ready master copy of final report	Deliverable to BOEM	
Computer file of final report and technical summary	Deliverable to BOEM	

Table 1. GOMR AQ Modeling Study Task Deliverable Summary and Schedule[a]

Task/Subtask	Deliverable to BOEM or Internal Project Milestone	Deliverable or Milestone Date
Final emissions databases and modeling files	Deliverable to BOEM	June 23, 2017
Meeting and Presentations		
Presentation summary and slides for Information Transfer Meeting	Deliverable to BOEM	TBD
Information Transfer Meeting	Presentation	TBD
Summary of Information Transfer Meeting Discussion Notes	Deliverable to BOEM	TBD
Journal Articles and Correspondence		
Draft peer-reviewed journal articles	Deliverable to BOEM	Within contract period, and at least 2 weeks before submission to journal
Reprints of journal article	Deliverable to BOEM	When published
Correspondence (e.g., e-mails, letters, etc.)	Deliverable to BOEM	On-going

[a] Changes to the project schedule will be communicated to BOEM as soon as ERG becomes aware of them.