

Attachment B
Fiscal Year 2011 Work Plan

**Fiscal Year 2011 Rider 8 Grantee Preliminary Work Plan
Effective Date through August 31, 2011**

Task 1: Procure Technical Services

The Performing Party shall use the City of El Paso procurement process to procure the services of a technical consultant to assist with implementation of the work plan. The consultant's tasks shall include all tasks the Performing Party deems necessary to fulfill the obligations of the work plan approved by the TCEQ including, but not limited to, emissions inventory development, photochemical model development, examination of local ambient monitoring data, and analysis of local control strategies and other projects.

Deliverable: The Performing Party will procure the services of a consultant to implement emissions inventory tasks, modeling tasks, and control strategy analysis. The Performing Party shall provide the TCEQ with notification when it has procured technical assistance.

Deliverable Date: As soon as practicable.

Cost: \$5,193

Task 2: Outreach

2.1 The Performing Party shall sponsor and advance public involvement and education designed to promote awareness of air quality issues and measures that can be taken to improve air quality. The Performing Party shall establish stakeholder groups or committees that include local governments, businesses, citizens groups, and environmental groups. The purpose of these stakeholder groups shall be (to the extent the Performing Party determines appropriate) to foster community participation in local ozone reduction efforts, review technical work, serve as source of information or ideas in developing local ozone reduction efforts.

Deliverable: The Performing Party shall establish local stakeholder groups described above.

Deliverable Date: As soon as practical, but no later than February 28, 2011

Cost: \$179,744

2.2 The Performing Party shall establish and/or maintain a public web site to facilitate public access to air quality information and the technical or outreach work undertaken by the Performing Party and the stakeholder group.

Deliverable: The Performing Party shall produce a working web site open to the general public on the internet.

Deliverable Date: As soon as practical, but no later than February 28, 2011

Cost: \$9,600

Task 3: Prepare Conceptual Model through the 2009 Ozone Season

The Performing Party shall identify necessary and sufficient conditions for high or exceeding ozone measurements in their program area (defined as the immediate statistical area plus adjacent counties) at the Ozone National Ambient Air Quality Standard. The Performing Party's analyses shall include any seasonal variations and use data through 2009 to the extent possible. In particular, the Performing Party's conceptual model will include the following analyses:

- Evaluate the wind speeds, directions and time of day associated with high ozone events to determine the local conditions and source alignments most frequently associated with high ozone events.
- Develop 24 hour back trajectories for the ozone standard (and for ozone less than 60 ppb) to determine source regions most (and least) likely to affect local area ozone.
- Conduct a weekday/weekend analysis to evaluate the potential effectiveness of reduced levels of local industrial and mobile source activity on their area;
- Evaluate the range and average background ozone concentrations associated with local wind directions. It will be necessary to determine directional and seasonal frequency;
- Investigate ozone and precursor trends and estimate the annual frequency of high ozone;
- Address additional relevant questions listed in Section 11.1.1 of EPA's ozone modeling guidance document, *Guidance on the Use of Models and Other Analyses to Demonstrating Attainment of Air Quality goals for Ozone, PM2.5, and Regional Haze*.

Deliverable: The Performing Party shall deliver an updated Conceptual Model containing analysis of monitoring and other data through 2009. The conceptual model shall be delivered to the TCEQ in a Microsoft Office Word and Adobe Acrobat Reader (*.pdf) format. Accompanying data and other supporting material shall be provided in a mutually agreeable electronic format.

Deliverable Date: March 15, 2011

Cost: \$47,160

Task 4: Ambient Monitoring Projects

The Performing Party agrees that the TCEQ shall withhold \$30,000 from the funds allotted for this grant to provide operational funding for an Automated Gas Chromatograph monitoring instrument to be sited in the El Paso area through August 31, 2011.

- 4.1 The Performing Party shall prepare a proposal for enhanced upwind and downwind background monitoring sufficient to show the background levels of ozone, NO_x and SO₂ entering and leaving a program area. The proposal may include additional instrumentation at existing monitoring sites, movement of current monitoring sites, or development of additional sites, but in no case shall the proposal result in a net decrease of monitoring sites funded by the Performing Party within the program area.

Deliverable: Enhanced Monitoring Proposal. The monitoring proposal shall be delivered to the TCEQ in a Microsoft Office Word and Adobe Acrobat Reader (*.pdf) format.

Deliverable Date: March 1, 2011

Cost: \$100,000

- 4.2 The TCEQ and Performing Party will both review the Performing Party's Enhanced Monitoring Proposal and Conceptual Model and develop a mutually agreeable set of requirements for any new monitoring equipment needed for the 2011 ozone season. If a mutual agreement cannot be reached, then the Performing Party shall deploy monitoring equipment at the direction of the TCEQ.

Deliverable: New monitoring equipment deployed at the TCEQ's direction in time to monitor ozone, ozone precursors, or meteorology on a continuous basis for the 2011 ozone season.

Deliverable Date: April 15, 2011 through August 31, 2011

Cost: \$30,000

Task 5: Emissions Inventories Improvement

- 5.1 The Performing Party shall review the Area and Non-Road portions of the 2005 and 2008 National Emissions Inventories provided for each area by the TCEQ. The Performing Party shall identify any significant source categories that it believes to be under or over estimated, accompanied by high levels of uncertainty, or where the Performing Party believes it can provide additional or more detailed emissions inventory input at a sub-county level of analysis.

Deliverable: The Performing Party shall deliver an Emissions Inventory Improvement Review. The inventory improvement review shall be delivered to the TCEQ in a Microsoft Office Word and Adobe Acrobat Reader (*.pdf) format. In this review, the Performing Party shall identify up to five emissions sources that it feels can be improved and develop a plan to provide improved 2005 and 2008 emissions inventories for those sources. The review shall describe the proposed methodology, including any survey design, and any background the Performing Party feels is relevant to the project. Any supporting data or information shall be provided in like format or in a format agreed to by the TCEQ and the Performing Party. This work shall only represent the planning phase of proposed updates to the non-road section of the emission inventory.

Deliverable Date: March 1, 2011.

Cost: \$20,080

5.2 The Performing Party shall implement emissions inventory improvements for any sources for which improvement plans were developed in Task 6.1.

Deliverable: The Performing Party shall prepare a report documenting the emissions inventory improvement projects and providing the information necessary to update TCEQ modeling files for the 2008 baseline scenario. The Performing Party shall work with the TCEQ to insert improved local emissions inventory data in to the 2008 baseline and future year emissions inventories for the selected photochemical modeling episode. The report will describe the steps taken, any significant deviations from the previously developed plan, and any background the Performing Party feels is relevant to the project. The Performing Party shall provide the report in Microsoft Office Word and Adobe Acrobat Reader (*.pdf) formats. Any supporting data or information shall be provided in like format or in a format agreed to by the TCEQ and the Performing Party.

Deliverable Date: August 31, 2011.

Cost: \$ 104,920

Task 6: Air Quality Modeling Planning for FY2011

During the Phase II period (ending August 31, 2011), the TCEQ and the Performing Party will be engaged in several photochemical modeling activities designed to advance the Texas State Implementation Plan (SIP). The goal of these Phase II activities is to prepare both a working June 2006 base case ozone episode and a 2008 baseline scenario of this base case.

Some of the steps involved in reaching this goal may include, but are not limited to:

Primarily Responsibility of the TCEQ:

1. Completing performance evaluations of the Weather Research and Forecasting (WRF) meteorological modeling;
2. Producing meteorological modeling optimized for inland and coastal areas;
3. Developing and/or modifying 2006 meteorological and emissions inputs for an alternative modeling domain;

Primary Responsibility of the Performing Party with Oversight of the TCEQ:

4. Developing a photochemical modeling protocol appropriate for submittal as part of a Texas SIP revision based on a revised eight-hour ozone standard;
5. Improving and upgrading modeling emissions inventories for the 2008 baseline scenario of this ozone episode;
6. Investigating model performance of the 2006 base case ozone episode;

Primary Responsibility of the Performing Party:

7. Investigating possible ozone sources transported into a particular nonattainment area along with the formation of ozone within the area based on precursor emissions;
8. Investigating model sensitivity to broad changes in precursor emissions using tools such as Anthropogenic Precursor Culpability Assessment (APCA), Ozone Source Apportionment Technology (OSAT), or High-order Decoupled Direct Method (HDDM); and
9. Evaluation of potential local voluntary or mandatory control strategies.

During Phase II, the TCEQ will continually work to develop the overall photochemical modeling episode and periodically deliver updates to the Performing Party via internet, FTP site, or disk drive (for large files) provided by the Performing Party. Steps 1-3 will be the primary responsibility of the TCEQ while steps 7-9 will be the primary responsibility of the Performing Party. Steps 4, 5, and 6 will be primarily a Performing Party responsibility with significant oversight by staff at the TCEQ.

The Performing Party is encouraged to perform appropriate modeling sensitivities which may include APCA runs, OSAT runs, HDDM runs, or source category sensitivities which may provide the Rider 8 areas and the TCEQ with preliminary information regarding the more efficient control strategies to pursue. The use of

“zero out” runs whereby anthropogenic precursor emissions are eliminated over large geographic areas is discouraged.

There are several guidelines that the Performing Party shall adhere to.

First, in applying the photochemical model, the Performing Party may not analyze or model control strategies unless they meet the following criteria:

1. The geographic applicability is limited to the Performing Party's program area; and
2. The control strategy is either voluntary or can be implemented under a political subdivision's existing legal authority.

Second, because the TCEQ's staff resources are limited, the Performing Party should expect that technical assistance will be limited to answering specific questions from experienced users of EPS3, CAMx, WRF, LINUX operations systems, and LINUX systems management. Staff from the TCEQ will not be available to provide comprehensive assistance to inexperienced users of EPS3, CAMx, WRF, and LINUX. Third, distribution of multiple and/or large size modeling files to the Performing Party shall require a hard drive shipped and provided at the Performing Party's expense and formatted for LINUX operating systems. Fourth, the TCEQ will not reimburse the Performing Party for any use of photochemical modeling episodes developed for periods prior to 2005.

Deliverable: The Performing Party shall document its photochemical modeling activities as part of its regular monthly progress report. The Performing Party shall include any important analyses and results from its inventory development and photochemical modeling work. The Performing Party shall provide the report in Microsoft Office Word and Adobe Acrobat Reader (*.pdf) formats. Any supporting data or information shall be provided upon request in like format or in a format agreed to by the TCEQ and the Performing Party. For emission inventory and/or modeling file improvements, the Performing Party shall provide all “upstream” inputs in an appropriate electronic format so that suggested changes can be readily replicated and incorporated by the TCEQ staff.

Deliverable Date: August 31, 2011

Cost: \$ 32,760

Task 7: Local Control Strategies

The Performing Party shall develop and analyze local control strategies according to guidance developed by the TCEQ Air Quality Planning Section. The control strategy analyses shall contain sufficient information for TCEQ modeling staff to modify emissions inventory input files and Air Quality Planning may properly document the

strategies in any SIP revision. The local control strategies must meet the four criteria for SIP credit (quantifiable, enforceable, surplus, and permanent).

Deliverable: The Performing Party shall prepare a Local Control Strategy Analysis Document describing the control strategies recommended for inclusion into applicable SIP revisions and providing sufficient documentation for TCEQ staff to utilize in a SIP revision.

Deliverable Date: August 31, 2011

Cost: \$32,760

Task 8: Administrative Activities

The Performing Party shall perform all support necessary to ensure that all grant requirements are met and that the work is completed in a timely manner with sufficient quality. This may include, but is not limited to, providing general supervision for grant activities, administering sub-contracts, submitting reports and invoices, facilitating and/or attending meetings for stakeholder groups, developing work plans for anticipated future Rider 8 grants, or other planning entities. The Performing Party shall summarize its activities in a monthly progress report described below.

Deliverable: The progress report shall document, in sufficient technical detail and by task, the accomplishments, expenditures, and milestones achieved during the prior thirty (30) days in monthly progress reports. Specifically, the monthly progress report shall:

1. Summarize all activities performed by the Performing Party with respect to each task and subtask of this work plan for the previous month;
2. Establish performance goals for each task and subtask for the month in which the report is delivered;
3. Compare accomplishments on every task and subtask to performance goals established the previous month;
4. Summarize reasons why performance goals were not met; and
5. Provide a preliminary estimate of costs by task and subtask for the reporting period.

Deliverable Date: The Performing Party shall submit, via electronic mail, a monthly progress report of its activities no later than the 10th day of each month or the next business day if the 10th of the month falls on a weekend or holiday.

Cost: \$ 97,244

FY 2011 Summary of Deliverables

In the event of a conflict between the deliverables or due dates shown in this table and the deliverables or due dates described above, the deliverables and due dates

in the table prevail, except that if a deliverable is described above but is not shown on this table, it shall nevertheless be due as described above.

Deliverable	Deliverable Date
Task 1: Procurement of Technical Services.	As soon as practical
Task 2.1: The Performing Party shall establish a local stakeholder group.	February 28, 2011
Task 2.2: Establish a public web site to provide air quality information.	February 28, 2011
Task 3: Prepare a conceptual model through the 2009 ozone season.	March 15, 2011
Task 4.1: Proposal for enhanced ozone, meteorological, or precursor monitoring.	March 1, 2011
Task 4.2: Review monitoring proposal and deploy any new monitoring equipment.	April 15, 2011 through August 31, 2011
Task 5.1: The Performing Party shall review the area and non-road NEI's for 2005 and 2008 and develop improvement plans for up to five emissions sources.	March 1, 2011
Task 5.2: The Performing Party shall implement the inventory improvement plans from 5.1, issue a report, and assist TCEQ staff in preparing improved local emissions inventory information for entry into photochemical modeling emissions inventories.	August 31, 2011
Task 6: Photochemical modeling activities. The Performing Party shall document its photochemical modeling activities and deliver a final report.	August 31, 2011

Deliverable	Deliverable Date
<p>Task 7: The Performing Party shall prepare a Local Control Strategy Analysis Document describing the control strategies recommended for inclusion into applicable SIP revisions and providing sufficient documentation for TCEQ staff to utilize in a SIP revision.</p>	<p>August 31, 2011</p>
<p>Task 8: The progress report and monthly invoices shall document, in sufficient technical detail and by task, the accomplishments, expenditures, and milestones achieved during the prior thirty (30) days in monthly progress reports.</p>	<p>The Performing Party shall submit, via electronic mail, a monthly progress report of its activities no later than the 10th day of each month or the next business day if the 10th of the month falls on a weekend or holiday. Monthly invoices should be submitted to the TCEQ monthly as soon as practical.</p>
<p>Annual Cost Allocation Plan Documentation Section 12.8.1</p>	<p>The Performing Party shall annually provide to the TCEQ, copies of its current cost allocation plans for indirect, allocated central service, and billed central service costs within thirty (30) days of that plan being approved by its cognizant agency or state coordinating agency.</p>
<p>Section 12.8.2: Indirect and Allocated Central Service Costs Recovery Report for the Year Ending August 31</p>	<p>October 31 of each year</p>