

Technical Projects for Victoria

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Work Plans

- **FY 2010-2011 Original**
- **FY 2010-2011 Supplement**
- **FY 2012-2013**

FY 2010-2011 Task 1 Conceptual Description

Update Conceptual Description to Include Data through 2009

Base all analyses on three levels of the potential 8-hour ozone standard

- **60 – 64 ppb**
- **65 – 69 ppb**
- **>70 ppb**

Identify necessary conditions for formation of high ozone concentrations

Completed

FY 2010-2011 Task 2.1 Ambient Monitoring

- **Two new enhanced upwind and downwind background monitoring sites**
- **Routine, seasonal, hourly ambient monitoring data**
- **In place April 15 to Nov 15**
- **Monitor for 2010 and 2011**
- **Data to TCEQ LEADS**
- **Measure**
 - **Ozone**
 - **NOx at one site**
 - **Wind speed**
 - **Wind direction**
 - **Temperature**

Completed 2011 (partial period) and 2012 (whole period)

FY 2010-2011 Task 2.2 Ambient Monitoring

Deployment of new monitoring equipment

Not needed

FY 2010-2011 Task 2.3

Analysis of Volatile Organic Compounds Trends in the Victoria area

Collect 12 VOC canister samples at 4 sites for 3 consecutive days

- Memorial Square Park**
- CAMS87**
- Inez**
- Fannin**

- Sampling in May 2011**
- Sampling completed and report written**

FY 2010-2011 Task 2.4

Hydrocarbon and Ozone Flux Measurements

Surface Mobile Sampling

- **To measure transport into the Victoria area**
- **Four trips**
 - **April 28 2011**
 - **May 4, 2011**
 - **September 7, 2011**
 - **September 9, 2011**
- **Monitoring completed and report being written**

FY 2010-2011 Task 3.1 Emissions Inventory Review

- **Review area and non-road portions of 2005 and 2008 National Emissions Inventories**
- **Provided by TCEQ**
- **Completed**

FY 2010-2011 Task 3.1

Bottom up research on two emission source categories

Diesel equipment used by City and County

- **plan developed**
- **Surveys developed**
- **Surveys being performed**

Architectural Coatings (paint)

- **plan developed**
- **Surveys developed**
- **Surveys did were not effective due to low response rate**
- **Emissions will be based on paint purchases**

FY 2010-2011 Task 3.2

Review of 2008 Emissions Inventory

- **Not required since the revision of the ozone standard was not implemented**

FY 2010-2011 Task 3.3

Review of 2008 Emissions Inventory

- **Not required since the revision of the ozone standard was not implemented**

FY 2010-2011 Task 4.1

Installation of June 2006 Modeling

- **Obtain the files generated by TCEQ for the June 2006 photochemical modeling episode**
- **Place on UT computer and compare results to those obtained by TCEQ**
- **The files released by TCEQ in January 2012**

FY 2010-2011 Task 4.2

Assessment of June 2006 Modeling with 2008

Not required since the revision of the ozone standard was not implemented

FY 2010-2011 Task 4.3

Performance Evaluation of June 2006 Modeling

Performance Evaluation in the Victoria area

- **How well does the model simulate concentrations measured in the Victoria area?**
- **Standard set of EPA recommended metrics**
 - **Statistics analyses**
 - **Graphical analyses**
- **Additional metrics developed by UT**

FY 2010-2011 Task 5

Evaluation of Local Control Strategies

- **Use APCA analyses to evaluate level of transport into the Victoria area**
- **Evaluate the impact of new proposed sources in the area**

FY 2010-2011 Supplement

Task 8a and 8b

Mobile Sampling in Oil and Gas Production Areas

- **Conduct 3 mobile sampling trips in the late spring 2012 to evaluate emissions from oil and gas production areas**
- **Continuous measurement**
 - **TNMHC and methane**
 - **NO_x**
 - **SO₂**
 - **CO**
 - **Ozone**
- **6 VOC canister samples**

FY 2010-2011 Supplement Task 8c VOC Canister Sampling

- **Collect and analyze 7 VOC canisters**
- **Consecutive Days**
- **Collected at Memorial Square Park**

FY 2010-2011 Supplement Task 8d Transport Analyses

Evaluate transport into the Victoria area

- **Use local trajectory tool developed by UT**
- **Based on measurements in the Victoria area**
 - **CAMS stations**
 - **Mobile Sampling**
- **Compare results with modeling if the June 2006 episode performs well and is ready to use**

FY 2012-2013 Task 1 Ambient Monitoring

- **Continue enhanced upwind and downwind background monitoring sites at Inez and Fannin**
- **Routine, seasonal, hourly ambient monitoring data**
- **In place April 15 to Nov 15**
- **Monitor in 2012 and 2013**

FY 2012-2013 Task 2 Conceptual Model

- **Postponed for one year**
- **Similar to Conceptual model in the past**
- **Update Conceptual Description to Include Data through 2011**
- **Analyses based on standard of 75 ppb**
- **Is there a potential episode for 2011 to model?**

FY 2012-2013 Task 3

Oil and Gas Production Emissions Assessment

- **Obtain recent studies performed by TCEQ and others**
- **Compare those results with those from the Victoria area**
 - **Mobile monitoring**
 - **VOC canister sampling**
- **Compare to EI data used in modeling**
- **Compare to satellite based observations**
- **Conduct modeling with June 2006 episode**

FY 2012-2013 Task 4 Transport Analyses

- **Evaluate transport of ozone and ozone precursors into the Victoria area with the June 2006 episode using APCA**
- **Compare these results with mobile sampling and stationary monitoring results**

FY 2012-2013 Task 5

Comparison between Mobile Source Emissions

- **Compare on road mobile source emissions results predicted by MOBILE6 and new MOVES models**

FY 2012-2013 Task 6

Participate in development of new modeling episode

- **The June 2006 episode covers about half of the time when high ozone is measured in the Victoria area**
- **Late August and September are also time periods when high ozone is measured**
- **Transport levels are higher in August/September than in May/June**
- **Work with other NNAs to develop new episode for September.**
 - 2006
 - 2011

FY 2012-2013 Task 6

Participate in a Flare Emissions Project

- **UT has performed a large project to measure the emissions from flares**
- **Are there some locations in the Victoria area where the results from the UT study can be applied to obtain better estimates of emissions from flares**

Questions?