



Joint Rocky Mountain Phase III Oil and Gas Emissions Inventory Project July 2008

Overview

The Independent Petroleum Association of Mountain States (IPAMS) is sponsoring the development of a Phase III regional oil and gas emission (O&G) inventory for the Intermountain West, jointly with the Western Regional Air Partnership (WRAP), building on the WRAP Phase I¹ and Phase II² inventory projects. The result will be an accurate, comprehensive criteria pollutant emissions inventory for all point and area sources associated with the exploration and production of O&G in the major basins throughout the six-state study region for year 2006 as well as future projection years.

IPAMS represents independent O&G operators throughout the Intermountain West, and is coordinating participation and data collection from producers in Colorado, Montana, New Mexico, North Dakota, Utah and Wyoming. IPAMS participated in the development of the previous Phase II project, and through this effort has identified the need to improve both the regional WRAP inventory and inventories for individual states and tribes to reflect more detailed information on emissions from exploration and production activity.

Scope of Work

This effort would focus on surveys of producers to update and gather data used to calculate emissions of the criteria pollutants – NO_x, CO, VOCs, PM and SO_x. ENVIRON Corporation is working for IPAMS to prepare and analyze the surveys, and calculate and report the emission inventories for each basin. Buys and Associates is working for IPAMS as their technical lead and to assist medium and smaller operators with completing their surveys.

The project work will include revised projections to future years including 2018, to be used for emissions analysis and haze/criteria pollutant air quality modeling purposes by WRAP, state, tribal, and federal agencies, or other interested parties. A detailed mechanism for O&G production companies to annually report data will also be created to provide a consistently up-to-date emissions inventory. The project started in November 2007 with the Denver-Julesburg (D-J) and Uinta basins. The project scope of work and schedule are divided into three overlapping parts:

- 1) D-J Basin in northern Colorado, part of the Denver area ozone nonattainment planning area;
- 2) Uinta Basin in northeast Utah; to support the BLM's Uinta Basin Air Quality Study; and
- 3) All other Rocky Mountain basins³ with significant O&G development and production activity.

Process and Schedule

For each basin, ENVIRON will work with the air regulatory agencies to verify and update the Phase II emissions for permitted O&G point sources to the 2006 base year. Producers will provide detailed area source data via surveys to supplement the point source data. Reviewing permitted point source data and applying the area source survey results will produce a complete inventory of criteria pollutants covering all O&G activities in each basin. Work products consisting of a technical memo for each basin will reside on the WRAP website, on a Phase III project page.

¹ http://www.wrapair.org/forums/ssjf/documents/eiccts/OilGas/WRAP_Oil&Gas_Final_Report.122805.pdf

² http://www.wrapair.org/forums/ssjf/documents/eiccts/OilGas/2007-0_Phase_II_O&G_Final_Report_v10-07.pdf

³ The study will cover the D-J, Uinta, San Juan, Piceance, Green River, Powder River, Paradox, Williston, Wind River, Big Horn, and Great Plains basins.

Phase III Project Schedule

November 2007 – June 2008	<ul style="list-style-type: none"> • Complete D-J Basin baseline 2006 emissions and mid-term 2012 projections • Complete draft Uinta Basin baseline 2006 emissions • Begin Uinta Basin mid-term 2012 projections • Begin Piceance Basin baseline 2006 emissions
July 2008	<ul style="list-style-type: none"> • Complete Uinta Basin mid-term 2012 projections • Complete Piceance Basin baseline 2006 emissions • Begin Piceance Basin mid-term 2012 projections • Begin North San Juan baseline 2006 emissions and mid-term 2012 projections • Begin South San Juan Basin baseline 2006 emissions
August 2008	<ul style="list-style-type: none"> • Complete Piceance Basin mid-term 2012 projections • Complete North San Juan Basin baseline 2006 emissions and mid-term 2012 projections • Begin all Wyoming baseline 2006 emissions
September 2008	<ul style="list-style-type: none"> • Complete South San Juan Basin baseline 2006 emissions • Begin South San Juan Basin mid-term 2012 projections
October 2008	<ul style="list-style-type: none"> • Complete South San Juan Basin mid-term 2012 projections
November 2008	<ul style="list-style-type: none"> • Complete all Wyoming basins baseline 2006 emissions • Begin Wyoming basins mid-term 2012 projections • Begin Williston, Great Plains, and Paradox basins baseline
January 2009	<ul style="list-style-type: none"> • Complete Wyoming basins mid-term 2012 projections
February 2009	<ul style="list-style-type: none"> • Begin Williston, Great Plains, & Paradox basin mid-term 2012 projections • Complete Williston, Great Plains, & Paradox basin baseline
March 2009	<ul style="list-style-type: none"> • Complete Williston, Great Plains, & Paradox basin mid-term 2012 projections
May 2009	<ul style="list-style-type: none"> • Complete far future year projections for all basins
June 2009	<ul style="list-style-type: none"> • Final project report

Deliverables

- Collection/analysis of producer survey results in each basin, based on information about number and type of equipment and activity levels;
- Updated permitted point source data for each basin;
- Basin-, tribal-, and county-level criteria pollutant emissions inventory data for 2006 and future projection years, including an annual update reporting tool, improving on the methodology used in previous WRAP inventories; and
- Complete regional criteria pollutant emissions for the O&G sector.

Contacts

Tom Moore	WRAP	mooret@cira.colostate.edu	970-491-8837
Lee Gribovicz	WRAP	lg@westgov.org	307-778-4927
Kathleen Sgamma	IPAMS	ksgamma@ipams.org	303-623-0987
Alison Pollack	ENVIRON	apollack@environcorp.com	415-899-0700
Amnon Bar-Ilan	ENVIRON	abarilan@environcorp.com	415-899-0700
Doug Henderer	Buys and Associates	dhenderer@buysandassociates.com	303-781-8211