

**WRAP Emission Forum Meeting Summary**  
**San Diego, CA**  
**January 26-27, 2005**

On January 26-27, 2005, the WRAP Emission Forum (EF), held at the Westin Hotel in San Diego, California. Attendees at the meeting included:

<u>Name</u>	<u>Affiliation</u>
Alice Edwards, EF Co-Chair.....	Alaska DEC, Air Quality Division
Dennis Schwehr, EF Co-Chair .....	WEST Associates
Jenifer Williams, EF Member .....	Institute of Tribal Environmental Professionals
Bob Palzer, EF Member .....	Sierra Club
Lori Campbell, EF Member .....	Nevada DEP, Air Quality Division
Joe McPhie, EF Member .....	Williams Field Services Company
Michael Uhl, EF Member .....	Clark County (Nevada) Division of Air Quality
Dave McNeill, EF Member .....	Utah DEQ, Air Quality Division
Chris Ramsdell, EF Member .....	Idaho DEQ, Air Quality Division
Roy Doyle, EIWG Member .....	Colorado APCD, Air Quality Division
Heather Lancour, EF Member.....	New Mexico ED, Air Quality Bureau
Clint Farr, WRAP Stakeholder.....	Alaska DEC, Air Quality Division
Lee Gribovicz, TOC Co-Chair .....	Wyoming DEQ, Air Quality Division
Tom Moore, WRAP Technical Support Staff.....	Western Governor's Association
Lee Alter, WRAP Policy Support Staff.....	Western Governor's Association
Ken Cronin, Tribal Visibility Coordinator.....	National Tribal Environmental Council
Bob Gruenig, Tribal Air Quality Program Coordinator .....	National Tribal Environmental Council
Don Arkell, Visibility Program Coordinator .....	WESTAR
Wayne Leipold, TOC Member.....	Phelps Dodge Copper Company
Lee Comrie, WRAP Stakeholder.....	Pima County (Arizona) Assoc. of Governments
Brenda Harpring, WRAP Stakeholder .....	Nevada DEP, Air Quality Division
Ebrahim Juma WRAP Stakeholder .....	Clark County (Nevada) Division of Air Quality
Bob Downing, EF Member .....	Maricopa County (Arizona) Air Quality Dept.

And the following participants joined by telephone:

James Carlin, EF Member.....	Montana DEQ, Air Quality Division
Jeff Stocum, EF Member.....	Oregon DEQ, Air Quality Division
Sally Otterson, EF Member .....	Washington DOE, Air Quality Division
David Holoman, Contractor .....	EH Pechan
Alison Pollack, Contractor .....	Environ
Gerry Mansell, Contractor .....	Environ

The Agenda for this meeting is available on the Emission Forum web page.

Meeting Summary

The meeting began with a review of the major projects is undertaking including

- Emission Inventory & Control Technology Technical Support
- Updating Mobile Source Emissions
- Emission Data Management System
- Alaska Aviation Inventory
- Alaska Representative Community Emission Inventory

The Emission Management Data System (EDMS) went on-line January 12<sup>th</sup>, and now the Emission Forum is looking at updates and operations into the future. These include updates to the 2002 baseline Emission Inventory and addition of the 2018 base/control strategy projections. The Emission Forum went over a list of potential “Enhancements” for the EDMS, with estimated development time and cost for the various options.

Updates were given on the progress of the Alaska Community EI and Aviation EI Projects, with both projects moving forward towards completion mid-year. The Mobile Source EI project will inventory on-road and non-road sources, for the standard suite of visibility related pollutants, on an annual and seasonal average weekday temporal basis. The Mobile Project Schedule calls for 2002 emissions by end of March, a draft report on ‘02 emissions in April, 2008/13/18 emissions files and a draft final report in June, and a final report responding to comments on draft in July.

Additional updates were given on the status of the Stationary Source EI work, the WRAP’s initial Attribution of Haze Report and work completed by the Tribal Data Development Workgroup. The WRAP’s involvement with Regional Planning Organization Projects was described, including projects to develop a 2002 National Wildfire Emission Inventory, establish an Inter-RPO EI Data Warehouse, utilize the GEOS-Chem model for determining model boundary conditions, develop an alternative emissions pre-processor model called ConCEPT, and update the model used to estimate Ammonia emissions.

The rest of the meeting was turned over to reviewing and defining the Emission Forum 2006 budget and work plan needs. There was talk about how to incorporate the In & Near Forum “micro” inventories into the EDMS. EDMS operations and “enhancements” will dominate the Emission Forum budget, with projects coming to about \$300K for EDMS in 2006. And it was pointed out that there are a few miscellaneous tasks that still are to be tackled.

The point was made that the WRAP as a whole will need to consider support for the control strategy evaluation as Air Managers begin digesting the Attribution Report and start developing plans for achieving Reasonable Progress towards the Visibility Goals at individual Class I areas within their jurisdictions, or impacted by emissions from their state/tribal boundaries.

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### **Meeting Details**

Tom Moore began the meeting by going over the Emission Forum page, where all the EF projects are listed: <http://www.wrapair.org/forums/ef>

He pointed out the major projects being undertaken include:

- Emission Inventory and Control Technology Technical Support
- Updating Mobile Source Emissions
- EDMS Project Page
- AK Aviation Inventory

It was pointed out the Alaska Representative Community Emission Inventory project also needs to be added.

### ★ EDMS Status Report ★

The next topic was the Emission Management Data System (EDMS) and Tom Moore noted that the WRAP got this system on-line January 12<sup>th</sup>, with users required to register prior to use. David Holoman of Pechan was on the phone, and it was noted that David would perform the function of Database Administrator for the EDMS, operating and maintaining the site in 2005.

It was noted that we are planning on updating the 2002 baseline EI's in the coming year, and that the 2018 base/control strategy projections would also be added when they are completed later in the 2005. We are also working to reconcile tribal/state overlaps. The schedule for applying EDMS EI's to RMC modeling in 2005 was listed on the Tom Moore's slide presentation. David Holoman then described the proposed "Enhancements" for the EDMS from a document showing the enhancement summary. This Enhancements document also contained the estimated development time and cost for the various options.

Tom Moore then described the Beta Testing plans for the EDMS. He noted that ERG had conducted the first testing last fall, but we didn't have capability to test the data provider and data analyst level of access at that time. But we have funds to undertake a second round of testing, and ERG's "Proposal for WRAP EDMS Acceptance Testing" (November 19, 2004 memo) describes that effort. ERG's goals would be to:

- 1) Plan and implement tests for system usability and functionality in areas that were not fully functional before (i.e./ ad-hoc reporting, data export & upload)
- 2) Review and assess how beta system bugs were addressed
- 3) Review the system conformance with the Software/Hardware Development Plan
- 4) Provide a set of observations and recommendations for future EDMS improvement.

### ★ Alaska Community EI Project ★

Alice Edwards gave an update on the Alaska Community EI project, and she noted that they have survey information from 8 communities, but are having to still work for contacts in 6 other communities. They have learned that the time line was overly ambitious, and the project is falling behind schedule. They have found that the communities are skeptical about receiving results back from such surveys, and they need to assure good follow-up contact to maintain the credibility of the WRAP.

### ★ Alaska Aviation EI Project ★

Alice then followed with an update on the Alaska Aviation EI project. In this project the Inventory Preparation Plan has been completed and is available for review. She gave details of the information being received on the “Large” and the “Medium/Small” airports that they are targeting.

### ★ Inter-RPO Projects Update ★

Tom Moore then gave an update on the Inter-RPO emission projects. The projects are described below:

#### ✦ 2002 National Wildfire Emission Inventory ✦

A draft work plan has just been released, requesting review and comment by February 11<sup>th</sup>. There is a Fire-Air Issues Workgroup that will discuss issues at an RPO meeting in Austin February 9-10<sup>th</sup>. They need to review 2002 and 2018 EI plans, discuss implementation of these EI's in the modeling analyses, and discuss policy/planning issues.

#### ✦ EI Data Warehouse ✦

This is an EI project loosely modeled on the WRAP's EDMS. But it is a much slimmer “bare-bones” EI data storage system where emission files would reside for RPO access.

#### ✦ GEOS-Chem ✦

This model is what is being used for determining boundary conditions in the WRAP modeling. This project is being coordinated with the WRAP Modeling Forum, and one of the issues is trying to project boundary conditions for 2018 (i.e./ will there be [100?] power plants in China by then?).

#### ✦ ConCEPT ✦

Patrick Barickman of Utah is working on this Consolidated Community Emission Processing Tool (ConCEPT) emission processing model for the WRAP, but there is no new information on the development of this alternative emissions processor model to replace the two currently used models of SMOKE and EMS-2002.

#### ✦ Ammonia Model ✦

Sally Otterson of Washington is working on this project for the WRAP, and she reported that science document on this project will be finished March 18<sup>th</sup>. This model is designed to look at the differences in emissions from specific animal numbers on a local basis (see 12/22/04 LADCO Model Flow Chart).

### ★ Tribal Data Update ★

Jenifer Williams gave an update on Tribal emissions activities. She reported that ITEP had distributed TEISS to a total of 62 tribes as of the end of the 3<sup>rd</sup> quarter of 2004. They have promoted TEISS at an EPA Region 9 meeting, and to the Arizona Air Quality Forum. They just completed their third TEISS training session in Las Vegas with 14 tribes participating.

Regarding EI Technical Support, they are assisting the Makah Tribe with their EI and ran the NONROAD model for their marina boats. They also made on-site visits to the Salt River Pima-Maricopa Indian Community and the Fort McDowell Yavapai Nation, while visits are planned for the Acoma Pueblo and the Southern Ute tribe.

Regarding Tribal Point Source EI's, they are continuing outreach to tribes with Title V sources and have obtained permit/emissions data from the files at EPA Region 8 offices. Eight tribes have agreed to participate and work with the WRAP's SSJF Contractor.

### ★ Mobile Source EI Update ★

Alison Pollack of Environ is the contractor that has the contract to update the Mobile Source inventories for the WRAP. She joined by phone and gave a presentation on the status of this project in a PowerPoint presentation. The scope of the inventory is on-road and non-road sources, for the standard suite of visibility related pollutants. The temporal distribution for inventories will be annual, and seasonal average weekday emissions (four 3-month seasons), for the 2002 base year, and for future years of 2008, 2013 & 2018. The inventories will cover the 14 WRAP state region, at the county level. The output will include summary spreadsheets, NIF files for input to the EDMS, and SMOKE "IDA" files. The major tasks are:

- Survey the mobile planning agencies (MPO's, DOT's)
- Update gasoline and diesel sulfur inputs
- Perform base year '02 MOBILE 6.2 modeling
- Perform future year MOBILE 6.2 modeling
- Perform base year '02 NONROAD2004 modeling
- Perform future year NONROAD2004 modeling
- Update aircraft emissions
- Update locomotive emissions
- Update commercial marine emissions (develop estimates for off-shore shipping lanes)
- Submission of all data to EDMS and SMOKE
- Documentation and presentation of results

The Overall Project Schedule calls for 2002 emissions by end of March, a draft report on '02 emissions in April, 2008/13/18 emissions files and a draft final report in June, and a final report responding to comments on draft in July.

### ★ Stationary Source EI Update ★

Tom Moore referred participants to the “Emission Inventory and Control Technology Technical Support” link on the EF as the place where information on this project will be posted. There are three main points of focus for this SSJF effort, oil & gas, 2018 projections and the EGU NO<sub>x</sub> analysis.

The Oil & Gas Workgroup has had one call earlier in January, and is planning another call February 16<sup>th</sup>.

Regarding Projections, the workgroup has held a couple of calls in January to begin developing the scope of this project, and a draft work plan has been posted January 12<sup>th</sup> for identifying specific tasks.

### ★ Attribution of Haze EI Implications ★

Tom Moore described the AoH project (see 11/23/04 AoH Meeting Notes) with a history of the development, the information that went into the report (EI, Modeling & Monitoring Data) and a description of the report structure. And he noted that the report was posted for general review just before the end of 2004 (posted at <http://www.wrapair.org/forums/aoh/ars1/report.html>). Comments are now due on this report by February 11, 2005.

### ★ 2006 Emission Forum Project Needs ★

There was a discussion started regarding what types of activities that the EF might be tasked with in the coming year. Lee Gribovicz noted that there is a big amorphous issue that is forming in front of us in dealing with Regional Haze. He pointed out that with the initial Attribution of Haze effort, the IOC will now begin discussing these causes of haze, and start proposing different types of control strategies to achieve “reasonable progress”. Once these proposals start coming forward, then there will be calls to evaluate the effectiveness of these strategies. That requires some sort of modeling analyses, like sensitivity modeling or new TSSA runs. Regarding the EF, that means developing new or modifying existing inventories. And this is a much bigger issue that affects the work of all the rest of the technical forums as well.

There was additional discussion, pointing out that emission inventories must be tracked, and will likely be updated to address “current” conditions at any particular point in time. These issues must be incorporated into the development of the EF work plan to be prepared later in this meeting.

The point was made that the oversight committees, the TOC and the IOC, need to start the discussion to give guidance to the Forums and workgroups on what they should be looking at in the future to meet the terms of the Strategic Plan.

### ★ In & Near Forum Project ★

Lee Alter gave a presentation on the In & Near Forum Emission inventories, while Gerry Mansell and Alison Pollack of Environ (developed the website) joined by telephone. They described what's been accomplished to date and proposing that we work to incorporate these web based inventories into the WRAP EDMS. The In & Near Forum had constructed "micro" inventories for a radius of 50 KM around the western Class I areas (sometimes contiguous areas were grouped - ended up as 82 groups representing 117 WRAP Class I Areas). They compiled 1996 inventories for point, mobile, area and fire categories with Arc/INFO data layers incorporated for jurisdictional and Class I boundaries, land use and population. The website for this project is:

<http://www.wrapair.org/forums/class1/near>

It was suggested that ideally, we would eventually incorporate this system within EDMS and enable stakeholders to retrieve similar maps and data for the 2002 inventory (or any other inventory for that matter), as EDMS inventory data is updated. It was pointed out that we need greater flexibility in selecting analysis area and map features, but the procedures and formats are essentially already worked out. But there was discussion that although it is theoretically possible, this would take significant database and GIS computer coding to complete such a system.

One alternative idea was that we really wouldn't "join" the In & Near website with the EDMS, but rather the EDMS would remain solely as an inventory reservoir. And then the user would be provided with directions to "go and get" the desired inventory from EDMS to automatically update the In & Near tables and maps. And it was suggested that we really need to update the land use data from the "out of date" data available when this site was developed several years ago. Environ will evaluate the options, and make some proposals on how to proceed.

### ★ 2006 Emission Forum Work Plan ★

Alice Edwards began the discussion by noting that the Emission Forum has essentially spent all its 2005 money, and is going into the Planning Team meeting with almost no excess funds for "reprogramming". And we now need to define what products have to be completed to allow development and completion of RH SIP's in the next 18 months.

Dennis Schwehr had completed a January 20<sup>th</sup> draft 2006 budget, and we went over in detail the proposals in that document. The main need for the future is the "hosting & maintenance" of the EDMS at around \$180K for 2006. The balance of EDMS "enhancements" were separated under either Functionality (\$110-180K) or Data Storage/Reporting (\$135K) categories.

One enhancement talked about is the ability to Store and Retrieve Emission Model Input files [#8] (MOBILE, NONROAD, SMOKE, etc), at an estimated cost of \$45K. There was discussion

as to whether the states and tribes really need this type of access to emission modeling files, or whether the contractors (Environ, CEP or RMC) can't simply provide the information upon request. It was concluded that this is a service that we really don't need at this time.

Regarding Auxiliary Point Source Data [#6], it was concluded the proposal to add certain point source fields such as emission control device, efficiency, additional control information, year on-line, SCC verification and etc, really was a function that could be handled by the DBA.

Regarding XML [#1], we thought that it should be included because XML will become more prevalent in the future. Regarding Automated Database Cloning [#2], we thought the DBA will be doing this and it was removed from the table. Regarding Low Graphics EDMS [#3], this would aid users with low speed internet connections. It was decided that we really should wait a year and see if there is a problem before we act on the project.

Regarding Biogenic/Dust Feedback Loom [#4], this would allow users to make corrections to dust or biogenics. But the way we change these emissions is to change the inputs to the BEIS or Dust models. It was decided to leave this for future consideration.

Regarding Exchange Method for File Transfer [#5], not all states are establishing nodes on the EPA Network, and it was decided not to pursue this option now. Regarding Biogenic Emissions at less than annual resolution [#7], it was concluded that this really isn't necessary at this point and is low priority for the future.

Regarding Capability to Geo-Code Area Source Categories [#9] (i.e. landfills, small compressors), a state could go in and enter geo-location data such that they could analyze the impacts in more detail. It was concluded that this might be an optional item, but we really need to see what the SSJF Oil & Gas project brings back regarding small O&G sources. Regarding Permit Tracking [#10] there was mixed opinion on how valuable this function might be to the WRAP. It was concluded that we'll leave this on the table for future consideration, but it won't be acted on right now.

On the low end, the options kept for consideration total to a little over \$100,000 for enhancements. In prioritizing these items it was decided that not all the items left for consideration, would be tackled in 2006. With Housing & Maintenance, the selected projects come to about \$300K for EDMS in 2006.

Lee Gribovicz then pointed out that this money is solely for EDMS work and that the EF may have other tasks before it. He reiterated that the possibilities for technical analysis that could result from control strategies springing the fertile minds of the Air Managers, are potentially significant. The Forum wrestled with how to address this question of control strategy analysis, and it was suggested we could call it "Emission Support for Control Development". But it was also pointed out the TOC might need funds for other Forums, so there was some suggestion that

the Budget ought to be placed under that Oversight Committee. It was finally concluded that the EF would place a \$50K fund in the proposed budget for Strategy Development Support as a talking point. It is virtually assured that the WRAP will need some funds for technical analyses of the control strategy proposals, but it was concluded that we should let the WRAP stakeholder process resolve where the resources should reside.

Regarding the In & Near activities, it was concluded that any EDMS connections or development would probably be better directed to that Forum. Regarding Tribal work, there was some discussion about whether the Emission Forum might be required to aid the TDDWG in actually producing emission inventories. But any Tribal inventory work will most likely not be produced until 2007.

Jim Carlin raised a point of concern for his state, noting that Montana and North Dakota are interested in getting an enhanced assessment of emissions that affect the Teddy Roosevelt & UL Bend areas near these states' northern border. They are worried about Oil & Gas emissions in that area, but it was pointed out that the SSJF is working on evaluation of this area. And Jim noted that he is also concerned about Agriculture practices that result in NO<sub>x</sub> and SO<sub>2</sub>. No conclusions were reached, but it was agreed to look at trying to incorporate some type of specialty work.

It was decided that the Co-Chairs will prepare another draft of this budget, and that we will hold a call at 2:00 PM Mountain Time on February 10<sup>th</sup> to make the final review of the Forum desires.