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## MEMORANDUM

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TO: Patrick Cummins, WRAP Co-Director  
Lewis McLeod, WRAP Co-Director

FROM: Ira Domsy, AMC State Co-Chair  
Randy Ashley, AMC Tribal Co-Chair

DATE: November 25, 2008

RE: Cost Information Relating to Future Operation, Maintenance, and Development of  
WRAP Technical Support Systems

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It is critical to maintain the technical support systems and infrastructure that have been developed in support of state and tribal efforts to implement the regional haze rule. Those same systems have the potential to assist states and tribes with other regional-scale initiatives and projects. States may be facing reduced EPA support for completion of their regional haze plans. Our concern is that no long-term funding for these support systems has been identified, and as a consequence states will be unable to implement their regional haze SIPs unless resources are secured for regional technical support.

The purpose of this memo is to identify information needed to: 1) Understand the funding needed to maintain the most critical ongoing systems for implementation of regional haze requirements; 2) Understand what additional funding would be needed to conduct periodic monitoring, emissions, modeling and other analyses required by the regional haze rule; and 3) Estimate costs to carry out additional regional technical assessments, assuming that full funding is provided for items 1) and 2). We are asking for cost estimates for three potential work projects that WRAP states and tribes would benefit from WRAP support as working examples of how these costs will be determined and presumably the cost saving associated with leveraging WRAP's current technical capacity.

Our intent is to use the information requested in this memo to actively pursue funding for ongoing operations and other projects based on priorities to be established by the Air Managers Committee on behalf of the WRAP Board. These estimates would support the development of annual workplan and project budgets for the 2010 through 2013 timeframe.

### Request for Cost Estimates

#### 1) Base Funding – Operation and Maintenance of Critical Systems

Provide estimates for the maintenance of existing base WRAP Regional Haze technical information and data, including ongoing updates to emissions inventories and meteorological data in support of the review, approval, and ongoing implementation of the regional haze plans.

Separately break-out the cost and resources for maintenance of tools or infrastructure that support the WRAP technical information (e.g., servers and computing systems), and for maintenance of any current products generated by the WRAP. Finally, provide estimates for recommended system and/or infrastructure enhancements (if any) and the rationale for the upgrade(s). Attached is an outline showing the types of information we are requesting, and the form in which that information would be most useful to the AMC.

## 2) Regional Haze – Periodic Assessments

Provide cost estimates for the sequence of monitoring, emissions, modeling, and other analyses needed during the 2010 to 2013 timeframe to comply with the requirements of the regional haze rule in the coming years, and separately estimates for additional recommended modeling and other analyses and the rationale for each.

## 3) Other Regional Analyses

There are many possible analyses that could be undertaken leveraging the technical capabilities of the WRAP. The following three are likely projects that states will need to carry out in the coming years that would benefit from WRAP support (not necessarily in order of priority).

- a) *Technical information necessary for multi-state or regional-scale analyses, e.g., inventory development and refinement for ozone precursors, monitoring data analysis and gap assessment, air quality modeling, etc.* Please identify if there are any separate costs and resources for particular tools necessary for ozone analyses, or whether separate/different data sets are necessary to analyze ozone regional transport, source attribution, and background conditions (compared to data sets used for Regional Haze).
- b) *Technical information necessary for multi-state or regional-scale mercury (Hg) analyses, e.g., Hg emissions inventory development and refinement, monitoring data analysis and gap assessment, necessary fate and transport analyses, etc.* Please identify if there are any separate costs and resources for particular tools necessary to analyze regional transport, source attribution, background conditions, deposition monitoring, and/or other impacts, or whether separate/different data sets are necessary for Hg analyses (compared to data sets used for Regional Haze). Please also identify whether federal studies and products obviate the need for potential western region or western multi-state Hg analyses (e.g., EPA OAQPS work (2008)).
- c) *Technical information necessary for multi-state or regional-scale ammonia/nitrogen (deposition) modeling and analysis, e.g., emissions inventory development and refinement, monitoring data analysis and gap assessment, necessary fate and transport information, etc.* Please identify if there are any separate costs and resources for particular tools necessary to analyze ammonia/nitrogen regional transport, source attribution, background conditions, deposition monitoring, and/or other impacts, or whether separate/different data sets are necessary for such analyses (compared to data sets used for Regional Haze).

We are available to work with you to ensure that the information we are requesting is in the form that is most useful in establishing the basis for our efforts to secure adequate funding for this important work. We expect that the information to be prepared in response to this request will need iterative review by WRAP Committees, Forums, and Workgroups to assist the AMC with a clear understanding of the assumptions made and work products expected. We value the work that WRAP has done, the expertise and partnerships that have been forged, and the potential application of the tools and systems that have been developed to other air quality issues. We are committed to facilitating on-going funding support for these important efforts.

ATTACHMENT

<b>Annual Base Funding – On-going System Maintenance and Operation</b>			
<b>Contracted System, Activity, etc.</b>	<b>Sponsoring Committee</b>	<b>Annual Costs</b>	<b>Description or Additional Information</b>
TSS management	TAF	XX,000	Management, data display updating and storage, tool development, training, other major operational elements
FETS operations and maintenance	FEF	XX,000	Data base compilation for wildfire, planned and accomplished Rx activities and emissions
VEWS project	TAF	XX,000	Report, analyze and display IMPROVE data; assumes matching contributions from other RPOs totaling \$120K
EDMS operations and maintenance	EF	XX,000	Haze emissions tracking, storage, analyses
309 SO2 Milestone Program tracking	IWG	XX,000	Implementation of program, ongoing since 2003
Regional modeling analyses by RMC	TAF	XX,000	Analyses to support review, approval, and continue implementation of haze plans
Hardware and software		XX,000	
Website maintenance		XX,000	
Personnel costs (x.x fte)		XX,000	
Travel support (x trips at \$x per trip)		XX,000	
Overhead estimate		XX,000	
Recommended system/infrastructure enhancements		XX,000	List and explain each separately
<b>Regional Haze – Periodic Assessments</b>			
<b>Year Needed</b>	<b>Assessment Description</b>	<b>Cost</b>	<b>Additional information</b>
	Supplemental Emissions updates for haze	XX,000	Filling ‘holes’ in selected source categories, updating EIs for 2012 SIP review (example)
	Supplemental Monitoring updates for haze	XX,000	In concert with emission and modeling updates for 2012 SIP review (example)
	Required modeling and other analyses required for regional haze	XX,000	Explain each and the cost per analysis effort
	Additional recommended modeling and other analyses required for regional haze	XX,000	Explain each and the cost per analysis effort

**Estimated Incremental Cost for Regional Ozone Studies, Assuming Base Funding for Regional Haze**

Activity	Cost	Explanation, Other Information	Explanation
Emissions Inventory			
Monitoring			
Regional Modeling			
Other			

**Estimated Incremental Cost for Regional Mercury Air Quality Analyses and Aquatic Deposition Studies, Assuming Base Funding for Regional Haze**

Activity	Cost	Explanation, Other Information	Explanation
Emissions Inventory			
Monitoring			
Regional Modeling			
Other			

**Estimated Incremental Cost for Regional Nitrogen Analyses and Deposition Studies, Assuming Base Funding for Regional Haze**

Activity	Cost	Explanation, Other Information	Explanation
Emissions Inventory			
Monitoring			
Regional Modeling			
Other			