APPENDIX C: QUESTIONNAIRE RESULTS AND OTHER CORRESPONDENCES

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted: 4/24/2003 4:19:00 PM
First Name:
Last Name:
Organization:
Job Function:
Level of Emissions Data Interest and Experience:
Phone Number:
Email Address:

Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
APPF, AQMF, AAMRF, Class1, DEF, EF, FEF, MSF, RDF, STL

2. What is the anticipated level of use by you/your organization?
Medium

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository, StateAnnualEmissions, RHRImplementation, Other

4. Who should submit emissions data?
STL

5. What should the minimum data submission frequency be?
Annual

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants, Other

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?
Non-roadMobile, Wildfire, UnpavedRoadDust

8. For each of the above source categories, what primary activity data should be included?

9. Would you expect the system to perform emissions calculations?

10. Would you like the system to perform emissions projections?

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?

Yes

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?
Medium

13. Should the emissions rates be actual or potential-to-emit or both?
Actual

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Annual, Seasonal, Mixed

15. What spatial resolution of the emissions data would be helpful to you/your organization?
County, ModelingGrid, Mixed

16. What geopolitical boundaries need to be included in the system?
WRAP, AllModelingAreas

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?
Yes

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat

20. What frequency of review would be helpful/useful?

21. Can WRAP alter submitted data in case of errors or inconsistencies?
No

At what point should WRAP stop altering data?

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?
Yes

23. How should international emissions data be submitted and revised?

GIS Components

24. What GIS capabilities should the web-based system have?
ExtendedGISFunctions

25. What map printing capabilities should the web-based system have?
8.5x11

26. What would be your GIS software preference, if any?
ESIR

User Preferences / Access

27. Who should be able to access the system?
WRAPMembers, STLAgencies, Public, Other

28. How would you like to see the data be accessed?
StaticReports, Ad-HocQueries, DownloadDatasets

29. What systems are you currently using?

What do you like/dislike about these systems?

30. What file type(s) will you want to export data into?
Database, Other

31. What format(s) will you want to export data into?
NEI

32. What level of security should the system implement and how sensitive is the data?

Training

33. What types of training should be available?
OnlineManual

Physical Location

34. What type of organization should house/maintain the system?

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	4/18/2003 6:33:00 PM
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Last Name:	Benjamin
Organization:	California Air Resources Board
Job Function:	Supervisor
Level of Emissions Data Interest and Experience:	Manager of CARB section responsible for CEIDARS database
Phone Number:	(916) 323-2915
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Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
STL

We will very likely not use the EDMS for California since we have our CEIDARS database. We may use it for some adjacent states. Who actually ends up using the EDMS will depend upon the usefulness of the system and so is difficult to predict at this time.

2. What is the anticipated level of use by you/your organization?
Low

We will continue to rely on our CEIDARS database because it contains the most up-to-date information for California. We see no need for the WRAP EDMS primarily because of the existence of the NEI. Rather than place yet another reporting burden on agencies that already report to the NEI, I strongly suggest that the NEI be used.

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository, StateAnnualEmissions

The EDMS should make full use of the National Emission Inventory (NEI). We devote considerable resources to data submittals to the NEI, including working closely with USEPA to QA the data. We would prefer not to have to make separate submittals to the WRAP. I suspect other states and agencies would probably have similar feelings. I believe the NEI does not currently have GIS capabilities so maybe you could focus your efforts on providing the NEI data with a GIS interface.

4. Who should submit emissions data?
Other

I believe the bulk of the data should come from the NEI developed by EPA. Since the states, tribes, and local agencies already submit data to the NEI, why not just use the NEI instead of requesting us to make a data submittal to yet another emission inventory database.

5. What should the minimum data submission frequency be?
Annual

No more frequent than annual since we update our inventory once per year. Since we advocate use of the NEI, the update frequency should be consistent with that of the NEI.

6. What pollutants should be included in the EDMS?

VisibilityImpairingPollutants

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?
Point, Area, On-roadMobile, Non-roadMobile, Wildfire, PrescribedWildlandFire, AgriculturalFire, PavedRoadDust, UnpavedRoadDust, Biogenic, NaturalNon-antropagenic

We are concerned with all of these sources and address them through our emission inventory research and programs.

8. For each of the above source categories, what primary activity data should be included?

9. Would you expect the system to perform emissions calculations?
No

10. Would you like the system to perform emissions projections?
No

We have our own emission forecasting system in-house so see no need for this.

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?
No

We have our own on-road (EMFAC) and biogenics (BEIGIS) modeling programs so would have little use for these capabilities.

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?

13. Should the emissions rates be actual or potential-to-emit or both?
Actual

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Mixed

The temporal resolution of the data may vary depending upon the source. At a minimum, it should annual or seasonal. But there may be some source categories (e.g. biogenics) where the ability to model hourly emissions may be needed.

15. What spatial resolution of the emissions data would be helpful to you/your organization?
StateAndTribal, County

From an inventory perspective, county level is sufficient for us. But modelers would likely want data at the modeling grid level.

16. What geopolitical boundaries need to be included in the system?

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?

Submitting surrogate data would be an additional reporting burden for submitting organizations so I suspect most agencies would balk at this. However, I can see how EDMS users (e.g. modelers, planners) might want such information.

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?
Excellent question. I'm glad you asked it. Since California already expends considerable effort and resources in submitting EI data to the NEI, as well as working with EPA to QA the data, we strongly suggest that the NEI be used instead of soliciting separate data submittals to the WRAP. In addition to minimizing the burden for submitting agencies, this would have the added benefit of ensuring that the WRAP inventory is consistent with the NEI. Development of separate databases leads to problems with version control. I see little advantage in developing a WRAP EDMS unless it is felt that the NEI is not updated frequently enough.

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat, MissingInformation, ErroneousInformation

I think the level of QA undertaken by the EPA for the NEI is sufficient. Through their contractors, EPA expends considerable resources to fill in missing data.

20. What frequency of review would be helpful/useful?
EPA provides states/tribes/local agencies with a number of opportunities to review the NEI. We very much appreciate this opportunity but it also ends up being a significant use of our staff resources to reconcile the NEI with what we actually submitted to EPA. This is due largely to the fact that EPA changes or modifies data that they feel is erroneous. We would very much prefer not to have to go through such a reconciliation process with not only the NEI but also the WRAP EDMS.

21. Can WRAP alter submitted data in case of errors or inconsistencies?
No

From the perspective of WRAP, I can see how you migh want to correct data that you believe to be incorrect or inconsistent. But, having learned from the NEI, from our perspective, this greatly complicates the reconciliation process because we may not know what was done to the data. We believe our data is generally better than national data because we are closer to the sources in California. Rather than correct our data, we would prefer WRAP contact us so that we can collectively correct the errors in both our databases. This would ensure consistency between EI databases.

At what point should WRAP stop altering data?
WRAP should not alter data but rather work with submitting agencies to have them correct their own databases if needed. The submitting agencies can then do a resubmittal.

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?
Yes

From a modeling perspective, it makes sense to have the same methodology and emission factors. But, realistically there are ownership issues surrounding the use of certain methodologies and emission factors. For example, to be consistent, it would make sense to use MOBILE model output for all the on-road emissions in the domain. But here in California, we use the EMFAC model, not MOBILE, for all of our inventory, modeling, and planning purposes. Therefore, WRAP would need to use our EMFAC output to be consistent with our database. The question is: do you want there to be internal consistency within the WRAP EDMS or consistency between the WRAP EDMS and the official inventory of a given agency. I don't think it will be possible to have both unless all organizations can be convinced to use the same methodology and emission factors.

23. How should international emissions data be submitted and revised?
Preferably in the same format as the NEI.

GIS Components

24. What GIS capabilities should the web-based system have?
StaticMapping, BasicGISFunctions

Based on our experience, moving an emission inventory onto a GIS platform is very resource intensive. Doing

anything more than static mapping may be asking too much. But I expect most users would like at least pan and zoom capabilities.

25. What map printing capabilities should the web-based system have?

26. What would be your GIS software preference, if any?
ESIR

User Preferences / Access

27. Who should be able to access the system?
WRAPMembers, STLAgencies, Public, Other

Unless there is proprietary or confidential data, I see no reason why the system should not be available to every body. At a minimum, all data suppliers should have access to the system.

28. How would you like to see the data be accessed?

29. What systems are you currently using?
CEIDARS, TRI, NEI

What do you like/dislike about these systems?
Obviously we like the CEIDARS database because it was designed to meet our needs and we have control over the data quality. We recognize the utility of the NEI and TRI but find submittal of information to these entities to be a resource intensive task.

30. What file type(s) will you want to export data into?
TextFile, Database

31. What format(s) will you want to export data into?
NEI, Other

It is unlikely we want want to export data from the WRAP EDMS into our CEIDARS database. But we would want to be able to easily export data from CEIDARS into the NEI and the EDMS.

32. What level of security should the system implement and how sensitive is the data?
Since we do not provide confidential data to the NEI, we see no reason for the NEI or the EDMS to be secure.

Training

33. What types of training should be available?

Since we do not see the benefits in using the EDMS for our programs, it is unlikely we would be seeking training.

Physical Location

34. What type of organization should house/maintain the system?

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	3/31/2003 10:22:00 AM
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Last Name:	Bowman
Organization:	Modeling
Job Function:	
Level of Emissions Data Interest and Experience:	
Phone Number:	360.407.6815
Email Address:	

Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
AQMF, AAMRF, Class1, DEF, EF, FEF, MTF, MSF, TDDWG, STL, Public

I find a bit of a problem: The question asks for primary users but I don't see any reference to secondary users. I've marked both in the above.

2. What is the anticipated level of use by you/your organization?

The use will depend on the completeness and useability of the database.

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository

It is not practical to provide a database that will provide a complete answer for all uses. I'm concerned that the scope has not been defined at this point. It needs to have data used to estimate future conditions (20+ years.)

4. Who should submit emissions data?
STL

Provincial? Submissions should probably be restricted to regulatory agencies.

5. What should the minimum data submission frequency be?
Annual

With the exception of a few categories, emissions change between years is much smaller than the uncertainties of the emission estimates themselves. The start-up of new sources and the shut-down of existing sources should be tracked closely. I guess that philosophy would work with "fire" sources also.

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants

WRAP's mandate is regional haze but the database should be sufficiently flexible to provide for additional uses in the future.

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?

Depending on the scale and location, any one of the listed source categories may be a primary source of

concern. All should be in the database to meet a completeness criterion.

8. For each of the above source categories, what primary activity data should be included?
Sufficient information to estimate emission rates and physical plume behavior for every hour of the year. To allow for unanticipated situations, the database should not implicitly assume that one hour is the minimum time resolution. We are already seeing that meteorology probably needs saving at 15-minute intervals at 4 km.

9. Would you expect the system to perform emissions calculations?
No

10. Would you like the system to perform emissions projections?
No

Activity projections -- for many sources, emission projections may depend on meteorological conditions.

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?
No

Again, the emissions depend on the temperature, sunlight, ... which vary from scenario to scenario.

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?

13. Should the emissions rates be actual or potential-to-emit or both?

Actual emissions are required for model evaluation. Potential emissions would be used to estimate potential impacts.

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?

Sufficient information must be provided to estimate hourly emissions. For many sources, annual emissions with hourly/seasonal factors will suffice.

15. What spatial resolution of the emissions data would be helpful to you/your organization?

Sufficient information must be supplied to accurately allocate emissions to a 4 km grid. Sub-kilometer grid sizes should be considered for future growth.

16. What geopolitical boundaries need to be included in the system?
AllModelingAreas

Sufficient extent so that the database provides complete coverage of the modeling domain

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?

The individual check boxes are more important than the simple reporting of emissions (you are redundant by having "Estimated emissions" as a check box.)

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?
Most likely by submitting just once. Perhaps, if this database works, WRAP states will submit to this database where Q/A will be done and then this database will submit to the NEI (or the NEI will point to it.)

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat, MissingInformation, ErroneousInformation

If the data are not useable without additional Q/A then the database will not be used at all.

20. What frequency of review would be helpful/useful?
Whenever data are submitted -- within 10 working days would seem reasonable.

21. Can WRAP alter submitted data in case of errors or inconsistencies?

That should be worked out with the individual data suppliers

At what point should WRAP stop altering data?

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?

Regional consistence is far less important than is documentation of the method used. There are good reasons why different areas may use methods more appropriate for the specific situation.

23. How should international emissions data be submitted and revised?
We have found, here in the Northwest, that the offer of data exchange works wonderfully.

GIS Components

24. What GIS capabilities should the web-based system have?
ExtendedGISFunctions

Queries, selection, those are areas where GIS shines and can make an important contirbution. Anything less can be done without any GIS product whatsoever.

25. What map printing capabilities should the web-based system have?

The Web-based system will have no map printing capabilities. It should have map generating capabilities for both page and larger format maps (note: an 8.5 x 11 map may be at any scale, small or large) as selected by the user. The maps would be printed at the user's location.

26. What would be your GIS software preference, if any?
ESIR

I suspect that GRASS would provide all the functionality required and I believe it will output products in standard formats to enable local printing.

User Preferences / Access

27. Who should be able to access the system?
Public

What's the difference between "Public" and "International"? Or is there confusion on the role of the Internet -- ooh, I shouldn't have said that, but the confusion significantly decreases my confidence that this consultant has the knowledge and experience to satisfactorily carry out this task.

28. How would you like to see the data be accessed?
StaticReports, Ad-HocQueries, DownloadDatasets, Other

All are required -- modeling would likely use automated queries for datasets (ftp) but the public may require ad-hoc queries to generate maps.

29. What systems are you currently using?

Home-grown, Access hosted database for point sources. Flat files, locally written scripts for area, mobile sources -- usually for formatting into SMOKE ready files.

What do you like/dislike about these systems?

30. What file type(s) will you want to export data into?
TextFile

All database and spreadsheets can satisfactorily ingest delimited text files. Other formats could be supplied on request. NetCDF should be considered, especiallyfor gridded data.

31. What format(s) will you want to export data into?

If the data can be exported to NEI, the system could be used as an intermediary between the submitter and EPA with necessary Q/A being done at the WRAP level before final submission.

32. What level of security should the system implement and how sensitive is the data?
There are aspects of activity data for point sources that are sensitive and cannot be released.

Training

33. What types of training should be available?
OnlineManual, Workshops, Other

Should include email list, Web-based help, FAQs. The CD-ROM or DVD could include both the User's Manual and streaming video of the training workshops.

Physical Location

34. What type of organization should house/maintain the system?

A location that would be expected to remain constant for an extended period (decades).

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	3/26/2003 11:59:00 AM
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Last Name:	Boyer
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Level of Emissions Data Interest and Experience:	
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Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
AQMF, DEF, EF, FEF, MSF, STL

Emissions Forum Fire Emissions Forum require a repository to store input data for calculating emissions. Modeling Forum requires a repository to store calculate emissions inputs for SMOKE. Mobile Sources Forum requires a mobile source emissions tracking system.

2. What is the anticipated level of use by you/your organization?
High

The states of WA, OR, and ID, and the Canadian province of BC use WRAP input data for calculating emissions and WRAP processed emissions to create SMOKE files for AQ modeling at the Pacific Northwest Regional Modeling Center housed at Washington State University. The state of WA also uses WRAP processed mboile source emissions for making policy decisions.

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository, StateAnnualEmissions, RHRImplementation

4. Who should submit emissions data?
STL, Other

EPA's NEI has always served as default data for WRAP EI, although EPA does not submit this data. States, locals, and tribes traditionally submit EI data to WRAP.

5. What should the minimum data submission frequency be?
Other

Regional haze regs do not require estimation of annual EI. States, locals, and tribes are more likely to comply with EPA's NEI schedule (3 years).

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants

Regional haze regs do not require tracking of greenhouse gasses. WRAP funding should be restricted to complying with regional haze regs. I think that this is an EPA requirement for regional haze funds.

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?

Point, Area, On-roadMobile, Non-roadMobile, Wildfire, PrescribedWildlandFire, AgriculturalFire, PavedRoadDust, UnpavedRoadDust, Biogenic, NaturalNon-antropagenic

All of the above are required for AQ modeling.

8. For each of the above source categories, what primary activity data should be included?
Calculated emissions for all sources, plus documentation or location of documentation. Point Sources: all inputs required for SMOKE Area Sources: surrogate activity data, ef, growth rates. On-road Mobile Sources: MOBILE6 inputs, VMT, growth rates. Non-road Mobile Sources: NONROAD inputs, growth rate surrogates, growth rates. Paved road dust: all inputs for paved road dust ef calculation, VMT, growth rates Unpaved road dust: all inputs for unpaved road dust ef calculation, VMT, growth rates I do not have sufficient background to suppy info for other sources.

9. Would you expect the system to perform emissions calculations?
No

Levels of detail for emissions inputs vary significantly for estimating emissions. The level of detail will determine the choice of methodology for calculating emissions. Introducing a variety of methodologies into a database creates complexities.

10. Would you like the system to perform emissions projections?
No

Sane as previous answer.

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?
No

Including emissions modeling introduces significant complexities. Emissions models are regularly updated, which implies that database would also have to be updated regularly.

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?

13. Should the emissions rates be actual or potential-to-emit or both?

I am not an expert in this field.

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Annual, Seasonal

For mobile sources (including road dust), seasonal calculations are required to match RVP, oxy-fuel, and temperature inputs to then sum to estimate annual emissions. SMOKE monthly, daily, and hourly profiles are applied to annual emissions for AQ modeling. I am not an expert for other sources.

15. What spatial resolution of the emissions data would be helpful to you/your organization?
County

County level meets both policy needs and SMOKE needs. Grid submittals require bypassing SMOKE, which may be beyond the initial needs - introduces addtional complexities.

16. What geopolitical boundaries need to be included in the system?
AllModelingAreas

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?
Activity, EmissionFactors, SpeciationProfiles, TemporalProfiles, SpatialAllocationProfiles, StationarySourceParameters, EstimatedEmissions, EconomicGrowth, Population, LandUse, Other

Submit everything available that is used to estimate emissions.

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?
Don' know.

Data Quality Control and Assurance

19. What level of review is neccessary?

Need to develop QA plan.

20. What frequency of review would be helpful/useful?
Need to develop QA plan.

21. Can WRAP alter submitted data in case of errors or inconsistencies?
Yes

Must consult with submitting agency before altering data.

At what point should WRAP stop altering data?
Should not be altered once AQ modeling begins.

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?
No

Areas will have different levels of detail. Requiring a consistent methodology forces use of a methodology that meets the minimum level of detail available. For example, some areas have conducted surveys or contacted sources to aquire specific activity data. A consistent methodolgy across the west would require use of some default surrogate for activity.

23. How should international emissions data be submitted and revised?
Submit to Emissions Forum. Forum will submit to db administrator.

GIS Components

24. What GIS capabilities should the web-based system have?

Don't know.

25. What map printing capabilities should the web-based system have?

Don't know.

26. What would be your GIS software preference, if any?

Don't know.

User Preferences / Access

27. Who should be able to access the system?
WRAPMembers, STLAgencies, Public

View but not modify.

28. How would you like to see the data be accessed?
Ad-HocQueries, DownloadDatasets

29. What systems are you currently using?
The Pacific Northwest Modeling Center (ID, OR, WA, BC) is developing a data repository/warehouse to store all inputs required to develop SMOKE emissions files. A website maintained by WSU will grant access to data inputs, SMOKE input files, and SMOKE processed emissions.

What do you like/dislike about these systems?
Easy to develop and maintain.

30. What file type(s) will you want to export data into?
TextFile

Text files require minimum disk storage and can be easily manipulated for import into db or spreadsheet. Scripts have been developed for processing into SMOKE files.

31. What format(s) will you want to export data into?
NEI

NEI data can be easily processed for SMOKE input files.

32. What level of security should the system implement and how sensitive is the data?
Public access to view data, but not modify data.

Training

33. What types of training should be available?
OnlineManual, Workshops

Offer one workshop.

Physical Location

34. What type of organization should house/maintain the system?
University

Contract modeling center (UCR) to maintain.

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	5/20/2003 7:04:00 PM
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Level of Emissions Data Interest and Experience:	High and medium
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Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
AQMF, DEF, EF, STL

Lots of different orgs and peoples need and use data

2. What is the anticipated level of use by you/your organization?
Medium

We are concerned about AQ and AQ trends on the Rez. We plan on doing modeling in the future.

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository

Lets not build a monster to manage and fund.

4. Who should submit emissions data?
STL

5. What should the minimum data submission frequency be?
Annual

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants, Other

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?
Point, Area, On-roadMobile, Non-roadMobile, Wildfire, PrescribedWildlandFire, AgriculturalFire, PavedRoadDust, UnpavedRoadDust

8. For each of the above source categories, what primary activity data should be included?

9. Would you expect the system to perform emissions calculations?
No

10. Would you like the system to perform emissions projections?
No

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?
No

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?
Medium

Depends upon their QA

13. Should the emissions rates be actual or potential-to-emit or both?
Actual

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Annual

15. What spatial resolution of the emissions data would be helpful to you/your organization?
StateAndTribal, County, ModelingGrid

16. What geopolitical boundaries need to be included in the system?

Not sure

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?
No

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?
By having an approved QAPP.

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat

20. What frequency of review would be helpful/useful?
annual with submittal

21. Can WRAP alter submitted data in case of errors or inconsistencies?
Yes

At what point should WRAP stop altering data?
They should have a QAPP that identifies when.

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?
No

Don't try to make one size fits all.

23. How should international emissions data be submitted and revised?
Same as others

GIS Components

24. What GIS capabilities should the web-based system have?
StaticMapping

25. What map printing capabilities should the web-based system have?

26. What would be your GIS software preference, if any?
ESIR

User Preferences / Access

27. Who should be able to access the system?
STLAgencies

28. How would you like to see the data be accessed?
StaticReports, DownloadDatasets

29. What systems are you currently using?

What do you like/dislike about these systems?

30. What file type(s) will you want to export data into?
Database

31. What format(s) will you want to export data into?
NEI

32. What level of security should the system implement and how sensitive is the data?

Training

33. What types of training should be available?
OnlineManual, HelpDesk, Workshops

Physical Location

34. What type of organization should house/maintain the system?

One that is qualified.

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	4/23/2003 4:33:00 PM
First Name:	Bob
Last Name:	Downing
Organization:	Maricopa Cty (AZ) Envl Svcs Dept
Job Function:	Emission Inventory Unit Mgr
Level of Emissions Data Interest and Experience:	5 yrs
Phone Number:	602-506-6883
Email Address:	bdowning@mail.maricopa.gov

Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
AQMF, Class1, EF, STL

I have limited knowledge about the tasks and mandates of all WRAP forums, but a system with the scope of that envisaged would be of enormous use for state and local agencies.

2. What is the anticipated level of use by you/your organization?
High

If user-friendly GIS capabilities were included, I could envision me or my agency's staff using it almost daily ?responding to public information requests, analyzing state/local data that we've submitted ourselves, etc. The ability to look at metadata for the entire WRAP region would also be a key feature.

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository, StateAnnualEmissions, RHRImplementation

The "value added" of this system would be that it is MORE than a repository of existing WRAP (often NEI) data, but also analyzes, QA, and allows retrieval and analysis options to make the data more accessible to all.

4. Who should submit emissions data?
STL

It needs to be "official" (i.e., public sector) data only

5. What should the minimum data submission frequency be?
Annual, Other

Annual would be nice ?but maybe a 3-year reporting cycle, in step with NEI, would be more efficient. Some insight as to how WRAP members intend to implement the requirements of the Consolidated Emissions Reporting Rule (CERR) would help answer this question.

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?
Point, Area, On-roadMobile, Non-roadMobile, PavedRoadDust, UnpavedRoadDust

8. For each of the above source categories, what primary activity data should be included?
Data scope and format should be as similar to the NEI Input Format (NIF) as possible.

9. Would you expect the system to perform emissions calculations?
No

10. Would you like the system to perform emissions projections?
No

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?
Yes

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?
Medium

Hard to answer -- my confidence level would depend on the instrastructure and documentation set up to perform the above tasks.

13. Should the emissions rates be actual or potential-to-emit or both?
Actual, Potential

Both would be nice, of course. But in our case, while we've had a computerized emissions reporting/QA system in place for several years, our PTE calculations, as a function of the permitting process, are still largely maintained in paper files.

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Annual, Seasonal

15. What spatial resolution of the emissions data would be helpful to you/your organization?
County

16. What geopolitical boundaries need to be included in the system?
WRAP

I have a local/state (AZ) interest only; the modeling community should be polled about this one.

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?
Yes

Some items on the list (e.g., activity levels, emission factors, temporal profiles, stack parameters, estimated emissions) are in fact required by CERR, so would be easily obtained. In Maricopa County, "official" data on population projections, economic growth rates, and land use classifications, are all the responsibility of other agencies, and thus difficult (or impossible) to collect and report.

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?
By making EDMS follow NEI formats and conventions as colsely as possible. I'd hope that submitting data to EDMS would be only marginally more effort than preparing and QA'ing files to the NEI ?essentially, state/locals would submit the same types of files to both, simultaneously.

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat, MissingInformation, ErroneousInformation

20. What frequency of review would be helpful/useful?

21. Can WRAP alter submitted data in case of errors or inconsistencies?
No

This is largely a definitional issue, I think. For instance: I submit data to EDMS, then later find errors and notify WRAP. WRAP is "altering" EDMS data, but only at the rquest of the original submitter. Otherwise, the danger is that EDMS data begins to diverge from that in NEI. Where a regional database like EDMS would be of most use would be "altering" or gap-filling data where otherwise EPA-generated estimates would predominate.

At what point should WRAP stop altering data?

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?
Yes

Sure, there are benefits in terms of comparability, but if I submit data to EDMS which WRAP then alters to a standard methodology of calculating emissions, that means that my original data set (and that version submitted to NEI) now differs from the WRAP data set. Tracking and quantifying these differences would be a nightmare.

23. How should international emissions data be submitted and revised?
This depends on existing regional, national and international standards. For example, some site-specific emissions data are considered confidential by Canadian standards.

GIS Components

24. What GIS capabilities should the web-based system have?
ExtendedGISFunctions

25. What map printing capabilities should the web-based system have?
8.5x11, LargeScale

26. What would be your GIS software preference, if any?
ESIR

No real preference, just more familiar with ESRI products.

User Preferences / Access

27. Who should be able to access the system?
WRAPMembers, STLAgencies, Public, Other

Different levels of access would be useful -- e.g., "read/write" privileges for govt. agencies submitting data, "read-only" privileges for the outside world.

28. How would you like to see the data be accessed?
Ad-HocQueries, DownloadDatasets

29. What systems are you currently using?
Sybase data base w/PowerBuilder front end. Query capabilities using MS-Access.

What do you like/dislike about these systems?
Requires training in MS-Access to retrieve data sets.

30. What file type(s) will you want to export data into?
Database, Other

31. What format(s) will you want to export data into?
NEI

32. What level of security should the system implement and how sensitive is the data?
Ideally, the system should be accessible to the general public, much like TRI. thus, all data in the system should be considered available to all requesters. All "sanitizing" of confidential emissions data that I possess would be done before I submit data to WRAP (as with NEI).

Training

33. What types of training should be available?
OnlineManual, Workshops

Once the system is up and running, debugged, and fairly robust, an online user's manual is probably most cost-effective. Training workshops, at least in the initial implementation phase, might easily be piggy-backed onto other WRAP meetings.

Physical Location

34. What type of organization should house/maintain the system?

No preference; the "best" choice probably depends on the long-term funding mechanisms chosen.

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	4/11/2003 11:06:00 AM
First Name:	Roy
Last Name:	Doyle
Organization:	Colorado Dept. of Public Health and Environment
Job Function:	EIs
Level of Emissions Data Interest and Experience:	Extremely High
Phone Number:	3036923159
Email Address:	roy.doyle@state.co.us

Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
AQMF, Class1, DEF, EF, FEF, MTF, MSF, TDDWG, STL

2. What is the anticipated level of use by you/your organization?
High

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository, RHRImplementation

4. Who should submit emissions data?
STL

5. What should the minimum data submission frequency be?
Annual

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?
Point, Area, On-roadMobile, Non-roadMobile, Wildfire, PrescribedWildlandFire, AgriculturalFire, PavedRoadDust, UnpavedRoadDust, Biogenic, NaturalNon-antropagenic

8. For each of the above source categories, what primary activity data should be included?
Points down to process rates. Mobile down to link data.

9. Would you expect the system to perform emissions calculations?
No

No for stationary. Yes for mobile. Yes for biogenics.

10. Would you like the system to perform emissions projections?

Yes

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?
Yes

What is meant by "demonstrate"?

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?
Medium

13. Should the emissions rates be actual or potential-to-emit or both?
Actual

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Annual, Seasonal

15. What spatial resolution of the emissions data would be helpful to you/your organization?
County, ModelingGrid

16. What geopolitical boundaries need to be included in the system?
AllModelingAreas

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?
Yes

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?
NEI format where possible.

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat, MissingInformation, ErroneousInformation

20. What frequency of review would be helpful/useful?
Per submission

21. Can WRAP alter submitted data in case of errors or inconsistencies?
No

The states probably have the best information so state should be contacted.

At what point should WRAP stop altering data?
Unknown-Tough to know when the WRAP should over-write state submitted data.

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?
Yes

23. How should international emissions data be submitted and revised?
Through EPA or through WGA contracts.

GIS Components

24. What GIS capabilities should the web-based system have?
ExtendedGISFunctions

25. What map printing capabilities should the web-based system have?
8.5x11

Let user do their own printing.

26. What would be your GIS software preference, if any?
ESIR

User Preferences / Access

27. Who should be able to access the system?
WRAPMembers, STLAgencies, Public, Other

28. How would you like to see the data be accessed?
StaticReports, Ad-HocQueries, DownloadDatasets

29. What systems are you currently using?
In-house point source system (SQL). ESRI ArcMap. MS Access.

What do you like/dislike about these systems?

30. What file type(s) will you want to export data into?
Database, Other

ESRI Shape files for GIS data.

31. What format(s) will you want to export data into?
NEI

32. What level of security should the system implement and how sensitive is the data?
Data should be protected from being "hacked". Maybe read enabled only.

Training

33. What types of training should be available?
OnlineManual, HelpDesk

Physical Location

34. What type of organization should house/maintain the system?
University, Contractor, STLAgency, Other

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	5/21/2003 1:17:00 PM
First Name:	Lee
Last Name:	Gribovicz
Organization:	Wyoming Air Quality Division
Job Function:	Emission Inventory Coordinator
Level of Emissions Data Interest and Experience:	Primary Job Interest; 5 yrs experience
Phone Number:	(307) 332-6755
Email Address:	lgribo@state.wy.us

Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
AQMF, DEF, EF, FEF, MTF, TDDWG, STL

The primary use of this data will be for States/Tribes to manage their Air Quality resources under regional haze. There may be some interest from the public, but I think the EDMS should be focused on regulatory needs.

2. What is the anticipated level of use by you/your organization?
High

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository, StateAnnualEmissions, RHRImplementation

4. Who should submit emissions data?
STL

I think the regulatory agencies (states/tribes) will be the primary source of information. Only in specialty cases like fire, will there be data from industry/trade associations.

5. What should the minimum data submission frequency be?
Annual

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?
Point, Area, On-roadMobile, Non-roadMobile, Wildfire, PrescribedWildlandFire, AgriculturalFire, PavedRoadDust, UnpavedRoadDust, Biogenic, NaturalNon-antropagenic

All source sectors are important.

8. For each of the above source categories, what primary activity data should be included?
I'm not expecting that this EDMS be much of a calculation tool. Perhaps fire would be the exception.

9. Would you expect the system to perform emissions calculations?
No

10. Would you like the system to perform emissions projections?
No

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?
No

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?
Medium

13. Should the emissions rates be actual or potential-to-emit or both?
Actual

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Annual, Seasonal

15. What spatial resolution of the emissions data would be helpful to you/your organization?
StateAndTribal, County, AirCorridor, ModelingGrid

GIS functions should be able define any user specified polygon.

16. What geopolitical boundaries need to be included in the system?
WRAP

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?
No

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?
There needs to be a "manager" of the EDMS who coordinates the QA/QC issues.

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat, MissingInformation, ErroneousInformation

20. What frequency of review would be helpful/useful?
annually

21. Can WRAP alter submitted data in case of errors or inconsistencies?
No

Submitting agencies should be contacted for corrections.

At what point should WRAP stop altering data?

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?
Yes

The emission data is becoming more and more standardized, but the submitting agencies will have primacy of decisions regarding methodology.

23. How should international emissions data be submitted and revised?
Through the WRAP Modeling Forum

GIS Components

24. What GIS capabilities should the web-based system have?
StaticMapping, BasicGISFunctions, ExtendedGISFunctions

25. What map printing capabilities should the web-based system have?
8.5x11, LargeScale

26. What would be your GIS software preference, if any?
ESIR

Standardized GIS from the "major" manufacturer.

User Preferences / Access

27. Who should be able to access the system?
WRAPMembers, STLAgencies, Public

28. How would you like to see the data be accessed?
StaticReports, Ad-HocQueries, DownloadDatasets

29. What systems are you currently using?
Wyoming is currently developing a GIS based emission database. We have relied on EPA's NEI in the past.

What do you like/dislike about these systems?
NEI is not acceptable.

30. What file type(s) will you want to export data into?
TextFile, Database, Other

31. What format(s) will you want to export data into?
NEI, EmissionModeling

32. What level of security should the system implement and how sensitive is the data?
Only the EDMS will have access to data changing

Training

33. What types of training should be available?
OnlineManual, HelpDesk, Workshops

Physical Location

34. What type of organization should house/maintain the system?
University

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	6/16/2003 1:24:00 PM
First Name:	David
Last Name:	Jones
Organization:	Maniilaq Association
Job Function:	Air Program Coordinator
Level of Emissions Data Interest and Experience:	High - Significant
Phone Number:	(907)442-7621
Email Address:	djones@maniilaq.org

Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
APPF, AQMF, AAMRF, Class1, DEF, EF, MSF, TDDWG, STL

The WRAP forums and various agencies are the parties tracking emissions. The Public is interested, generally, but I don't think they will be accessing it directly.

2. What is the anticipated level of use by you/your organization?
Medium

There isn't any tribal data and the State of Alaska data is sparse. This will be changing slowly, so my initial response is "medium". It will increase in useage as more data is entered and the database becomes more useful.

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository, StateAnnualEmissions

This is how I would be using it in view of my response to #2 above. Tracking implementation of any regulations requires a 'before' set of data and an 'after' set of data.

4. Who should submit emissions data?
STL, IndustriesAndTradeAssociations, Other

It would be ideal of all data is submitted, but this may not be practical.

5. What should the minimum data submission frequency be?
Annual

Annually would be sufficient for my use. The time required of tribal staff would be quite limited and any more frequently would be impossible.

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants, Other

All pollutants are important to tribes since most of them are trying to 'maintain' existing good air quality, regardless of what pollutants have regulatory limits.

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?
Point, Area, On-roadMobile, Non-roadMobile, Wildfire, PavedRoadDust, UnpavedRoadDust

Regional haze isn't a big problem here. However, the components contributing to regional haze are, collectively, important.

8. For each of the above source categories, what primary activity data should be included?
Emission inventory data plus any monitoring data available.

9. Would you expect the system to perform emissions calculations?
No

Calculations should be part of any emission inventories and/or monitoring data retrieval.

10. Would you like the system to perform emissions projections?
Yes

This would be an advantage, however it would require quite a bit of additional data beyond EIs and monitoring data.

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?
No

I think modeling is of very, very limited use for my area, if at all.

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?
Low

I have limited confidence in remotely generated calculations. There are too many chances of error and emission factors may not be applicable to this region or area.

13. Should the emissions rates be actual or potential-to-emit or both?
Actual

Actual rates are 'true' and not projections based on models which may or may not be appropriate to this region/area.

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Annual, Seasonal

With small population centers, separated by significant distances (+/- 50 mi.), any resolution beyond seasonal doesn't have practical application. A few cities in Alaska derive benefit from daily and possibly hourly data, but not many of them.

15. What spatial resolution of the emissions data would be helpful to you/your organization?
StateAndTribal, County, AirCorridor, ModelingGrid, Mixed

Resolution at county level has been a problem, especially where there is just one, or a few, data points. Resolution at a "realistic" level is ideal (like data point plus ?3 mi. radius), but we may have to settle for something inbetween.

16. What geopolitical boundaries need to be included in the system?
WRAP

This works for my useage.

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?
No

Let's not get lost in the 'modelers nightmare' as the useage will become subject to infinite variables.

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?
Use the same QA/QC info already generated for reporting to EPA. Why duplicate and/or waste time for offices with very small staff levels (1-3 people)?

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat

Not sure what you are asking.

20. What frequency of review would be helpful/useful?
Data should be checked for 'reasonableness' before being entered into the database. Please don't get bogged down in running QA/QC checks, etc.

21. Can WRAP alter submitted data in case of errors or inconsistencies?
No

I think the entity sending in the data should be contacted about questionable data, and if errors were made, they should be asked to re-submit the data. WRAP SHOULD NOT ALTER ANY DATA!!!!

At what point should WRAP stop altering data?
From the beginning!!! No altering...

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?
No

I agree with using the same methodology, if that could be determined and it didn't require a 'specialist' to use it. Also, emission factors can be different for different areas so how can everyone use the same factors?

23. How should international emissions data be submitted and revised?
In the format that WRAP uses for its database. Don't waste time/money converting data into other formats for other countries.

GIS Components

24. What GIS capabilities should the web-based system have?
StaticMapping, BasicGISFunctions

Please keep it basic and simple.

25. What map printing capabilities should the web-based system have?
8.5x11, LargeScale

Graphic displays are sometimes very useful.

26. What would be your GIS software preference, if any?
ESIR

Tribes have access to free copies of this software and this is the one most used by tribes.

User Preferences / Access

27. Who should be able to access the system?
WRAPMembers, STLAgencies, Public

Data should be available to all, but only submitting agencies should be allowed to input/alter their own data.

28. How would you like to see the data be accessed?
StaticReports, Ad-HocQueries, DownloadDatasets

Specific data requests save time and printer ink.

29. What systems are you currently using?
Misc.

What do you like/dislike about these systems?
Accessibility and fixed full data reports.

30. What file type(s) will you want to export data into?
TextFile, Database, Other

MS Excel would be ideal.

31. What format(s) will you want to export data into?
NEI

This is the most common for us, and only recently.

32. What level of security should the system implement and how sensitive is the data?
Data can only be imputed/edited by the submitting entity. WRAP, etc. personnel should not edit directly or anyone else. If the data is submitted, then it is public information. Some tribes will not submit data at all. The complications vs uses, of any data when it is confidential, makes it too cumbersome in my opinion.

Training

33. What types of training should be available?
OnlineManual, HelpDesk, Workshops, Other

All of the above initially. However, thereafter a cd-rom and one person on-call should suffice.

Physical Location

34. What type of organization should house/maintain the system?
STLAgency

Somewhere stable and at little or no cost to maintain!! Idealistic aren't I!!!

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	5/14/2003 2:45:00 AM
First Name:	Sarah
Last Name:	Kelly
Organization:	Institute for Tribal Environmental Professionals
Job Function:	Program Manager
Level of Emissions Data Interest and Experience:	Moderate
Phone Number:	(928) 523-6377
Email Address:	Sarah.Kelly@nau.edu

Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
AQMF, AAMRF, EF, MTF, TDDWG, STL

If the EDMS was kept more up-to-date than the EPA's Air Data NEI information, and it was as easy to access, then I believe that tribal agencies would prefer to use it (over AirData) to obtain information about emissions

2. What is the anticipated level of use by you/your organization?
Medium

Our use would be medium to high, depending on how the EDMS is set up. We currently keep a copy of all tribally developed EI information that is submitted to the NEI. (Right now, most tribes are using us to format and submit their data for NEI, so we have a copy of all tribe's data). We keep this extra copy because now it is difficult to query the NEI to get all information developed by tribes (exclusive of data that was developed by other agencies), and that is a data set that is of interest to us and the tribes we work with. As more tribes start using TEISS, which enables them to format and submit EI data to the NEI without our help, I think it will still be desirable to able able to query the NEI and the WRAP EI database and be able to pull out just the data developed by tribes.

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository

4. Who should submit emissions data?
STL, IndustriesAndTradeAssociations

5. What should the minimum data submission frequency be?
Other

Most tribes will not be updating their EI data on an annual basis, though a few tribes might. Many tribes will update every couple of years, and may not have a regular schedule for updating their EI, they may only do it when something changes. The EDMS should allow this type of sporadic data submission by the tribes, so that the most up-to-date data developed by tribes will always be a part of the WRAP data set, regardless of when it was developed.

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?
Area, Non-roadMobile, Wildfire, PrescribedWildlandFire, AgriculturalFire, PavedRoadDust, UnpavedRoadDust, NaturalNon-antropagenic

8. For each of the above source categories, what primary activity data should be included?

9. Would you expect the system to perform emissions calculations?
No

Each agency should have the flexibility and freedom to use what ever methods of emission calculations they like and be able to choose emission factors that are locally developed if they are available. If the system does calculations, it should allow a great deal of flexibility. I'm not aware that the WRAP is requiring that certain methods and factors be used, but they may in the future to provide a consistent data set.

10. Would you like the system to perform emissions projections?

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?

It depends if the WRAP emission forum can come to consensus on which methods they would like to have used for all these functions.

13. Should the emissions rates be actual or potential-to-emit or both?
Actual

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Annual

15. What spatial resolution of the emissions data would be helpful to you/your organization?
StateAndTribal

Will need to resolve the fact that counties overlap reservations. Where reservation data exists that was developed by the tribe, it should supercede any data reported at the county level for the same land area.

16. What geopolitical boundaries need to be included in the system?
WRAP, AllModelingAreas

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?
Yes

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat, MissingInformation, ErroneousInformation

20. What frequency of review would be helpful/useful?

21. Can WRAP alter submitted data in case of errors or inconsistencies?
Yes

Yes, but must get the prior approval of the submitting agency.

At what point should WRAP stop altering data?

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?
Yes

It would be good if everyone was using the same methods.

23. How should international emissions data be submitted and revised?

GIS Components

24. What GIS capabilities should the web-based system have?
BasicGISFunctions, ExtendedGISFunctions

25. What map printing capabilities should the web-based system have?
8.5x11

26. What would be your GIS software preference, if any?
ESIR

User Preferences / Access

27. Who should be able to access the system?
WRAPMembers, STLAgencies

28. How would you like to see the data be accessed?
StaticReports, Ad-HocQueries, DownloadDatasets

29. What systems are you currently using?
We are formatting tribes data for NEI in the NIF format and we keep our tribal EI database in Access in the NIF format.

What do you like/dislike about these systems?

30. What file type(s) will you want to export data into?
TextFile, Database

31. What format(s) will you want to export data into?
NEI

32. What level of security should the system implement and how sensitive is the data?
Tribes usually won't release data at all if they feel it is sensitive. Tribal data that comes to the EDMS will be OK for the public to see in most cases.

Training

33. What types of training should be available?
OnlineManual, HelpDesk, Workshops

Physical Location

34. What type of organization should house/maintain the system?
University, Contractor

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	4/14/2003 5:53:00 PM
First Name:	Brock
Last Name:	LeBaron
Organization:	Utah Div. of Air Quality
Job Function:	Technical/Modeling
Level of Emissions Data Interest and Experience:	High
Phone Number:	801/536-4006
Email Address:	blebaron@utah.gov

Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
AQMF, EF, MTF, STL

2. What is the anticipated level of use by you/your organization?
Medium

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository, RHRImplementation

4. Who should submit emissions data?
STL

EI data needs to come into the system via the states/tribes when possible. Holes can be filled by use of NET data or regional emission calculations (e.g, biogenics).

5. What should the minimum data submission frequency be?
Annual

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?
Point, On-roadMobile, PrescribedWildlandFire, AgriculturalFire

8. For each of the above source categories, what primary activity data should be included?
Whatever data is available to temporally disaggregate from annual to daily (hourly?). Big impact sources like fire emissions may need to actualy be logged by event. Other sources can use profiles.

9. Would you expect the system to perform emissions calculations?
No

10. Would you like the system to perform emissions projections?
No

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?
No

The only advantage here is consistancy across the region.

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?
Medium

Again, the value to doing this is consistance versus accuarcy across the region. For modeling the first is more important.

13. Should the emissions rates be actual or potential-to-emit or both?
Actual

Need actual for model perfomace eval. and PTE for future potential impacts.

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Annual

Annual is all you can expect from the states, but need to have profiles to get to hourly for modeling.

15. What spatial resolution of the emissions data would be helpful to you/your organization?
StateAndTribal, County, AirCorridor, ModelingGrid

If you have a GIS component it should be easy to slice and dice anyway you want.

16. What geopolitical boundaries need to be included in the system?
WRAP

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?
Yes

Probably not. But there should be a place to store them if available.

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?
Submission to NET and EDMS needs to be parallel. No additional work to submit to EDMS.

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat, MissingInformation, ErroneousInformation

Should be easy to do some level of erroneous data checks using bounding.

20. What frequency of review would be helpful/useful?

21. Can WRAP alter submitted data in case of errors or inconsistencies?
No

Probably not without state/tribal concurrance.

At what point should WRAP stop altering data?
When it makes no difference in application outcome. e.e., model results are not significantly different.

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?
Yes

This probably will never happen but it would nice. In some cases when consistency is very important it may be neccesary to make regional calculations with the blessing of the states and tribes.

23. How should international emissions data be submitted and revised?
WRAP should be responsible for the getting these data and submitting.

GIS Components

24. What GIS capabilities should the web-based system have?
BasicGISFunctions

Probably all that would be used by standard users. Make sure the needed coverages are included.

25. What map printing capabilities should the web-based system have?
8.5x11

26. What would be your GIS software preference, if any?
ESIR

Will there be lisencing problems?

User Preferences / Access

27. Who should be able to access the system?
WRAPMembers, STLAgencies, Public, Other

28. How would you like to see the data be accessed?
StaticReports, Ad-HocQueries, DownloadDatasets

29. What systems are you currently using?
Windows, NT, LINUX are avaiable.

What do you like/dislike about these systems?

30. What file type(s) will you want to export data into?
TextFile, Other

31. What format(s) will you want to export data into?
EmissionModeling

Modeling Forum need.

32. What level of security should the system implement and how sensitive is the data?
Not sure on this. Some level at least.

Training

33. What types of training should be available?
OnlineManual, Workshops

Physical Location

34. What type of organization should house/maintain the system?
University, STLAgency

May not matter as long as they can do the job. The CIRES IMPROVE data site seems to be well managed.

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	4/21/2003 10:05:00 AM
First Name:	Lewis
Last Name:	McLeod
Organization:	Confederated Salish & Kootenai Tribes
Job Function:	Tribal Air Quality Technician
Level of Emissions Data Interest and Experience:	moderate
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Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
APPF, AQMF, AAMRF, Class1, DEF, EAF, EF, FEF, MTF, MSF, RDF, TDDWG, STL, Public

this systems will be used by everyone for decision making

2. What is the anticipated level of use by you/your organization?
Medium

I will want to be able to use it

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository

4. Who should submit emissions data?
STL, IndustriesAndTradeAssociations, Other

anyone who has valid, verifiable data should input it so that we make sure we have complete data sets

5. What should the minimum data submission frequency be?
Other

semi-annual

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?
Area, Non-roadMobile, Wildfire, PrescribedWildlandFire, AgriculturalFire, PavedRoadDust, UnpavedRoadDust

8. For each of the above source categories, what primary activity data should be included?
emissions tpy, production schedule, working schedule and other data that relates to dust issues

9. Would you expect the system to perform emissions calculations?
Yes

10. Would you like the system to perform emissions projections?
Yes

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?
Yes

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?
High

13. Should the emissions rates be actual or potential-to-emit or both?
Actual, Potential

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Annual, Seasonal, Daily, Mixed

15. What spatial resolution of the emissions data would be helpful to you/your organization?
StateAndTribal, County, Mixed

16. What geopolitical boundaries need to be included in the system?
AllModelingAreas

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?
Yes

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?
tell me

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat, MissingInformation, ErroneousInformation

20. What frequency of review would be helpful/useful?
upon input and at unspecified times during collection of data

21. Can WRAP alter submitted data in case of errors or inconsistencies?
No

I'm not sure of this. I would think that access to the ability to alter data would have to be controlled by a technical group or forum.

At what point should WRAP stop altering data?
Never if errors are found

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?

Yes

good science

23. How should international emissions data be submitted and revised?
This has to be researched and discussed.

GIS Components

24. What GIS capabilities should the web-based system have?
ExtendedGISFunctions

25. What map printing capabilities should the web-based system have?
8.5x11, LargeScale

26. What would be your GIS software preference, if any?

Not sure about this.

User Preferences / Access

27. Who should be able to access the system?
WRAPMembers, STLAgencies, Public

28. How would you like to see the data be accessed?
StaticReports, DownloadDatasets

29. What systems are you currently using?

What do you like/dislike about these systems?

30. What file type(s) will you want to export data into?
TextFile, Database

31. What format(s) will you want to export data into?
NEI, EmissionModeling

32. What level of security should the system implement and how sensitive is the data?
This element needs to be addressed from a Tribal perspecitve because some Tribes consider their data extremely sensitive. Need to take a close look at this.

Training

33. What types of training should be available?
OnlineManual, HelpDesk, Workshops

Physical Location

34. What type of organization should house/maintain the system?
Contractor, STLAgency

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	4/24/2003 12:21:00 PM
First Name:	Carol
Last Name:	Nielsen
Organization:	Utah Division of Air Quality
Job Function:	Inventory Coordinator
Level of Emissions Data Interest and Experience:	High
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Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
Class1, EF, FEF, MTF, STL

I believe that the current National Emissions Inventory (NEI) database includes the same information that will be used for the WRAP SIP except the SOx information for the Market Trading Program and maybe some additional fire data.

2. What is the anticipated level of use by you/your organization?
Low

I do not believe that I will be going to the database for data. The only data that I will be using is data that I will be providing to the database.

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository

The NEI database will contain the data that is needed for the WRAP SIP except for annual SOx data. I question why states need to submit the same data to two different databases.

4. Who should submit emissions data?
STL, Other

I think that the WRAP should use the data from the NEI. If there is additional data needed for the WRAP modeling process that cannot be stored in the NEI, that data should be kept in the WRAP database.

5. What should the minimum data submission frequency be?
Annual

Annual for the SOx Market Trading Program data because the NEI is presently not uploading data on an annual basis. The other data can be submitted to the NEI every three years.

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants

I would only include pollutants for data that cannot be stored in the NEI. The only data that I know of that the NEI is not equipped to store is SOx on an annual basis.

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?

Wildfire, PrescribedWildlandFire, AgriculturalFire, UnpavedRoadDust, NaturalNon-antropagenic

8. For each of the above source categories, what primary activity data should be included?

9. Would you expect the system to perform emissions calculations?
No

The calculations would be checked before the data is uploaded.

10. Would you like the system to perform emissions projections?
Yes

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?
Yes

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?
Medium

The confidence would depend on the specific model that was run.

13. Should the emissions rates be actual or potential-to-emit or both?
Actual, Potential

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Annual, Seasonal

The data that we expect to put into the database would only be annual emissions.

15. What spatial resolution of the emissions data would be helpful to you/your organization?
County

The modeling grid level would be helpful in the modeling process. However, I do not expect to have that detail of information to submit to the database and I don't know if other states will either.

16. What geopolitical boundaries need to be included in the system?

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?
Yes

For the annual SOx emissions, some of this data would be needed to assess whether the traded SOx emissions are equivalent from all sources.

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?
I believe that WRAP should use the NEI data. The QA/QC review on my level will not change depending on what database it is submitted to.

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat, MissingInformation, ErroneousInformation

This is the type of QA/QC that is already done on the NEI data.

20. What frequency of review would be helpful/useful?

21. Can WRAP alter submitted data in case of errors or inconsistencies?
Yes

Yes only with confirmation from the organization submitting the data.

At what point should WRAP stop altering data?
The data should not be altered without confirmation from the source. If it is altered without notification, there will be two national databases with different emission amounts for the same source.

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?
Yes

This would ensure that SOx emissions from different sources are the same quality when traded.

23. How should international emissions data be submitted and revised?

GIS Components

24. What GIS capabilities should the web-based system have?

I believe that I would not use this function.

25. What map printing capabilities should the web-based system have?

I would not use this capability.

26. What would be your GIS software preference, if any?

User Preferences / Access

27. Who should be able to access the system?
STLAgencies, Public

The information that I would submit to the database would be public information.

28. How would you like to see the data be accessed?

29. What systems are you currently using?
Access database and Excel spreadsheets.

What do you like/dislike about these systems?
Access can be used to upload the NEI data.

30. What file type(s) will you want to export data into?
Database, Other

31. What format(s) will you want to export data into?
NEI

I would not be using other states data. I would already have my submitted data.

32. What level of security should the system implement and how sensitive is the data?
The data that I forsee submitting to the database is inventory data that cannot be confidential.

Training

33. What types of training should be available?
OnlineManual

Physical Location

34. What type of organization should house/maintain the system?

No preference.

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	3/26/2003 1:21:00 PM
First Name:	Sally
Last Name:	Otterson
Organization:	Emissions Forum/WA Dept. of Ecology
Job Function:	
Level of Emissions Data Interest and Experience:	
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Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
AQMF, EF, STL

I checked the forums I thought were the PRIMARY users, but most of the emissions-related forums will provide data to EDMS.

2. What is the anticipated level of use by you/your organization?
High

High in my capacity as Emissions Forum member. Medium to Low as a State Agency.

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository, StateAnnualEmissions, RHRImplementation

The primary role of the database is to help states/tribes implement the emissions reporting requirements of the RH rule and provide emissions data that can be used in an emissions processor (such as SMOKE) for modeling.

4. Who should submit emissions data?
STL

Data from industry or other organizations may reside in the database, but it should come through the regulatory agency: state, local or tribe.

5. What should the minimum data submission frequency be?
Other

Frequency should be stipulated according to the RH rule: it may be annual for some types of tracking (e.g. mobile source emissions reporting under section 309), but may be less frequent (e.g. every 5 years for periodic emissions reports used to track reasonable progress) for others.

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants

Database structure should not prohibit addition of non-visibility impairing emissions at a future data, but at this time it should focus on the visibility-impairing pollutants

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?

Point, Area, On-roadMobile, Non-roadMobile, Wildfire, PrescribedWildlandFire, AgriculturalFire, PavedRoadDust, UnpavedRoadDust, Biogenic, NaturalNon-antropagenic

All of these major source categories are important for one reason or another.

8. For each of the above source categories, what primary activity data should be included?
I would strongly recommend that this database include emissions and point source modeling parameters only (required data elements in SMOKE files PTINV, ARINV, MBINV). Each source has different requirements; indeed some are calculated via complex models. Methods and models are constantly changing and would require that the database constantly be updated/changed. This will be very costly. Large database efforts that attempt to do everything usually fail from over-complexity, over-simplicity, or non-cooperation from users. David Misenheimer from EPA also made this point at the 3/2003 Santa Fe WRAP All Technical Forums meeting. If WRAP must calculate emissions for some source categories, this should be done outside of the EDMS and only the emissions results should be kept in EDMS.

9. Would you expect the system to perform emissions calculations?
No

Please see explanation for question 8 above.

10. Would you like the system to perform emissions projections?
No

I think the system should store emissions projections, but not make them. I don't know a lot about the processes WRAP has used for emissions projections, but I imagine there are varying levels of complexity to arriving at the final emissions - including use of emissions models. I would recommend EDMS be an emissions storage system only. See explanation under question 8.

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?
No

See explanation for question 8 above.

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?

13. Should the emissions rates be actual or potential-to-emit or both?
Actual, Potential

Potential to emit is for point sources. If the data is available from state/local/tribes it could be part of the database to be used in emissions projections.

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Annual, Seasonal, Daily, Hourly, Mixed

Emissions will be used in SMOKE which takes annual or seasonal day emissions for area/mobile sources, and annual, seasonal daily, specific-day, or hour specific data for point sources. SMOKE temporal profiles and cross-reference files are used to allocate annual/seasonal/daily emissions to the correct hours when the data is used for modeling. The WRAP could develop default temporal profiles and cross-reference files that could simply be made available as downloadable files.

15. What spatial resolution of the emissions data would be helpful to you/your organization?
StateAndTribal, County, AirCorridor, Mixed

The first three check box categories may be useful for summary reporting. SMOKE looks for county level emissions for modeling. They are gridded using spatial allocation files. WRAP could provide default SMOKE spatial allocation and cross-reference files (e.g. population, landuse, railroads, etc.) that could simply be made available as downloadable files. SMOKE will use these files to make grid allocations of the county (or perhaps tribe) level emissions in EDMS.

16. What geopolitical boundaries need to be included in the system?
AllModelingAreas

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?
SpeciationProfiles, TemporalProfiles, SpatialAllocationProfiles, StationarySourceParameters, EstimatedEmissions, EconomicGrowth

I would still suggest that EDMS only contain emissions data and point source parameters necessary for modeling (required data elements in SMOKE files PTINV, ARINV, MBINV); however, organizations could submit supporting temporal/spatial/speciation SMOKE files for storage on the EDMS website so others could download the information.

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?
Unknown, but the closer these can be coordinated, the more likely the WRAP will be successful in implementation of EDMS.

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat, MissingInformation, ErroneousInformation

20. What frequency of review would be helpful/useful?
After every major regional update/submission.

21. Can WRAP alter submitted data in case of errors or inconsistencies?
Yes

With consent of submitter

At what point should WRAP stop altering data?
WRAP should develop realistic schedule in consultation with Emissions Forum and other technical forums. Unless major schedule changes are required to fix major problems, WRAP should stop altering data according to their planned schedule.

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?
No

I don't see how the WRAP can force consistency since they are not responsible for writing the SIPs. If all parties agree, this could perhaps be done to support the background modeling; otherwise, it is up to states to do their SIPs.

23. How should international emissions data be submitted and revised?
May be most efficient to do only as needed by special contract.

GIS Components

24. What GIS capabilities should the web-based system have?

If EDMS is going to contain point sources by coordinates, and area/mobile/biogenic by county/tribe (recommended), then GIS capabilities do not have to be very sophisticated. The data should be downloadable for input into SMOKE or whatever systems users may wish to use. Users are then free to use the data in concert with other data/systems to display/summarize, etc.

25. What map printing capabilities should the web-based system have?

26. What would be your GIS software preference, if any?

We use ESRI, but again, just make the data downloadable and users may use whatever products they have.

User Preferences / Access

27. Who should be able to access the system?
WRAPMembers, STLAgencies, Public, Other

Read/query/download access should be given to all unless there is any confidential data. If so, we will need different levels of access. If activity data is not provided, confidentiality should not be a problem. We will need differing levels of update access.

28. How would you like to see the data be accessed?
StaticReports, Ad-HocQueries, DownloadDatasets

29. What systems are you currently using?
Access, linux with Perl, Arcview, SMOKE, (PAVE).

What do you like/dislike about these systems?
Access is OK for smaller files. Linux with Perl is better for large files. Arcview is our agency's standard GIS package, but PAVE helps visualize emissions for QA when processing emissions in SMOKE.

30. What file type(s) will you want to export data into?
TextFile, Database, Other

Short reports could export to database or spreadsheet formats, but it is probably just easier to export text files. Text files can be used in just about any other product.

31. What format(s) will you want to export data into?
NEI, EmissionModeling

We may not get to export the exact final files for either NEI or SMOKE (or other emissions processor), but we should be able to get close.

32. What level of security should the system implement and how sensitive is the data?
Area/mobile/biogenic data should not be sensitive. Depending on what is decided, some of the point source data could be. Our policy with EPA might be helpful here: if it's confidential, don't submit it.

Training

33. What types of training should be available?
OnlineManual

There should be an email address to send questions to. If we keep it simple, we should avoid the need for a lot of user support.

Physical Location

34. What type of organization should house/maintain the system?
Other

I think WRAP should house the system. This will be a long-term commitment. If we select an outside entity, we are more dependent on their resource issues/demands.

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	3/26/2003 5:24:00 PM
First Name:	Marc
Last Name:	Pitchford
Organization:	AMRF
Job Function:	
Level of Emissions Data Interest and Experience:	
Phone Number:	
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Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
APPF, AQMF, AAMRF, Class1, DEF, EAF, EF, FEF, MTF, MSF, TDDWG, STL

2. What is the anticipated level of use by you/your organization?
Medium

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository, StateAnnualEmissions, RHRImplementation, Other

It has other important roles as well including emissions projections, policy analysis, storing higher time resolution data (hourly & daily), emissions modeling, public education, etc.

4. Who should submit emissions data?
STL, IndustriesAndTradeAssociations, Other

others as well

5. What should the minimum data submission frequency be?
Other

via links, it could be getting fire emissions on a daily basis for example.

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants, Other

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?
Point, Area, On-roadMobile, Non-roadMobile, Wildfire, PrescribedWildlandFire, AgriculturalFire, PavedRoadDust, UnpavedRoadDust, Biogenic, NaturalNon-antropagenic

8. For each of the above source categories, what primary activity data should be included?
store, summarize, display, quality check, diseminate, etc.

9. Would you expect the system to perform emissions calculations?
Yes

10. Would you like the system to perform emissions projections?
Yes

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?
Yes

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?

13. Should the emissions rates be actual or potential-to-emit or both?
Actual, Potential

Technical assessments require the first, while some policy assessments require the second

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Annual, Seasonal, Daily, Hourly, Mixed

15. What spatial resolution of the emissions data would be helpful to you/your organization?
Mixed

where ever possible it should be by map coordinate to the nearest few meters Modeling grids change over time so that should be avoided

16. What geopolitical boundaries need to be included in the system?
AllModelingAreas

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?
Activity, EmissionFactors, SpeciationProfiles, TemporalProfiles, SpatialAllocationProfiles, StationarySourceParameters, EstimatedEmissions, EconomicGrowth, Population, LandUse, Other

we need a place for all of these parameters

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat, MissingInformation, ErroneousInformation

20. What frequency of review would be helpful/useful?
with each new submission plus annual reviews for the entire system

21. Can WRAP alter submitted data in case of errors or inconsistencies?
Yes

only with notification

At what point should WRAP stop altering data?

when they get it right

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?
Yes

23. How should international emissions data be submitted and revised?
any way we can get it

GIS Components

24. What GIS capabilities should the web-based system have?
ExtendedGISFunctions

25. What map printing capabilities should the web-based system have?
8.5x11, LargeScale

26. What would be your GIS software preference, if any?

User Preferences / Access

27. Who should be able to access the system?
WRAPMembers, STLAgencies, Public, Other

28. How would you like to see the data be accessed?
StaticReports, Ad-HocQueries, DownloadDatasets

29. What systems are you currently using?

What do you like/dislike about these systems?

30. What file type(s) will you want to export data into?

31. What format(s) will you want to export data into?

32. What level of security should the system implement and how sensitive is the data?

Training

33. What types of training should be available?
OnlineManual, HelpDesk, Workshops

Physical Location

34. What type of organization should house/maintain the system?
University, Contractor, STLAgency, Other

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	4/3/2003 12:56:00 PM
First Name:	Dennis
Last Name:	Schwehr
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Job Function:	
Level of Emissions Data Interest and Experience:	
Phone Number:	
Email Address:	denniss@simginc.com

Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
AQMF, Class1, EAF, EF, FEF, MTF, MSF, TDDWG, STL

Forums who use EI data to conduct additional modeling or analyses will use the EDMS. But in the long run, states, tribes, locals will use it to compile EI's in planning areas, to assist with control strategies, monitor progress and comply with RH rules.

2. What is the anticipated level of use by you/your organization?
Low

The EF is responsible for input of point, area and mobile EI, rather than a user of outputs. It is unknown at this point which forum or entity will be responsible for conducting the EDMS output reports to monitor SO2 targets, CAC's etc.

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository, StateAnnualEmissions, RHRImplementation

Existing (histroical), EI gathered in future years, as well as EI's as projected for future years are the principle uses of the EDMS

4. Who should submit emissions data?
STL

For the most part, it will be the governing bodies who gather EI's who will submit them. There may be some exceptions, particularly for fire.

5. What should the minimum data submission frequency be?
Annual

Annual submissions are the preference;however, many states are on a three year schedule and the EDMS may have to have a means of carrying a annual EI to a froward year as a surrogate for a year in which a state does not submit a new inventory

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants

Many users are likely to want other pollutants. Even if those pollutants are added initially, some folks may still want others that do not exist in the EDMS; therefore it makes sense that some flexibility be incorporated to add new pollutants in the future

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?
Point, Area, On-roadMobile, Non-roadMobile, Wildfire, PrescribedWildlandFire, AgriculturalFire, PavedRoadDust, UnpavedRoadDust, Biogenic, NaturalNon-antropagenic

all, plus ammonia sources

8. For each of the above source categories, what primary activity data should be included?
I am not sufficiently expert to answer this question. Rely on input from others.

9. Would you expect the system to perform emissions calculations?
Yes

a library of emission factors, changeable, must be maintained in the cases in which submitters use differnt factors, so that some consistency can be gained, or in the event that data is submitted for which factors must be applied to calc emissions

10. Would you like the system to perform emissions projections?

unknown. If you are asking if emissions for a future year are to be projected based on economic factors, I say 'no'

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?
No

no, but it must be compatible with SMOKE so that EDMS output can be used by SMOKE

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?

13. Should the emissions rates be actual or potential-to-emit or both?
Actual

emissions inventories and modelling will all be based on actual. Some folks may want to use the EDMS for PSD increment calcs, which would require potential emissions, but that is a bell or whistle that goes beyond the intent

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Mixed

mobile emissions may require temporal. I'll leave this question for toehrs who know more.

15. What spatial resolution of the emissions data would be helpful to you/your organization?
ModelingGrid

certainly grid level; however, query capability must allow states, tribes, locals to obtain geographic EI's based on jurisdictional boundaries

16. What geopolitical boundaries need to be included in the system?
AllModelingAreas

impacts from Ca, Mex and CENRAP must be considered, so these areas must be included in the EI

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?

I personally don't know. I'll leave that to others.

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?
It is anticipated that the EDMS will be manned by someone who will perform some levels of QA. It's possible that a QA/QC manual will be developed and contain some checks to be performed by submitters as well as the EDMS coordinator. Details unknown at this time.

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat, MissingInformation, ErroneousInformation

likely all three because these components must be correct before input to modelling.

20. What frequency of review would be helpful/useful?
some review with each submission. additional review on an annual basis, assuming an annual submission cycle.

21. Can WRAP alter submitted data in case of errors or inconsistencies?
Yes

the capability to correct info already submitted, whether QA'd or not, must be present.

At what point should WRAP stop altering data?
I don't know if there should ever be a cutoff point. If there was one, it would be some time after the annual submission and QA

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?

We strive for consistency in factors etc, however, we also recognize that some submitters are committed to using their own emission factors that might be different than other entities would use. The EDMS must allow that but also have the ability to change factors

23. How should international emissions data be submitted and revised?
I don't know. I suggest you contact ERG (through Lee G) to see how Mexico emissions will be submitted. He might also know who to contact about Canada.

GIS Components

24. What GIS capabilities should the web-based system have?

I'll leave this to others

25. What map printing capabilities should the web-based system have?

others can answer this

26. What would be your GIS software preference, if any?

don't know

User Preferences / Access

27. Who should be able to access the system?
WRAPMembers, STLAgencies, Other

Perhaps anyone, including the public. however, access for making submissions or corrections must be restricted.

28. How would you like to see the data be accessed?
StaticReports, Ad-HocQueries, DownloadDatasets

The first three, certainly

29. What systems are you currently using?
Have you seen the survey report prepared for the Emissions Forum about three years ago, which may give some insight to this and other questions about the current methods used by states for EIs. Sorry, I can't recll the consultant who did the work.

What do you like/dislike about these systems?

30. What file type(s) will you want to export data into?

31. What format(s) will you want to export data into?

32. What level of security should the system implement and how sensitive is the data?
Keeping in mind that the EDMS will likely employ a coordinator for QA, reports, etc., some restrictions can be imposed on all users, allowing unrestricted access and authorization by the coordinator. Examp;e, maybe users should not be allowed to change data, but would be allowed to submit changes, that the coordinator would actually enter into the system.

Training

33. What types of training should be available?
OnlineManual, HelpDesk, Workshops

A manual seems necessary as well as training workshops. To some extent the coordinator should be able to help users, although I hope that's not excessive.

Physical Location

34. What type of organization should house/maintain the system?
University, Contractor, STLAgency, Other

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	4/25/2003 3:55:00 PM
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Last Name:	Stocum
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Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
AQMF, DEF, EF, FEF, MTF, MSF, STL

2. What is the anticipated level of use by you/your organization?
Medium

The work we do primarily focuses inside the state with our own generated emission estimates. So other emission sources and other states' data has a lower priority.

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository

4. Who should submit emissions data?
STL

I don't feel that any industry or particular company will voluntarily submit anything and if made to do it the chance for bad data to enter the database is quite high.

5. What should the minimum data submission frequency be?
Annual

Nothing more frequent than annual. As it is the CERR has a 3 year frequency on many sources and even anything more frequent than that will take a backseat to anything that is mandatory. Especially with chopped budgets and limited staff.

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants, Other

Anything that is available should be housed as it makes the EDMS a "one stop shop".

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?

Don't have the knowledge to answer this.

8. For each of the above source categories, what primary activity data should be included?

9. Would you expect the system to perform emissions calculations?
No

No I think just holding the emissions is good enough.

10. Would you like the system to perform emissions projections?
Yes

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?
No

Typically demonstrations deal with general, easy, modeling scenarios, I don't find that helpful because if I am having an issue running a model it is usually over one of the more complex scenarios that are particular to my state and generic examples don't help.

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?
Medium

13. Should the emissions rates be actual or potential-to-emit or both?
Actual

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Annual

15. What spatial resolution of the emissions data would be helpful to you/your organization?
County

16. What geopolitical boundaries need to be included in the system?
WRAP

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?
Yes

Activity, EFs, emissions - yes. Also anything else that isn't organized elsewhere. For example I'd rather go to the Census Bureau for population numbers because I'd trust them to be right and defensible.

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?
I'm not sure....

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat

20. What frequency of review would be helpful/useful?

21. Can WRAP alter submitted data in case of errors or inconsistencies?
Yes

Yes but only after discussion with original submitter.

At what point should WRAP stop altering data?

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?
Yes

Yes the benefits are there for this consistency, but is it realistic to think that all the states have the capacity to perform the same methodology? I think it is agreeable that a survey is the best way to get activity data but there isn't enough resources to survey everything but if a particular state can't live without that level of accuracy does that mean every state must follow that methodology?

23. How should international emissions data be submitted and revised?
It should be submitted just as the rest of the data. If it isn't compatible with what is already there then there is no point in adding it especially if the desire is to have the database do calculations and projections. Units etc. must be identical.

GIS Components

24. What GIS capabilities should the web-based system have?
ExtendedGISFunctions

It seems to be that basic abilities are never enough and always leave too much to be desired so go all the way.

25. What map printing capabilities should the web-based system have?
8.5x11, LargeScale

26. What would be your GIS software preference, if any?
ESIR

User Preferences / Access

27. Who should be able to access the system?
WRAPMembers, STLAgencies, Public

State/local/members having upadate privledges and the public just read access.

28. How would you like to see the data be accessed?
Ad-HocQueries, DownloadDatasets

29. What systems are you currently using?
excel, access, oracle, arcview

What do you like/dislike about these systems?

30. What file type(s) will you want to export data into?
Database

31. What format(s) will you want to export data into?
EmissionModeling

32. What level of security should the system implement and how sensitive is the data?

Training

33. What types of training should be available?
OnlineManual, Workshops, Other

Physical Location

34. What type of organization should house/maintain the system?
University

Graduate students are bright and less expensive.

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	4/25/2003 4:07:00 PM
First Name:	Christopher
Last Name:	Swab
Organization:	Oregon DEQ
Job Function:	Emission Inventory Analyst
Level of Emissions Data Interest and Experience:	medium
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Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
STL

This is a general guess on my part.

2. What is the anticipated level of use by you/your organization?

If EDMS proves to be an accurate data source, level of use would be medium to high.

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository, StateAnnualEmissions

I'm not very familiar with RHR requirements, not sure of my answere here.

4. Who should submit emissions data?
STL

We already submit much info to the EPA, it might be somewhat redundant to have EPA submit on top of state agencies.

5. What should the minimum data submission frequency be?
Annual

Most of our results are in tons per year.

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants, Other

It would be nice if HAP's were included.

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?

I don't know if I can answer this one. I'm not too familiar with RHR.

8. For each of the above source categories, what primary activity data should be included?

9. Would you expect the system to perform emissions calculations?
Yes

That would definitely be nice.

10. Would you like the system to perform emissions projections?

Don't know.

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?
Yes

This would be nice also.

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?

We would have to make a comparison between data generated at DEQ and data generated from EDMS.

13. Should the emissions rates be actual or potential-to-emit or both?

Both would be nice, but we're getting beyond my scope here.

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Annual, Seasonal

Both annual and seasonal are important.

15. What spatial resolution of the emissions data would be helpful to you/your organization?
County

County level would work well for us.

16. What geopolitical boundaries need to be included in the system?
WRAP

This would be more than enough, I think.

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?

In order for accurate results, especially with regard to questions 9 through 16, I think it would be helpful if organizations submitted their own "local" data. But this would entail considerable effort, on par with a CDX submittal to the EPA. How much work is WRAP willing to do to track down local data such as population?

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?
Our own experience here is that QA/QC and submission of EI data (example: Tri-annual state county-by-county EI data)for EPA requirements takes considerable effort, especially when updating information after the first submittal (1999 year after 1996 year).

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat, MissingInformation, ErroneousInformation

All levels are important. Small mistakes add up to tons of pollutants, and there is much room for error.

20. What frequency of review would be helpful/useful?
As much as possible.

21. Can WRAP alter submitted data in case of errors or inconsistencies?
Yes

It will be another level of QA.

At what point should WRAP stop altering data?
Not sure what "altering" means here. Refining, QA'ing, or manipulating? Also, be sure to let the submitting agency know what WRAP has done.

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?
Yes

This would be excellent, but determining the best methodology to use might prove difficult.

23. How should international emissions data be submitted and revised?
Beyond my scope, but start by converting metric units to english.

GIS Components

24. What GIS capabilities should the web-based system have?
BasicGISFunctions

What will emissions be allocated by? (determined by question 15?)

25. What map printing capabilities should the web-based system have?
LargeScale

Large scale would be great.

26. What would be your GIS software preference, if any?
ESIR

User Preferences / Access

27. Who should be able to access the system?

All should be able to access the system.

28. How would you like to see the data be accessed?
StaticReports, Ad-HocQueries, DownloadDatasets

It's probably asking for too much, but all of these access types would be great.

29. What systems are you currently using?
We have a database system that we occasionally use in conjunction with Arcview GIS. We also have extensive arcived electronic files.

What do you like/dislike about these systems?
Our database works great, we are getting comfortable with GIS. Electronic files (linked spreadsheets) are a pain.

30. What file type(s) will you want to export data into?
Database, Other

Small projects = spreadsheets. Large projects = database.

31. What format(s) will you want to export data into?

NEI, EmissionModeling

Recently, a lot of our modeling has required SMOKE formatted inputs.

32. What level of security should the system implement and how sensitive is the data?
Good question. We are a state agency, so all of our data is available to the public. I don't know about other agencies requirements, though.

Training

33. What types of training should be available?
OnlineManual, HelpDesk, Workshops

All these would be nice, including a help desk as this appears to be a large project with a large amount of info available.

Physical Location

34. What type of organization should house/maintain the system?
University

I don't really know, though I'm guessing a university.

EDMS Needs Assessment Website

Questionnaire

General Information

Date Submitted:	4/22/2003 11:07:00 AM
First Name:	Mary
Last Name:	Uhl
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Job Function:	Manager, Planning and Policy Section
Level of Emissions Data Interest and Experience:	I oversee our EI program
Phone Number:	505-955-8086
Email Address:	Mary_Uhl@nmenv.state.nm.us

Emissions Data Needs, Reporting and Tracking

1. In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?
APPF, AQMF, AAMRF, Class1, DEF, EAF, EF, FEF, MTF, MSF, RDF, TDDWG, STL, Public

I think that a robust EI system will be used by all the forums for all kinds of research, calculations, and determinations.

2. What is the anticipated level of use by you/your organization?
Medium

NMED would upload data to such a system and use the system to gather information about other sources in the west.

3. What do you envision or expect the primary role(s) of the EDMS to be?
WrapRepository, StateAnnualEmissions

4. Who should submit emissions data?
STL

States, tribes and locals should submit their own data--too many entities entering data would result in errors.

5. What should the minimum data submission frequency be?
Annual

This would match our inventory cycles.

6. What pollutants should be included in the EDMS?
VisibilityImpairingPollutants, Other

There should be fields for other pollutants, although these might not be filled in for several years.

7. In terms of you/your organization's involvement with Regional Haze issues, What are the primary sources of concern?
Point, Area, On-roadMobile, Non-roadMobile, Wildfire, PrescribedWildlandFire, AgriculturalFire, PavedRoadDust, UnpavedRoadDust, Biogenic, NaturalNon-antropagenic

8. For each of the above source categories, what primary activity data should be included?

9. Would you expect the system to perform emissions calculations?
No

10. Would you like the system to perform emissions projections?
No

11. Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc.)?
No

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10 and 11)?
Medium

13. Should the emissions rates be actual or potential-to-emit or both?
Actual, Potential

Having both would be most useful for a wide variety of applications

14. In your opinion, what is the the most useful or necessary temporal resolution of the emissions data?
Annual, Hourly

Annual and hourly are both useful for many applications

15. What spatial resolution of the emissions data would be helpful to you/your organization?
County, ModelingGrid

16. What geopolitical boundaries need to be included in the system?
AllModelingAreas

17. Do you envision organizations to submit surrogate data such as Activity, Emission factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic Growth, Population or Land use?
Yes

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and the WRAP EDMS?
It would be best if states could submit the NEI and EDMS data simultaneously and if the QA/QC of the data happened in the same time frames.

Data Quality Control and Assurance

19. What level of review is neccessary?
SubmissionFormat, MissingInformation, ErroneousInformation

20. What frequency of review would be helpful/useful?
annual

21. Can WRAP alter submitted data in case of errors or inconsistencies?
Yes

with consultation from the state/local/tribe

At what point should WRAP stop altering data?
If/when the state doesn't concur with the changes.

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors)?
Yes

If possible!

23. How should international emissions data be submitted and revised?
WRAP should obtain the inventories and revise in consultation (as appropriate) with Mexico and Canada

GIS Components

24. What GIS capabilities should the web-based system have?
ExtendedGISFunctions

25. What map printing capabilities should the web-based system have?
8.5x11, LargeScale

26. What would be your GIS software preference, if any?

User Preferences / Access

27. Who should be able to access the system?
WRAPMembers, STLAgencies, Public, Other

28. How would you like to see the data be accessed?
StaticReports, Ad-HocQueries, DownloadDatasets

29. What systems are you currently using?
We are currently implementing AMS TEMPO

What do you like/dislike about these systems?
This system is somewhat complicated to learn, but has a great range of capabilities for access.

30. What file type(s) will you want to export data into?
TextFile, Database, Other

We can do any of these.

31. What format(s) will you want to export data into?
NEI

32. What level of security should the system implement and how sensitive is the data?
Should be publicly-accessible to read, generate reports, but not to write.

Training

33. What types of training should be available?
OnlineManual, HelpDesk, Workshops

Physical Location

34. What type of organization should house/maintain the system?
Contractor

EDMS Needs Assessment Questionnaire

General Information

First Name: Alice
Last Name: Edwards
Organization: Alaska Department of Environmental Conservation
Job Function: Section Manager

Level of Emissions Data Interest and Experience: Responsible for staff that generate Alaska's SIP-related emission inventories

Phone Number: (907) 465-5109
Email Address: alice_edwards@dec.state.ak.us

Emission Data Needs, Reporting and Tracking

1. **In your opinion, who will the primary users of the WRAP Emissions Data Management System (EDMS) be?** I checked the following boxes:

   Air Pollution Prevention Forum
   Air Quality Modeling Forum
   Areas Within & Near Class 1 Areas Forum
   Dust Emissions Forum
   Economic Analysis Forum
   Emissions Forum
   Fire Emissions Forum
   Market Trading Forum
   Mobile Sources Forum
   Tribal Data Development Work Group
   States/Tribes/Local Agencies
   General Public

   Explain: The primary users will be the WRAP forums that either generate emission information or use emission information for their analyses. In addition, states, tribes, and local agencies will be suppliers of data to the system and will need to extract data for their SIP development purposes. The general public is an end user that will need to have access to the data and certain reports.

2. **What is the anticipated level of use by you/your organization?**

   I checked: Medium.

   Explain: I anticipate submitting state data to the system for WRAP use. I would like to be able to at least do simple retrievals or reports to look at comparisons between states and to review and work with my state's data.

3. **What do you envision or expect the primary role(s) of the EDMS to be?**

   I checked the following:

   Repository of existing WRAP emission inventories
   Track the implementation of Regional Haze Rule requirements

   Additional Input: The primary role of the EDMS should be to address WRAP needs and regional haze rule requirements.

4. **Who should submit emissions data?**

   I checked the following:

   State/Tribal/Local Agencies

   Discuss Further: If multiple submissions of data for the same source are made to the system, how do we determine what is correct to use. If we control submissions to the states/tribes/local agencies, we reduce the possibility of conflicting emission estimates or double counting of emissions.

5. **What should the minimum data submission frequency be?**

   I checked: Other

   Why?: I would tie the minimum data submission to the CERR schedule (e.g. every 3 years), since that will be the least impact on states. More frequent submittals should be allowed for states/tribes/locals that wish to submit more frequently (e.g. annual).

6. **What pollutants should be included in the EDMS?**

   I checked the following:

   Visibility Impairing Pollutants (VOC, NOX, CO, SO2, PM10, PM2.5,NH3, OC, EC, Coarse PM)

   Additional Information: The system should be able to handle the CERR pollutants – all criteria and visibility-related pollutants.

7. **In terms of you/your organization's involvement with Regional Haze issues, what are the primary sources of concern?**

   I checked the following from the list:

   Wildfire
   Prescribed wildland fire
   Paved road dust
   Unpaved road dust
   Natural (non-anthropogenic) sources

   Additional Comments: In Alaska, it appears that based on the monitoring data to date, that fire is an important emission source for regional haze. In addition, Alaska has large sources of dust, primarily wind blown, that may be important to the regional haze impacts within the state.

8. **For each of the above source categories, what primary activity data should be included?**

   The Fire Emission Joint Forum has identified the primary activity data related to fire emissions. I would suggest that their recommendations be closely followed. I am unclear as to all the primary activity data that would need to be stored for dust emissions.

9. **Would you expect the system to perform emissions calculations?**

   Additional Comments: Based on discussions at the workshop, it appears that fire emissions need to be calculated within the system. For other source categories, emission calculations may not be as important since most states are already calculating these emissions and most WRAP tribes will soon have software that provides that capability under the TEISS project. In the future, it might be something to consider, but is probably not essential at this point except for fire.

10. **Would you like the system to perform emissions projections?**

    Yes.

    Comments: It seems like there would be a need to project emissions into future years for planning purposes. If this was built into the system, I think it could prove useful in analyzing controls or trends in emissions for planning purposes.

11. **Would you like the system to be able to demonstrate emissions modeling (i.e. Mobile6, BEIS, etc)?**

    No.

Comments: At this point, it seems to make more sense to conduct emissions modeling outside the system and submit/store the data/results. Often emissions models will not work well for Alaska – either they do not take into account Alaska's climate conditions/geography or they are not designed to with defaults for Alaska.

12. What would be your confidence level in emission data obtained from the EDMS performing the above functions (Questions 9, 10, and 11)?

Medium

Explain: While I think that the system could effectively calculate emissions and perform projections, Alaska sometime must adopt alternative methods of emission calculations in order to address the cold climate, geography, etc. Because of this, we cannot always use the EPA-approved emissions models and get accurate results.

13. Should the emissions rates be actual or potential-to-emit or both?

I checked the following:

Actual
Potential-To-Emit

Additional Comments: I think that both actual and potential emissions should be reportable. Actual emissions would probably be preferred if available, but there may be cases where we will only be able to report potential-to-emit. We would want to be able to distinguish between potential and actual emissions in the database so that it is clear to the end user what is included.

14. In your opinion, what is the most useful or necessary temporal resolution of the emissions data?

I checked:

Mixed temporal resolution

Comments: The temporal resolution will depend on the source category. For most sources, annual or seasonal emissions are appropriate. For fire, a higher degree of temporal resolution may be needed (e.g. daily) due to the magnitude of impact that fire can have on a day-to-day basis.

15. What spatial resolution of emissions data would be helpful to you/your organization?

I checked:

County level, Modeling grid level, Mixed spatial resolution

Additional Comments: At a minimum the system needs to be resolved to a county/tribal reservation level in order to match to the CERR. However, if emissions were already disaggregated to a grid, it would be helpful to have the grid level maintained. Alaska's "counties" are geographically very large. This can become problematic as emissions are generated in discrete areas within a large area. If emissions are aggregated to the county level and then disaggregated from the county level back to grid, the emissions could be misplaced within the larger area (or smoothed out across the area).

Also, if Alaskan tribes want to submit emission data it will likely be on a community/village level. It would be important for their data to be able to be stored in a manner that allows the tribe to be able to retrieve it and know that it has not been altered without their knowledge. If the Alaskan tribal data is aggregated into the county level, they would not be able to determine the integrity of their data. It may also be an issue for local agencies that wish to submit data for their city (SMSA, CMSA) or non-attainment area.

16. What geopolitical boundaries need to be included in the system?

I checked:

All areas in the modeling regions (ie. Including some CENRAP state, Canada, and Mexico)

Please Explain: The WRAP will need a place to store the emissions data that was used/needed for modeling – this includes areas outside the WRAP. It would also be helpful to Alaska to have the Canadian emissions in the WRAP system as they will likely be important to our planning efforts.

17. Do you envision organizations to submit surrogate data such as Activity, Emission Factors, Speciation profiles, Temporal profiles, Spatial allocation profiles, Stationary source parameters, Estimated emissions, Economic growth, Population, or Land Use?

Yes

Explain: I think it would be good to allow organizations to submit this type of information, but I do not think states should be required to submit it.

18. How can involved organizations best handle data submission and QA/QC reviews to both NEI and WRAP EDMS?

Synchronization of timing between NEI and WRAP data submissions and reviews could be helpful to states. It may be most efficient to QA both NEI and WRAP data in the same time frame. However, this may not always be possible as EPA's NEI timeline may not work for WRAP.

Data Quality Control and Assurance

19. What level of review is necessary?

I checked the following:

QA/QC submission format
QA/QC submitted data for missing information
QA/QC submitted data for erroneous information

Additional Comments: I think all these levels of review would be important to maintaining and developing a good WRAP database system.

20. What frequency of review would be helpful/useful?

Submission format should be checked upon an organization's submission to the system. The missing information and erroneous information checks would need to occur within a reasonable time period (e.g. a few months) after submission. If problems are encountered, it would be good to be able to work with the submitting organization while the staff still have the data fresh in their minds.

21. Can WRAP alter submitted data in case of errors or inconsistencies?

Yes

Explain: I think WRAP should be allowed to alter data to address errors or inconsistencies, but this alteration should not be made until the submitting organization has been contacted to discuss the areas of concern. That way a submitting organization can also make corrections (if needed) to their internal emission inventory data system. A procedure or policy should also be established to help deal with any conflicts where WRAP and a submitting organization do not agree on an error or inconsistency. Ultimately, the submitting organization should probably have the final say on alterations to their data.

At what point should WRAP stop altering data?

WRAP should stop altering data based on a deadline that is established to meet the needs of modeling and analysis forums. Once a given inventory is finalized for use in modeling/analysis further alterations or submissions from organizations should be stored in a separate version.

22. Would there be additional benefits to regional consistency for emissions calculations (i.e. will all organizations use the same methodology and emission factors?)

Yes and No

Explain: While there would probably be additional benefits from a regional perspective to applying a consistent approach to all emission calculations, it is probably not practical. Some states have more sophisticated methods of emission development than others. It does not make sense to make these states use a more simplistic method and it is probably impractical to ask other states to attempt more sophisticated methods. Also, Alaska often has issues or problems using standard EPA methods for generating emissions because the national approach does not fit the Alaska situation (climate, geography, etc.). It may be impossible for Alaska to be regionally consistent in all source categories.

23. How should international emissions data be submitted and revised?

Since EPA appears to be spear heading the work to gather emissions information from Canada and Mexico, it makes the most sense to get that data from EPA and revise it as they get updates from Canada and Mexico.

<u>GIS Components</u>

24. What GIS capabilities should the web-based system have?

I checked:

Extended GIS functions (buffering, map queries, select by line, rectangle, or feature)

Explain: I think the system should be able handle specific queries and have more extended features than just basic or static maps.

25. What map printing capabilities should the web-based system have?

I checked:

8.5 x 11 maps
Large scale maps

Explain: I think it would be good to have a capability to go beyond 8.5 x 11, especially for our large geographic areas.

26. What would be your GIS software preference, if any?

I checked:

ESRI

Explain: Alaska DEC uses ESRI products for GIS, so if the WRAP system used ESRI it would most likely by compatible with our existing systems.

<u>User Preferences/Access</u>

27. Who should be able to access the system?

I checked:

WRAP Members
State/Tribal/Local Agencies
Public

Additional Comments: The system should be available to all these entities, but may require different levels of access depending on the organization or individual. For example, the public should be able to look at the data and run reports, but not submit data.

28. How would you like to see the data be accessed?

I checked:

Links to static reports
Ad-hoc queries
Download datasets

Explain: Different user groups will have different needs. Static reports will likely work well for most general information requests. Ad-hoc queries should be made available to allow a more sophisticated user to pull the information they are interested in. This would save the WRAP from having to respond to all sorts of ad-hoc reporting requests. I think data download is important as organizations may want to be able to download their specific data for use in other analyses.

29. What systems are you currently using?

Alaska DEC currently has a custom emission inventory data base system that was developed internally at the department. It is based on an Oracle platform. It stores and calculates emission inventory data for point, area, non-road, and mobile sources. Data needed to generate emission estimates are hand entered into the system. It allows data export in the EPA format for NEI reporting. It currently has limited reporting capabilities. The system is a core program that we can expand on to provide greater functionality in the future.

What do you like/dislike about these systems?

The Alaska system is a bare bones system that allows data to be stored and reported to EPA. It could be greatly enhanced by allowing electronic data to be imported into the system and by having a more enhanced reporting function.

30. What file type(s) will you want to export data into?

I checked:

Delimited text file
Database format

Explain: Delimited text files are relatively easy to bring into spreadsheets. Database format would also be desirable if the data file were large and needed to be manipulated by Access or some other database product.

31. What format(s) will you want to export data into?

I checked:

NEI
Emission Modeling Inputs (SMOKE)

Explain: At a minimum, it would be helpful for the data to be exported into NEI format. This is a format that is in use by states and can be dealt with fairly easily. It would also allow a state to use a WRAP inventory for their state for EPA submission, if they desired. Emission Modeling input format will be important for meeting WRAP modeling needs.

32. What level of security should the system implement and how sensitive is the data?

It is important that data is moderately secure. States and tribes will need to know that their data is secure and not alterable by outside sources. Given the regulatory use for the data it is important that data integrity and security is maintained, while still allowing access to data for reporting and queries.

Training

33. What types of training should be available?

I checked:

Online User's Manual
Help Desk/Database Manager support
Training Workshops

Explain: Each level of training serves a purpose. Initial training workshops could be useful depending on the complexity of the system. On-line help and a help desk should be fine for general questions and use once organizations are comfortable using the system.

Physical Location

34. What type of organization should house/maintain the system?

I checked:

Other

Explain: The WRAP/WGA ultimately needs to be responsible for housing and maintaining the system, either internally or through contract. The system needs to be stable, secure, and available to all the WRAP states and tribes. Only the WRAP is ultimately comprised of states and tribes, no other entity has responsibility to these groups.

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Emissions Data Needs

- What's the primary role of the emissions database management system?
  1. Repository of existing WRAP emissions inventories ***YES***
  2. Dynamic system that can be used to track the implementation of Regional Haze Rule (RHR) requirements? ***YES***
  3. Dynamic system that can be used to track other regulations as well (i.e. greenhouse gas, PSD, clear skies, …etc)? ***To the extent that they impact or influence RHR***

- Will the system set up to calculate emissions given the inputs of activity levels from the state/tribe/local agencies (STL) and a uniform set of emission factors gathered by WRAP? Or will the STL report emissions data directly to the system? ***Both may be appropriate – projections of inputs upon which to apply sets of emission factors may also be desirable capability.***

- What are the pollutants that should be included in the database system?
  1. Visibility impairing pollutants: VOC, NOx, CO, SO2, PM10, PM2.5, NH3? ***YES***
  2. Broad pollutant list including greenhouse gases such as CO2, CH4? ***To the extent that they impact or influence RHR***

- What will the primary sources of concern be? ***This is a tough one, but should be able to prioritize for issues of accuracy, completeness, effort to obtain and maintain – each may be important for strategy development and assessment***
  1. Point sources?
  2. Area sources?
  3. On-road mobile sources?
  4. Non-road mobile sources?
  5. Wildfire?
  6. Prescribed wildland fire?
  7. Agricultural fire?
  8. Paved road dust?
  9. Unpaved road dust?

10. Biogenic sources?
11. Natural (non-anthropogenic) sources?

- What will the temporal resolution of the emissions data be? ***Another tough one – should be to level needed to compute the standard statistics needed for both reporting and modeling***
  1. Annual total emissions?
  2. Seasonal emissions?
  3. Hourly emission (i.e. CEM point source data)?
  4. Mix temporal resolution?

- What will the spatial resolution of the emission data be? ***No easy ones, I see – point sources are easy, but for non-point will likely be a mixture, with actual spatial definition differing depending upon pollutants and sources of data. However, reconciliation and identification of biases (direction and magnitude) must be part of whatever system is defined.***
  1. State and tribal land levels?
  2. County level?
  3. Air corridor level (i.e. CAC, Colorado Plateau)?
  4. Modeling grid level?

  - How will the geopolitical boundaries be included in the system? ***This begins to border on the easy – given today's GIS systems and supporting DBs, one should be able to define and redefine within capabilities of existing technologies (i.e., software packages) and the evolving "standard" feature sets being constructed today.***

  1. The WRAP 14 states and counties?
  2. The WRAP 14 states plus all tribal lands?
  3. All areas in the modeling regions?
     CENRAP states, counties, and tribal lands?
     Canadian and Mexican provinces/states and localities?

- Will STL report activity, emission factors, speciation profiles, temporal profiles, and spatial allocation profiles data along with the emission data? Will the source parameters, especially stationary sources, be included? Will projection data such as economic and population growth data be included? ***Given that the Emission DB will serve multiple users and uses, YES***

Data Quality control and assurance

- How much review is needed (frequency)?
  1. Reporting quality control for format?
  2. Content quality control for missing data and consistency? ***Consistency and Documentation must be strongly supported***

- Can WRAP change STL data in case of errors and inconsistency? ***Must be some SOP and Protocols for this IF the Emissions DB is to serve both reporting and projection needs***

- Will it be a regional consistency in emission calculation (same approach and emission factors)? ***Capability for such should exist, but states, tribes and FLMs should be allowed to use the regional self-consistent data as needed within their own framework – as long as it is documented***

- When does WRAP stop changing data? ***Interesting question – there should be a date certain for reporting purposes, but probably never for projection purposes, except to note that each projection needs to be based on some "time stamp" of data and documented (archived) as such.***

- How will international emissions data be reported? ***A question for which I do not have a comment. You're in luck.***

Data Reporting and Tracking Requirement

- How will the STL handle data submission both to NEI and WRAP?
  1. Resources to handle submission format and frequency? ***As others noted this AM – should use as much of the apparatus for NEI as possible.***
  2. QA/QC phases (between NEI and WRAP)? ***Also, as others noted this AM – critical to make use of (coordinate with at a minimum) the NEI.***

- Is the system expected to report and track all the RHR implementation requirements? ***My view is that the more the Emissions DB can do, the better we all are with respect to consistency, efficient and effective resource use, …***
  1. Major stationary sources SO2 milestones?
  2. Emissions in clean air corridors (CAC), by county
  3. Fire emissions, including wildfire prescribed agricultural, forest and rage fires?
  4. Mobile emission budget? For what pollutants: SO2, NOx, VOC, PM2.5, NH3, CO?
  5. Natural emissions?
  6. SO2 trading program evaluation?
  7. BART eligible sources and implementation?
  8. RHR pollution prevention goals of supplying 10% of the WRAP region energy from renewable and energy efficiency in 2005 and 20% in 2015 evaluation?

- Is the system expected to report and track other regulation requirements? ***As earlier, to the extent that they impact or influence RHR, YES.***
  1. Greenhouse gas?
  2. PSD?
  3. Clear Skies?

- What will be the reporting frequency? ***Another question for which I do not have a comment. You're in luck again.***
  1. Annual?
  2. Semi-annual?
  3. ….etc?

GIS Components

- What data specifically would you want mapped? ***Again, given all of the available, or soon to be available feature sets from either the federal agencies, or the states (and other smaller geopolitical units) themselves, one should not have to define this up front.***
  1. Just what you need for report?
  2. What's your wish list?

- Do you want to be able to download spatial data? ***YES***
  1. Images, vector files, layers, themes? ***Images may pose a bandwidth problem, but most of the other data types should not.***

- What resolution would you want basemap features (roads, rivers, place names, etc)? ***See above, and dynamic determination of resolution/detail.***
  1. Down to what level of detail?

- What GIS capabilities do you want the system to have? ***See above, and all capabilities.***
  1. Do you want it just to map location or to do GIS functions such as buffering, map queries, selection by lines, rectangles or features?

- What map printing capabilities would you like? ***See above, and should be user responsibility.***
  1. Do you want to be able to plot out large maps or 8.5x11?

- Do you have a GIS software preference? ***Believe that ESRI is more pervasive today in both federal and state/tribal entities.***
  1. ESRI
  2. MapPoint
  3. Oracle Spatial
  4. other ***(MapInfo is another package used by some, as are a couple of GIS extensions to CAD/CAM packages.)***

User Preferences / Access

- Who will be able to access the system? ***All at differing levels of control and actual information to which access would be granted.***
  1. Public?
  2. Private Only?

3. Mixed Levels of Access?

- How sensitive is the data? Good question. ***Would believe that there will be differing levels of sensitivity, but WRAP should strive to limit sensitivities IF the Emissions DB is to be as useful and valuable as I envision.***

- How will you want to access the data? ***YES to all.***
  1. Links to existing reports/documents?
  2. Ad-hoc queries of the database?
  3. Ability to download datasets?
  4. Others?

- What systems are currently available that you use? ***ESRI, MapInfo, Oracle (personally, not Forum)***
  1. What do you like about these systems? ***ESRI for its pervasiveness and documentation, plus its continued improvements, AND its move toward an object-oriented DB and more open source structure.***
  2. What do you dislike about these systems? ***As with most, its cost.***

- How are/will these reports be generated? ***YES to all.***
  1. Will you rely on specific data deliverables from the system to help generate reports?
  2. Will you want to query the system on an as needed basis to help generate reports?
  3. Will you want to export data on an as needed basis?
     a. Preferences on formatting? ***User should control***
     b. Similar to known/used systems?

Training

- What types of training would you like to have available for users of the system? ***Believe both would be useful and beneficial to differing audiences.***
  1. Online User's Manual for Data Access, GIS functions, and General Applications
  2. Training workshops?

Physical Location

- Where would be the ideal place for the system to be housed? ***Not sure here. All have their strengths, and weaknesses. Cost and continuity should be strong considerations, along with serving as a resource for users.***
  1. University center?
  2. Contractor property?
  3. STL agencies properties
  4. Others?

Dennis & Tom – From the discussions at the WRAP Meeting in Santa Fe, I have a couple of ideas that may be helpful to your emission inventory efforts. The examples I've listed in parentheses are not recommendations, just something to help describe each item.

1) QA/QC Plan – I recommend you write up a very specific plan for QC of the 2002 inventory, and complete the plan before you begin receiving 2002 data. The plan should address the questions listed below.
    a. How and when to QC the data, including:
        i. Data format (incoming files)
        ii. Data content – Erroneous data (incoming files and "assembled" EI)
        iii. Data content – Missing data (incoming files and "assembled" EI)
        iv. Data content – Inconsistent data (incoming files and "assembled" EI)
    b. What criteria will be used to identify potential data content errors and inconsistencies:
        i. Reasonable range checks (e.g., emissions for a given source/SCC exceed the typical max by an order of magnitude)
        ii. Inconsistency checks (e.g., stack flow rate doesn't match w/ dimensions and velocity)
        iii. Invalid code checks (e.g., invalid State/County FIPS codes, SCC's, SIC/NAICS codes, etc)
        iv. Invalid lat/lon or utm's (e.g., GIS shows a source's lat/lon to be outside of the indicated county)
    c. How and when States/Tribes/Local Agencies will correct errors and fill data gaps identified during QC.
    d. How and when WRAP/Contractor will correct errors and fill gaps that S/T/L's did not correct or fill.

    Note: The plan should especially address QC of point source lat/lon's and stack parameters. The goal should be to identify and correct any errors and data gaps that would cause problems with air dispersion modeling, so modelers should be consulted in the preparation of this plan.

2) Flowchart for EDMS to SMOKE – I recommend that asap, the Emissions and Modeling Forums work together to flowchart the process for output from EDMS to SMOKE to CMAQ (or whatever air dispersion model that will be used). Such a flow chart should specifically address the items below. This would be very helpful in designing EDMS.
    a. What file format(s) will be created by EDMS for input to SMOKE (e.g., IDA)?
    b. What individual EDMS output files will be created (e.g., EGU, Point Source Non-EGU, Stationary Area and Nonroad Mobile, Onroad Mobile, Fire)?
    c. What will be the temporal basis for each EDMS output file (e.g., EGU – hourly, Point Non-EGU – mix of annual and avg day, Onroad Mobile – Monthly)?
    d. Will all these data sets be stored in EDMS or will some be pulled from elsewhere (e.g., hourly data pulled from EPA's CEM database)
    e. How will each of these files be processed in SMOKE (e.g., apply default allocation profiles, apply unique profiles for specific geographic areas)?
    f. Will there be any unique treatments of source sectors in SMOKE (e.g., MOBILE6 will be run in SMOKE rather than inputting Onroad Mobile files from EDMS, PM Fine emissions from EDMS will be reduced to account for nontransportable portions)?

Ouattara Fatogoma
06/16/2003 01:17 PM

To: Jason Samus/Hunt Valley/EAEST@EA
cc:
Subject: RE: [WRAP-modeling-forum] EDMS

----- Forwarded by Ouattara Fatogoma/Loveton/EAEST on 06/16/2003 01:17 PM -----

"Kevin Briggs" <Kevin.Briggs@state.co.us>
03/13/2003 02:53 PM

To: <wrap-modeling-forum@mail.cert.ucr.edu>, <RRYM@chevrontexaco.com>
cc: <ofatogom@eaest.com>
Subject: RE: [WRAP-modeling-forum] EDMS

I am not sure where the emissions forum is going with the "Needs Assessment", but I think a listing of problematic emission categories such as airports could be part of the needs assessment. In the 2003 MF workplan we identified the Ammonia EI and Dust EI as problematic categories that need to be improved.

Here in Denver we have to make sure the Denver International Airport meets General Conformity requirements since DIA was built in part with federal funds and is in a PM10 and CO nonattainment area. Detailed airport EIs are another world, and, I would agree with you that airport emissions are three-dimensional and go beyond the airport fenceline.

>>> "Macarthur, Rory (RRYM)" <RRYM@chevrontexaco.com> 03/13/03 11:34AM
>>>
Kevin:

I won't be in Santa Fe, but an interesting issue with EDMS is the assessment of inflight emissions restricted to below the (I think) mean
daily diffbreak level (the inversion as input to UAM). This usually means emissions during airport approach are ignored--and jet PM contributes to visibility degradation along the flight path. CARB has begun to apportion emissions according to where they are emitted--that means less emissions at the airport at ground level and more emissions aloft. This has implications both for ozone, PM and visibility.

My two bits.

Ror
-----Original Message-----
From: Kevin Briggs [mailto:Kevin.Briggs@state.co.us]
Sent: Thursday, March 13, 2003 9:55 AM
To: wrap-modeling-forum@cert.ucr.edu
Cc: ofatogom@eaest.com
Subject: [WRAP-modeling-forum] EDMS

One of the cross-forum issues that will be discussed at the "all forums"
meeting(s) in Santa Fe next week will be the Emission Database Management System Needs Assessment Survey. I have attached a "food-for-thought" document from Chris Fatogoma of EA Engineering, Science and Technology. The Emissions Forum has contracted with EA

ES&T
to do a Needs Assessment Survey for the EDMS. The building and populating of the EDMS will then be contracted out based on the Needs Assessment Survey. Since the Modeling Forum and RMC are users of the emission inventories that will be contained in the EDMS, I would encourage members of the MF and RMC to make comments in order to shape the Needs Assessment Survey and the EDMS.

The survey is one of the topic items for the MF meeting on the morning of March 19 in Santa Fe. The discussion of the EDMS at the MF meeting might get squeezed out a bit because of other agenda items like model results and discussions on the 2003 work plan. So, I would also encourage those who have comments to start discussion threads on the RMC/MF Listserv (wrap-modeling-forum@cert.ucr.edu).

Between the discussion threads on the Listserv and MF discussions next week, the MF should come up with a list of major issues, concerns, and desires for the EDMS.

Ouattara Fatogoma
06/16/2003 01:18 PM

To: Jason Samus/Hunt Valley/EAEST@EA
cc:
Subject: Re: [WRAP-modeling-forum] EDMS

----- Forwarded by Ouattara Fatogoma/Loveton/EAEST on 06/16/2003 01:17 PM -----

"Kevin Briggs" <Kevin.Briggs@state.co.us>
03/13/2003 03:40 PM

To: <wrap-modeling-forum@mail.cert.ucr.edu>, <Kevin.Briggs@state.co.us>
cc: <ofatogom@eaest.com>
Subject: Re: [WRAP-modeling-forum] EDMS

Just to spur some discussion, here are a few issues that I have thought of:

1) Some source categories such as biogenic emissions are calculated in SMOKE. Generally, the MF really doesn't need for biogenic emissions to show up in the EDMS to do the modeling work. However, from a EI completeness standpoint, other groups/forums/states/tribes might want to see a summary of biogenic emissions.

2) For the 'formal' 2002 EI, I am not aware of any discussions about whether mobile source emissions will be estimated within SMOKE or outside of SMOKE which was the case with the 1996/2018 EIs. If mobile source emissions are to be calculated within SMOKE, then the EDMS would need to store basic data such as link data, speeds, VMT, etc. as well as scales up to county wide highway data.

3) Issues related to the link between the EDMS and SMOKE need to be resolved early on.

4) Outside of the MF, nobody really wants to see hourly emissions data. Should the RMC be the keeper of the "model ready" EIs or should the "model ready" EIs be stored with the EDMS.

5) Other models like the dust model and the ammonia model might rely on meteorological data to estimate hourly emissions for modeling puposes. How will these exterior models be linked to the EDMS.

>>> "Kevin Briggs" <Kevin.Briggs@state.co.us> 03/13/03 10:54AM >>>
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of March 19 in Santa Fe. The discussion of the EDMS at the MF meeting might get squeezed out a bit because of other agenda items like model results and discussions on the 2003 work plan. So, I would also encourage those who have comments to start discussion threads on the RMC/MF Listserv (wrap-modeling-forum@cert.ucr.edu).

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MEMORANDUM

To: Tom Moore, WRAP

From: Roy Doyle

Date: May 8, 2003

Subject: Area/Point Source Thresholds

Our discussion regarding area/point source thresholds during the WRAP Emissions Data Management System meeting in Denver prompted further thought, and I am submitting the following for consideration.

As you recall, our discussion involved the fact that states inventory small stationary sources in different ways. For instance, some states may inventory a gas station as an area source, while others may inventory it as a point source. The discussion led to the conclusion that it would be preferable for WRAP to set guidelines (by SCC code), whereas if a state submitted emissions as a point source that was listed under an area source SCC code, those emissions would be moved over to the area source module of the system. The rational was if WRAP needed to pull all emissions from a certain source category, they could do so more easily.

I understand the reasoning, however, I am afraid doing so would create other confusions. Keep in mind that the SCC code is assigned by process, not by industry. Therefore, if you split out SCC codes, it is probable you will have part of a facilities emissions under area sources and part under point sources. In the previous example, if a power plant had a fueling station for its trucks, the emissions from fueling would be contained in the area source module, while the other emissions would be contained in the point source module.

EPA allows different point/area source thresholds in the CERR rule.
Section 51.20 paragraph (c) 2:

If your state has lower emission reporting thresholds for point sources than paragraph (b) of this section, then you may use these in reporting your emissions to EPA.

Further, the paragraph (b) thresholds are as follows:
>100 tpy for SOX, VOC, NOX, PM2.5, and NH3
>1000 tons for CO

Unless a state has nonattainment areas, then for those nonattainment areas the point/area thresholds would be:
VOC in O3 moderate 100 try
VOC in O3 serious 50 tpy

VOC in O3 severe 25 tpy
And VOC for O3 extreme 10tpy

For serious PM10 70tpy

So, even within a state submittal, you may get a mix of point and area for a given source category.

Therefore I recommend WRAP accept any point/area threshold applicable to any given State. Load all point sources submitted as point sources in the point source inventory and anything submitted as area sources in the area source module. Leave it up to the State to avoid double counting between the two.