



Emissions Inventories – Lessons Learned Workshop “WRAP-up”

September 26, 2007

Objectives

- **Summarize EI work**
- **Questions & answers**
- **Identify strengths & weaknesses**
- **List uses & limitations**
- **Document for planning purposes & next steps**

Next steps on products from workshop

- **Draft 4-page white papers and talks posted on interactive agenda for meeting at:**
<http://www.wrapair.org/forums/toc/meetings/070925m/index.html>
- **Comments to authors and Tom Moore by October 17th**
- **Address comments in talks and 4-pagers**
- **Post final materials around November 1st**

Glossary available

TSS Glossary - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Media Print Mail

Address <http://vista.cira.colostate.edu/TSS/Help/Glossary.aspx> Go

Google G Go Bookmarks 46 blocked Check AutoLink AutoFill Send to Settings

WRAP tss HOME CONTACT HELP SEARCH Sign In | Register

You are here: TSS > Home > Glossary Wednesday, September 26, 2007 - TSS v1.1

Home Glossary of Terms, Codes, and Abbreviations

- About
- Contact Us
- Help
- Search
- Glossary
- News

Resources

- Haze Planning
- Monitoring
- Emissions
- Modeling
- Apportionment

Projects

- VIEWS
- COHA
- EDMS
- FETS
- RMC

Partners

- WRAP
- ARS
- CIRA
- ENVIRON
- Air Sciences

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

2000-04 Baseline: Refers to a WRAP emissions or modeling scenario based on the designated planning emissions inventories, including a 5 year average of fire emissions. Also referred to as Plan02 analysis series.

2002 Base Case: Refers to a WRAP emissions or modeling scenario based on 2002 emissions inventories, including actual fire emissions for 2002. Also referred to as Base02 analysis series.

2018 Base Case: Refers to a WRAP emissions or modeling scenario based on 2018 emissions inventories estimated by applying rules on the books in late 2004, generated in early 2006. Also referred to as Base18 analysis series.

2018 Preliminary Reasonable Progress: Refers to a WRAP emissions or modeling scenario based on the preliminary reasonable progress emissions inventories, generated in early 2007. Includes corrections, refinements and additions to the 2018 Base Case, as well as estimates of controlling SO2 and some NOx from special coal-fired power plants, called BART sources. Also referred to as PRP18 analysis series.

A

Abrasion mode: A size range of particles, typically larger than about 3 micrometers in diameter, primarily generated by abrasion of solids.

Absorption: A class of processes by which one material is taken up by another.

Absorption coefficient: A measure of the ability of particles or gases to absorb photons; a number that is proportional to the number of photons removed from the sight path by absorption per unit length.

Absorption cross section: The amount of light absorbed by a particle divided by its physical cross section.

Accumulation mode: A size range of particles, from about 0.1 to 3 micrometers, formed largely by accumulation of gases and particles upon smaller particles. They are very effective in scattering light.

Acid deposition: Wet and/or dry deposition of acidic materials to water or land surfaces. The chemicals found in acidic deposition include nitrate, sulfate, and ammonium.

Acid precipitation: Typically is rain with high concentrations of acids produced by the interaction of water with oxygenated compounds of sulfur and nitrogen which are the by-products of fossil fuel combustion.

Acid rain: (or acid mist) The deposition of acid chemicals (incorporated into rain, snow, fog, or precipitation) from the atmosphere to water or land surfaces. The pH of rain is considered acid when it is below

Done Internet

Start WRAPAir.org Western Re... TSS Glossary - Micros... 12:35 PM

Rosetta Stone available

Untitled Page - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://vista.cira.colostate.edu/tss/help/parameterkey.aspx>

Google Go

Bookmarks 46 blocked Check AutoLink AutoFill Send to Settings

WRAP [Sign In](#) | [Register](#)

You are here:

Key to Monitoring-Modeling-Emissions Mapping

Name	Compound	IMPROVE Species	CMAQ Mapping	CAMx Mapping	Emissions
Sulfate	SO4	3*S (sulfur) or SO4	ASO4J + ASO4I	PSO4	PSO4
Ammonium Sulfate	ammSO4	1.375*SO4	can be applied	can be applied	n/a
Sulfur Dioxide	SO2	n/a	SO2	SO2	SO2
Sulfuric Acid	H2SO4	n/a	SULF	SULF	SULF
Sulfur Oxides	SOX	n/a	n/a	n/a	SOX = PSO4 + S
Nitrate	NO3	NO3	ANO3J + ANO3I	PNO3	PNO3
Ammonium Nitrate	ammNO3	1.29*NO3	can be applied	can be applied	n/a
Nitrous Oxide	NO	n/a	NO	NO	NO = 0.9 * NOX
Nitrogen Dioxide	NO2	n/a	NO2	NO2	NO2 = 0.1 * NOX
Nitrogen Oxides	NOX	n/a	n/a	n/a	NOX = NO + NO2
Nitric Acid	HNO3	n/a	HNO3	HNO3	HNO3
Ammonia	NH3	n/a	NH3	NH3	NH3
Ammonium	NH4	Inferred from SO4 and NO3	ANH4J + ANH4I	PNH4	n/a
Organic Carbon	OC	OC1 + OC2 + OC3 + OC4 + OP	n/a	n/a	n/a

Start | WRAPAir.org Western Re... | Untitled Page - Micros... | Microsoft PowerPoint - [E...]

Internet 12:40 PM

2008-12 Strategic Plan - Goals

- **3 interrelated goals for simultaneous concurrent action between 2008 and 2012.**
 - **In 2008-09, coordinate and support the submittal, review, and approval of regional haze implementation plans.**
 - **In 2009, begin refinement of regional data and development of analysis tools for strategic evaluation of ongoing and future control strategies for air quality planning; focused on:**
 - **Tracking, reporting, and analyzing progress for regional haze;**
 - **Regional contributions to Ozone and PM health and welfare standards' nonattainment issues at various scales;**
 - **Understanding and analyzing the nature and causes of mercury, acid deposition, and critical loads in the West; and**
 - **Regionally-appropriate and effective emissions management strategies and programs.**
 - **In concert with emerging efforts to manage and adapt to climate change, fully integrate data for both energy supply and use as well as greenhouse gas emissions into air quality analyses.**

3 Organizational/Process Objectives

- **Maintain WRAP process (organization, staffing, operations) to continue support of successful regional planning.**
- **Continue support for tribal capacity, including:**
 - **Increasing the ability of Tribes to assess their air quality conditions and to develop strategies to address air quality issues as part of the larger regional planning process; and**
 - **Protection and control of tribal natural resources and communities.**
- **Maximize coordination within WRAP and with other related organizations (WESTAR, NTEC, FLMs, other RPOs, et cetera).**

Thanks for interest and
participation !!