MANE-VU Emissions Inventory Data and Documentation
April 2007

I. 2002 Emissions Inventory

MANE-VU
Contractor: Pechan – Randy Strait
Documentation and Database files can be found at **ftp.marama.org**
Subdirectory 2002 Version 3
Username: mane-vu
Password: exchange

- Version 3 of the 2002 MANE-VU Inventory
- Summaries for biogenic, Area, Point, Non-Road, and Onroad sectors of Version 3 of 2002 MANE-VU Inventory.
- Technical Support Document (TSD)

Midwest RPO
Contractor: Alpine – Greg Stella

- BaseK Emission Inventory conversion to SMOKE-ready format.

II. Non-EGU Future Year Emissions Inventory

MANE-VU
Contractor: MACTEC – Ed Sabo
Database files can be found at **ftp.marama.org**
Username: future
Password: emissions

Documentation can be found at
www.marama.org/visibility/Inventory%20Summary/FutureEmissionsInventory.htm

- OTB/OTW 2009/12/18 MANE-VU Inventory

  "On the books/On the Way" (OTB/OTW) Emissions inventories in both NIF and IDA format for Non-EGU, Point, Area, and Non-Road.

- BOTW 2009/12/18 MANE-VU Inventory

  "Beyond On the Way" (BOTW) Emissions inventories in both NIF and IDA format for non EGU Point, Area, and Non-Road were developed based on the

OTC control measures matrix. For regional haze purposes, except for SO2 controls, the BOTW controls are assumed in place by 2018.

- Technical Support Document (TSD)

Midwest RPO
Contractor: Alpine – Greg Stella

- BaseK 2009/12/18 OTB/OTW Growth and Control Factors Conversion to produce SMOKE-ready input files for all source categories.

III. EGU Future Year Emissions Inventory

IPM Modeling of EGU emissions for future years
Contractor: ICF – Boddu Venkatesh & Alpine – Greg Stella
Database files can be found at **ftp.marama.org**
Subdirectory 2.1.9 EGUs
Username: mane-vu
Password: exchange

Documentation for this IPM run is not available

- VISTAS 2.1.9 IPM 2009/12/18 CAIR Inventory. (ICF – Boddu Venkatesh)

  "ICF completed an IPM 2.1.9 modeling run based on the VISTAS PC_1f inventory. This run was headed by VISTAS, but has input from all RPOs. ***This is the IPM run MANE-VU is using for all of our base case CMAQ modeling.***

- 2009/12/18 VISTAS 2.1.9 IPM output was converted into NIF and IDA format for CMAQ modeling by Alpine (Greg Stella)

- 2009 Non-Fossil EGU IDA Conversion of non-Fossil EGU data into an IDA format for CMAQ modeling. All MANE-VU states were asked to submit a list of their non-fossil EGU units in the 2009 inventory. (Alpine – Greg Stella)

IV. MANE VU Inventories for Sensitivity Analysis

- **MANE-VU Fuel Oil sulfur content sensitivity Inventories. (Ongoing)**
  Contractor: Alpine – Greg Stella
  No documents yet available for posting online.

  Two 2018 sensitivity modeling inventories (S-1 and S-1) are being developed for use in REMSAD modeling. They will be based on the MANE-VU 2018 BOTW

Emissions Inventory. The sulfur content of the #2/4/6 fuel oils will be restricted for all SCCs that use these fuels, except EGUs. EGUs are excluded because the sulfur in fuels burning in EGUs is subject to emissions trading. Therefore restrictions on the sulfur content of these fuels would free up allowances in the market that would be used elsewhere, resulting in no net emissions decrease. The sulfur content for fuel oil is restricted as follows:

Sensitivity Inventory - 2018 S-1

Home heating and #2 Distillate Oil -	500 ppm S (0.05%)
#4 Distillate/Residual Oil	2500 ppm S (0.25%)
#6 Residual Oil (Except parts of CT & NY)	5000 ppm S (0.5%)
#6 Residual Oil (For parts of CT & NY)	3000 ppm S (0.3%)

Sensitivity Inventory - 2018 S-2

Home heating and #2 Distillate Oil -	15 ppm S (0.0015%)
#4 Distillate/Residual Oil	2500 ppm S (0.25%)
#6 Residual Oil (Except parts of CT & NY)	5000 ppm S (0.5%)
#6 Residual Oil (For parts of CT & NY)	3000 ppm S (0.3%)

Alpine is tasked with developing the Growth and Control packets that can be applied to the MANE-VU 20018 BOTW Inventory to develop the S-1 and S-2 inventories.

- **MANE-VU Additional Limits on EGU NOx and SOx Sensitivity IPM Modeling Run Comparing CAIR with CAIR+**
  Contractor: ICF – Boddu Venkatesh
  Database files are not yet available.

  Draft documentation and fact sheets can be found at:
  www.marama.org/visibility/Inventory%20Summary/FutureEmissionsInventory.htm

  - 2.1.9 IPM 2009/12/18 MANE-VU Base Case EGU Inventory S.T.E.T.

    This IPM run is known as the MANE-VU Base Case or MARAMA_5c. It was developed by MANE-VU based on the VISTAS 2.1.9 framework with updated natural gas prices and a few other adjustments to the input specifications. This Base Case was run to allow a comparison to the MANE-VU CAIR+ run described below. It has not been used for regional air quality modeling.
    State level results are available for this run.
    2009/12/18 NIF and IDA files are available. (Susan, is this true?)

Discrepancies in the modeling output are currently being resolved. The state level and parsed results will have to be rerun.

- 2.1.9 IPM 2009/12/18 MANE-VU CAIR+ Inventory S.T.E.T.

  This IPM run is known as the MANE-VU CAIR+ or MARAMA_4c. It was developed by MANE-VU based on the VISTAS 2.1.9 framework with updated natural gas prices and a few other adjustments to the input specifications. The results of this CAIR+ can be compared to the to the MANE-VU Base Case run described above. It has not been used for regional air quality modeling.
  State level results are available for this run.

  Discrepancies in the modeling output are currently being resolved. The draft Technical Support Document will be available April 30th.

IV. Inter-RPO EI Warehouse System

Contractor: ERG – Grace Kitzmiller/William Gerber
Warehouse can be found at:
http://app2.erg.com:8080/rpoapp/

MARAMA has uploaded the Version 3 2002 MANE-VU Emissions Inventory. VISTAS has also uploaded data. Problems with the uploaded data and the warehouse system are currently being worked out.

V. Additional Data

Contractor: EH Pechan
OMNI

Documentation and Database files can be found at
http://www.marama.org/visibility/ResWoodCombustion/

MARAMA has provided two updates of the National Emissions Inventory for residential wood combustion. Some states have chosen to use some of these results in preparing their 2002 inventories. In general, these updates are part of an ongoing process to refine information about this source category as it is a large source of emissions with very uncertain emission estimates.