M A R A M A

Mid-Atlantic Regional Air Management Association

Allegheny County Health Department Air Quality Program
Delaware Air Quality Management Section
District of Columbia Department of Health Air Division
Maryland Air & Radiation Management Administration
New Jersey Office of Air Quality Management
North Carolina Division of Air Quality
Pennsylvania Bureau of Air Quality
Philadelphia Air Management Services
Virginia Department of Environmental Quality Air Program
West Virginia Office of Air Quality

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CMU AMMONIA EMISSIONS INVENTORY PROJECT

MARAMA and NESCAUM hired Carnegie Mellon University to develop a comprehensive ammonia emissions inventory system consisting of both updated activity levels and emissions factors that can be used in a variety of atmospheric chemistry and air pollution models employed by different agencies.

INVENTORY SYSTEM DESCRIPTION: The software application generates an ammonia emission inventory for the continental United States based on user-defined input. Emission factors and activity levels are kept in easily modifiable input files. This structure makes it easy to perform sensitivity analyses and to update the inventory when new data become available.

- **Spatial Resolution:** Output can be obtained at national, state, county or sub-county (200 m) level.
- **Temporal Resolution:** Yearly except for fertilizer application (monthly).
- **Input:** Emission factors, activity data, and crop timing data for fertilizer applications.
- **Source Categories:** Major: Livestock waste, fertilizer application, and soil. Minor: Mobile, industry, Publicly Owned Treatment Works, humans, domestic animals, wild animals, and biomass burning.

WHERE to FIND: A link to the CMU web site to download the database and user's manual are available at www.marama.org under Regional Technical Center or go to http://www.envinst.cmu.edu/nh3. A hard copy of the final report describing the project can be obtained from MARAMA. Please send an e-mail to skayin@marama.org with your name, phone number, affiliation, and mailing address.

TRAINING: CMU developed a one-day training course for MARAMA to familiarize participants with the CMU Ammonia Inventory Database.

FOLLOW-UP ACTIONS RECOMMENDED:
- State and local emissions inventory experts should compare the CMU data to EPA's National Emissions Inventory (NEI) to decide whether changes are warranted.
- Additional work may be needed to revise the format of the CMU data so that it can be transferred to the NEI.
- Modelers will need to review the use of the CMU inventory for modeling.
- Additional work on emissions factors and activity data are needed.
- LADCO plans to integrate the database into the EMS2001 emissions processing system.

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