



The Clearinghouse for Inventories and Emission Factors

CHIEF

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United States
Environmental Protection
Agency

Office Of Air Quality
Planning And Standards
Research Triangle Park, NC 27711

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1997 Emission Inventory Conference

The international symposium, *The Emission Inventory: Planning for the Future* will be held October 28-30, 1997 at the Sheraton Imperial Hotel, Research Triangle Park, North Carolina. This is the seventh annual symposium on emission inventories sponsored by the Air & Waste Management Association, U.S. EPA Office of Air Quality Planning and Standards, Emission Factor & Inventory Group, and Office of Research and Development. This conference will provide a useful forum for exchange of ideas and information on the use of air emissions data between industry, the EPA, state agencies, and the public. The conference will feature many informative sessions presented by experts in the emission inventory field, training courses and an exhibition featuring displays on the technical themes of the conference.

Conference & Course Registration

Full registration to the conference includes admission to the technical sessions, two luncheons, refreshment breaks, the Tuesday evening reception, exhibition and a copy of the conference proceedings. There will be four half-day courses on Monday, October 27. Registration for one half-day course includes course manual and refreshment breaks; registration for two half-day courses will also include lunch. A discounted advance registration rate will be given to those who register by October 3, 1997. Information and registration forms can be obtained from the AWMA Registrar at (412) 232-3444 extension. 3142 or 1-800-270-3444.

Course Information (All courses are half-day courses)

- AIR-150:** Developing the Emission Inventory Basic Concepts (a.m.)
- AIR-152:** Overview and Hands-on Experience with EPA's Air Emission Estimation Tools (a.m.)
- AIR-149:** Hands-On Introduction to EPA's Air Emission Internet Websites (p.m.)
- AIR-154:** Calculating Emissions from Organic Liquid Storage Tanks (p.m.)

Session Topics

Emission Inventory Improvement Program
Air Quality Modeling Emission Inventories
Emission Inventory Uncertainty
Particulate Matter Inventories
Greenhouse Gases
Preparation of Emission Factors
Emission Inventory Data Management
Mobile Vehicle Emissions
Regional Inventories
Source Inventory
International Emission Inventories
Emission Inventory Projections
Toxics Inventories



Hotel Information

The conference will be held at the Sheraton Imperial Hotel, Interstate 40 Exit 282 at Page Road, Research Triangle Park, NC. Conference rate is \$88, single or double occupancy, plus applicable taxes. A limited number of rooms are available at the government rate. Reservations must be made by October 3, 1997 to guarantee rate, and can be made by calling the hotel directly at (919) 941-5050. After that date, rooms are released for general sale, and availability and rate are not guaranteed. The hotel has a complimentary shuttle service to & from Raleigh-Durham International Airport.

Evening Social Event

An authentic "Southern Pig Pickin'" will be held Wednesday evening, October 29 at the Sheraton Imperial poolside from 5:30 to 8:00 p.m. Entertainment will be provided by an internationally renowned clogging group. The cost for this event is \$15 per person and includes buffet dinner, beverages, and entertainment.

About Research Triangle Park

Research Triangle Park (RTP), situated between the three cities of Raleigh, Durham and Chapel Hill, is home to EPA's Office of Air Quality Planning and Standards and is the largest planned research and development park in the United States. RTP has one of the highest growth rates and lowest unemployment rates in the country, and the area has repeatedly been honored with such titles as Best Cities for Business and Best Place to Live in America. There are many attractions for dining and entertainment in the Raleigh/Durham/Chapel Hill area, which can be found on the RTP website under "Area Information" at <http://www.rtp.org/>.

CHIEF BBS Gets Phased Out: WWW is the Way to Go

by Ron Myers, EFIG

Although it has only been about eighteen months, it seems like many years ago that OAQPS received approval from EPA's Office of Information Resources Management (OIRM) to extend the capabilities of the original dial-up only TTN BBS system to FTP and World Wide Web (WWW) service. At that time, we knew that this extended service was conditional and that OAQPS would eventually have to use OIRM's Internet file servers to provide the information now on the TTN BBS. Some of the conditions which OIRM imposed were that we would move to their file servers when most of the usage of the existing system was through the Internet and when they could provide the functionality that was available through the dial up BBS system. It was expected that a couple of years would pass before most of the usage of the system was through the Internet; however, our users were quicker than we expected. As a result, a little more than six months ago, plans were implemented to switch the WWW access of the TTN BBS system over to the higher capacity and more fully capable WWW file servers managed by OIRM. At that time, we placed the following alert as the top item that users saw on the CHIEF BBS when using the dial-up system.

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**** ALERT **** ALERT **** ALERT **** ALERT **** ALERT *****
*
* Rather than continue to maintain two separate sites for electronic
* access to CHIEF documents, programs & models, EFIG will gradually be
* phasing out support of this site. If you have internet access, you
* should use:
*   Web - http://www.epa.gov/oar/oaqps/efig/
* If you do not expect to have internet access by October 1997, please
* send email to Ron Myers via TTN email or via internet email at
* Myers.Ron@epamail.epa.gov, and include which types of files you expect
* to need. For example Emission Factor reports (AP-42 Sections,
* background reports, drafts)? Emission Estimation Software (Tanks,
* WATER8, PC BEIS, etc.)? Inventory Guidance (EIIP documents, Trends
* reports, Trends procedures)? Databases (FIRE, SPECIATE, SCC lists? etc.)
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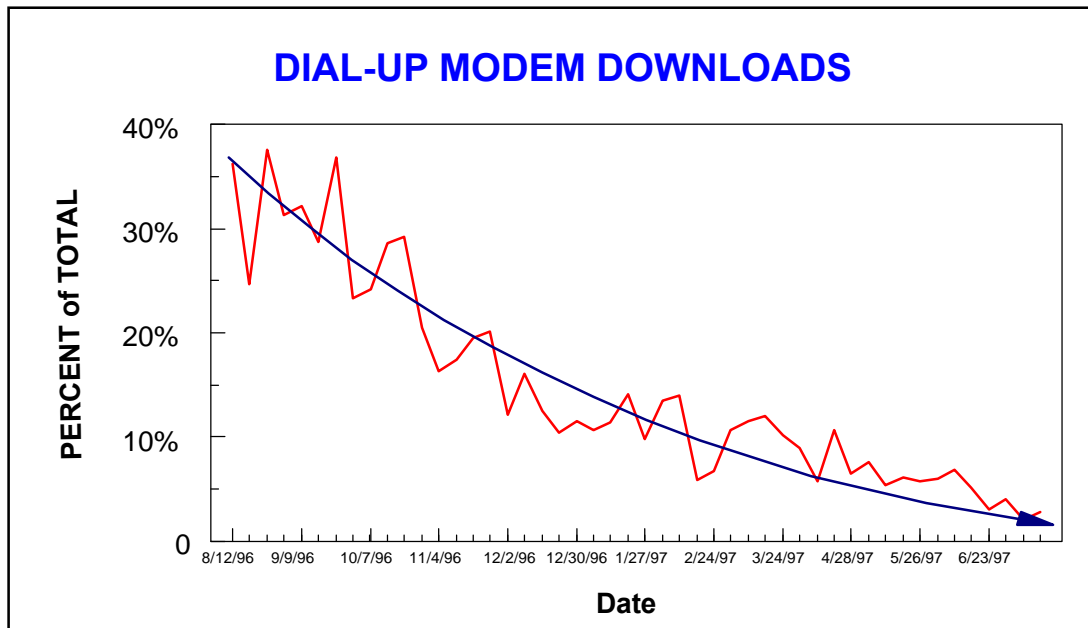
Since this notice was placed at the top of the alerts, there have been only four messages expressing concerns that the dial up service will cease. Here are those messages:

- (1) *Our company has decided not to allow access to the internet from its PC, therefore, I would like to have access to AP-42 sections and emissions calculation software (TANKS3, etc.) on the bulletin board. Thanks*
- (2) *Ron, my company is concerned about security and virus issues and has no long range plans to allow employees access to the internet. At least four people at my location are in the same boat. Others include Alan, Pam, and Carlos. I periodically need to check emission factors (during preparation of our Clean Air Act required annual emission report and during permit application preparation). We need to periodically access AP-42 Sections and background reports, Tanks, Fire/Speciate, NATICH, and SCRAM. I used to rely on an old paper version of AP-42 but seriously screwed up when the Coal NOx factor changed from 21 to 21.7 lbs/ton and didn't know about it until a regulator made a big deal out of it with my boss. I don't want that to happen again so I would really appreciate it if this BBS could be left online.*
- (3) *I am in the same boat of being unable to convince management of the need to obtain internet access. I work for a local agency and have been trying to convince management to provide internet for almost two years now. It appears that it will continue to be a losing battle for the near future. Perhaps though if a decision is made to discontinue the BBS, at least this should help in my arguments for internet access. In the meantime, I guess I will continue to write my reports on a clay tablet with a pointed stick. Oops, according to my sundial, its time for me to go! Thanks, BLGw*

(cont d. on p. 4)

(4) I wanted to let you know that those of us with the state of Kansas would like the capability of dial-up access to the TTN beyond this fall. We are in the process of installing a network with internet capability, but it will not be up and running in the foreseeable future.

In addition, due to either the need for our information or the popularity of the Internet WWW, the number of downloads has increased significantly. Also, the number of downloads through the dial-up modems has gone down. As a result the percentage of total downloads through the dial-up system has taken a precipitous fall. The average percent of files downloaded by the dial-up system for the four weeks ending July 14 has averaged less than 3 percent. The figure below shows the decline in percentage of files downloaded from the dial-up system.



Continuing to support both the centrally managed internet file server and the networked file servers for the TTN BBS will double the effort to keep the systems up to date. Also, the possibility of one system being out of sync with the other system introduces the possibility of confusion to the users. In addition to the CHIEF BBS system, the SCRAM and the OMS BBS systems have decided to cease support of the dial-up system. These three areas have routinely accounted for about half of all the downloads on the TTN system. The CAAA BBS, which will also cease support of the dial-up system, has accounted for another 20 to 25% of the downloads. Although the TTN BBS is now operating on a year by year basis until the functionality of some of the database programs can be developed for the internet-based system, this system will probably be operational until October 1998 when operation of the TTN BBS system will be reevaluated.

In late September we will make our final decision to discontinue the CHIEF site on the OAQPS maintained file servers. We will provide links from the OAQPS maintained server to the new TTNWEB on the central EPA system maintained by OIRM. This will result in eliminating access by the dial-up system. Given the above information, CHIEF users should realize that there does not appear to be a significant need for the dial-up BBS to continue. For those of you who are relying on the dial-up system, you might want to pass on to your management that the dial-up system to CHIEF, CAAA and SCRAM will vanish. If you use this system frequently, you can benefit from using a local internet provider (most of which offer faster access than our 14,400 bps) and cost less than \$30 per month for unlimited access rather than long distance telephone charges which are about \$0.15 per minute. If you are a state or local agency, you will gain connectivity to all of the other websites managed by other states, sites maintained by other offices in EPA and sites maintained by other environmental organizations.

Air CHIEF CD-ROM Leaps to Acrobat®

by Mary Anne Barckhoff, Lockheed Martin Contractor



Get ready everybody! The *Air CHIEF* CD-ROM will have a new look this year! The Emission Factor and Inventory Group (EFIG) has made the decision to switch the version 5.0 *Air CHIEF* CD-ROM from the *Folio Bound Views*® software platform to *Adobe Acrobat*® format. Why the sudden change, you ask? Primarily due to dissatisfaction with the Folio product. Although version 4.0 of *Air CHIEF* was developed in Folio format and produced a very satisfactory product, EFIG decided that it would be much more cost- and time-efficient to make the switch to Adobe, even after abandoning a half-finished Folio version.

What is the advantage of switching to Adobe Acrobat® Format?

There are many advantages to EFIG as well as the end-user. Not only is *Adobe Acrobat*® much less expensive and easier to use for electronic document conversion, but it is also a widely used product on the Internet World Wide Web (WWW), which means many end-users are already familiar with the product. Many groups within the US EPA, including EFIG, are using Acrobat to distribute electronic documents on the Internet. Most of the documents on *Air CHIEF* version 5.0 are already available on the CHIEF website (<http://www.epa.gov/ttn/chief/>) or soon will be.

Adobe Acrobat® uses the Portable Document File (PDF) format, which maintains the same formatting as a printed page. This alleviates any problems with "interpretation" of graphics, tables, or printouts, so it is a reliable format for electronic document distribution on the WWW. In addition, the *Acrobat Reader*®, which can be downloaded for free from the Adobe website, is available for Windows 3.x, Windows 95, Windows NT, UNIX, and Macintosh. The *Air CHIEF* CD-ROM will only be distributed with 16- and 32-bit Windows versions of the Reader, but users with other computer systems should also be able to use the documents on *Air CHIEF* by downloading the appropriate *Acrobat Reader*® from the Adobe website.

Another added advantage of *Adobe Acrobat*® is that users will now be able to search for a keyword in all of the documents on the CD-ROM. Many *Air CHIEF* 4.0 users have complained because this is not possible in the Folio version of *Air CHIEF*. Users have only been able to search individual "infobases" or separate electronic documents such as an AP-42 chapter or L&E document. Now, users can search every document in one easy step, which will save time and effort.

What will be on this Acrobat version of Air CHIEF?

Version 5.0 of *Air CHIEF* will include the complete *Compilation of Air Pollutant Emission Factors* (AP-42), Volume 1 (stationary sources), including updated sections from Supplements A, B, and possibly even a few finalized sections from the upcoming Supplement C. *Air CHIEF* version 5.0 will also include the complete *Locating and Estimating Air Toxic Emission* (L&E) document series, the Factor Information Retrieval System (*FIRE*) version 5.1b data, the Source Classification Code list, the Standard Industrial Classification (SIC) list, and the RTECS Chemical Synonym List. A new addition to the *Air CHIEF* CD-ROM will be the Emission Inventory Improvement Program (EIIP) guidance documents, which complement the information found in AP-42. To enhance the usability of these documents, *Air CHIEF* contains links between related AP-42 and EIIP sections, which makes cross-referencing between these documents that much easier. On top of all this, included on *Air CHIEF* version 5.0 will be AP-42 background files and installable copies of EFIG's programs (MS-DOS versions): TANKS 3.0, Water8, Chemdat8, and PC BEIS.

How does one get a copy of Air CHIEF?

The *Air CHIEF* version 5.0 CD-ROM is expected to be available for distribution sometime in October. It will be available for purchase from the Government Printing Office for \$15-\$20. If you have questions about *Air CHIEF*, call the *Info CHIEF* help desk at (919) 541-5285.

Source Category Listings for Specific Toxic Pollutants (Section 112(c)(6))

On June 11, 1997 the Environmental Protection Agency (EPA) issued a proposal to add to the list of source categories that emit pollutants listed in section 112(c)(6) of the *Clean Air Act Amendments of 1990*. Section 112(c)(6) requires that the EPA identify sources of alkylated lead compounds, polycyclic organic matter (POM), mercury, hexachlorobenzene, polychlorinated biphenyls (PCB), 2,3,7,8-tetrachlorodibenzofurans (TCDF) and 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). These identified sources will account for not less than 90% of the aggregate emissions of each pollutant subject to standards under Subsection 112(d)(2) or 112(d)(4). Standards must be developed for sources of these hazardous air pollutants (HAPs) by EPA not later than ten years after the date of enactment.

Listing Decision

The Environmental Protection Agency (EPA) is currently issuing a proposal to add to the list of industry groups (known as "source categories") that emit the seven hazardous air pollutants. Hazardous air pollutants are also known as air toxics; these are pollutants which are known or suspected to cause cancer or other serious health effects such as birth defects or reproductive effects.

The Clean Air Act Amendments of 1990 required EPA to identify the sources of 90 percent of the emissions of each of these pollutants. Further, the Act requires EPA to subject these sources to technology-based standards (under section 112(d)(2), known as maximum achievable control technology or MACT) or determine that their emissions do not violate established health thresholds (under section 112(d)(4)).

In response to these requirements and in order to protect public health and the environment, EPA proposes to add the following source categories to the list for regulation:

- Open Burning of Scrap Tires
- Gasoline Distribution Stage I Aviation, includes evaporative losses associated with the distribution and storage of aviation gas containing lead
- Wood Treatment/Wood Preservation, includes small (so-called "area") sources that treat wood with chemicals for preservation purposes

How Did EPA Evaluate the Sources of the Seven Pollutants?

In order to determine the sources of the seven air toxics, EPA developed emission inventories of known sources of each pollutant. Emissions inventories consist of estimates of annual emissions to the air from all sources (with available data) such as power plants, chemical plants, automobiles, and forest fires. Using this inventory data, EPA identified the sources of the *total* emissions of these seven pollutants. However, EPA did not further evaluate certain types of sources that could not appropriately be addressed under the authorities of section 112 of the Clean Air Act. These excluded sources are wildfires and prescribed burning, mobile sources (cars, airplanes, etc.), residential combustion sources (fireplaces, wood stoves, oil and coal heaters), and pesticide application. EPA evaluated the remaining categories of sources to determine whether they were currently regulated or scheduled for regulation under sections 112(d)(2) or (d)(4).

Background

Under the *Clean Air Act Amendments of 1990*, EPA is required to regulate sources of 188 listed toxic air pollutants. (Note that this list originally contained 189 pollutants, but EPA has subsequently removed the chemical caprolactum from the list.) On July 16, 1992, EPA published a list of industry groups (known as source categories) that emit one or more of these air toxics. For listed categories of "major" sources (those that emit 10 tons/year or more of a listed pollutant or 25 tons/year or more of a combination of pollutants), the

(cont d. on p. 7)

Section 112 (c)(6) *(cont d. from p. 6)*

Clean Air Act requires EPA to develop standards that require the application of stringent air pollution reduction measures known as maximum achievable control technology (MACT).

These seven pollutants were among the pollutants of concern identified by the International Joint Commission of the United States and Canada, and the Great Lakes Commission, as well as EPA's Great Waters Program because of their persistence and tendency to bioaccumulate in the environment. These pollutants are also associated with adverse health effects such as nervous system damage and reproductive effects.

EPA is not proposing to list some source categories that contribute to emissions of the seven pollutants, because these sources are subject to other regulations within the Clean Air Act. For example:

- Utility emissions are addressed under EPA's utility air toxics study.
- Medical and municipal waste emissions are regulated under EPA's solid waste combustion standards.
- Combustion sources are included in EPA's on-going effort to develop the Industrial Combustion Coordinated Rulemaking.

Next Steps

After evaluating public comments on this proposal, EPA intends to issue a final list in December 1997. Following publication of the final list, EPA intends to proceed to develop technology standards for the additional source categories under section 112(d)(2).

For More Information

The following three items are available: Section 112(c)(6) Federal Register Proposal; Final Inventory Report; Summary of Comments and Responses to Draft Inventory Report. These items can be downloaded in a compressed *WordPerfect*® 6.1 format or *Adobe Acrobat*® format. For assistance with downloading these files, call the *Info CHIEF* help desk at (919)541-5285. The web site address is: <http://www.epa.gov/oar/oaqps/airtox/112c6fac.html>.

The complete Section 112(c)(6) proposal and background documentation is available through EPA's Air and Radiation Docket (Docket Number A-97-05) and Information Center by calling (202) 260-7548 or -7549 or FAX (202) 260-4000 (a reasonable fee may be charged for copying).

Agencies Hold Emission Inventory Workshop

by Steve Bromberg, EFIG

On July 15-17 approximately 130 EPA, state, and local agency representatives met in Durham, NC to discuss issues related to compiling and reporting emission inventory information. This was the first time in over five years that the inventory community had met to address emission specific issues. Presentations were made describing the new proposed standards and the process and procedures for compiling the 1996 Periodic Emission Inventory (PEI). Emerging areas such as a new toxic inventory, the proposed emission reporting rule, new data transfer options, and concerns related to emission factors were also presented. During the second day, all the attendees were divided into subgroups to facilitate discussion of the issues.

During the small group meetings state and local agency representatives provided their perspective on the various topics. This input will be used by EPA to adjust approaches taken by the various programs to better fit with how nonfederal agencies operate. A summary of the meeting will be distributed to all attendees and will be posted on the 1996 Emission Inventory website at <http://www.epa.gov/oar/oaqps/efig/ei/>.

Section 112(k) - Urban Air Toxics Program Development of Air Emissions Inventory

Under sections 112(c)(3) and 112(k) of the *Clean Air Act Amendments of 1990*, the Environmental Protection Agency (EPA) is required to identify categories and subcategories of sources of hazardous air pollutants (HAPs) in urban areas that pose a threat to human health. Specifically, the EPA must identify sources of at least 30 HAPs that present the greatest threat to urban populations, and assure that sources that account for 90 percent or more of the aggregate emissions are subject to regulation. In addition, a national strategy must be developed to reduce cancer incidence attributable to these pollutants by at least 75 percent.

In order to respond to these mandates, EPA proposed performing an analysis in the following two parts.

Part I: An integrated approach to compare risks resulting from the mobile and stationary source emissions of five HAPs in four cities.

Part II: A review and synthesis of information on urban air pollution with emphasis on stationary area source emissions and information on most significant HAPs.

The first analysis was prepared and distributed for external review (see files on the Unified Air Toxics website). This approach was abandoned because of the lack of availability of representative inventories. Inventories of adequate quality were available for only two cities and could not be used to develop a national urban air toxics strategy. The second analysis, the focus of EPA's current program to develop an urban area source strategy, is described below.

Qualitative Analysis of Most Significant HAPs in Urban Areas

In order to determine "the 30 HAPs that present the greatest threat to public health", as required in section 112(c)(3), a method of comparing the emissions and relative health threat of all 188 HAPs listed in section 112 is necessary. Unfortunately, as stated in the *EPA's Urban Area Source Research Program - A Status Report on Preliminary Research*, fair or better information to perform such a risk analysis exists for only 20 or so of the 188 HAPs. Therefore, a risk-based comparison (similar to Part I) of all 188 HAPs is not possible at this time. In lieu of such a comparison, a qualitative analysis of existing information can be made to exhibit what is known about each HAP in terms of monitored air concentrations, emissions inventories, and health hazards. This represents the best available information and highlights consistent findings, in terms of HAPs with significant evidence of problems, and uncertainties. Because this analysis is a composite of information from a variety of local- and national-scale studies, its usefulness in determining specific actions to reduce such emissions and relative hazards on a national scale may be limited.

Available toxicity, ambient air monitoring, and emissions inventory data, and results from existing exposure and risk assessment studies were used to develop a list of 40 potential HAPs.

Inventory Development for 40 HAPs

In order to address the requirements of sections 112(c)(3) and 112(k), national emissions inventories of HAPs are needed. These inventories will serve as the reference baseline in the development of a national strategy to control the 112(k) pollutant emissions.

EPA is reviewing and analyzing available data to revise existing assessments of the sources in the U.S. that emit each of the 40 HAPs. Inventories for the 40 HAPs that are listed in section 112(c)(6) have already been compiled and will not be redone. The final 112(c)(6) inventory report was posted on the 112(c)(6) web page in June 1997 at the address, <http://www.epa.gov/oar/oaqps/airtox/112c6fac.html>.

(cont d. on p. 9)

Section 112(k) (cont d. from p. 8)

For the HAPs that are not listed in section 112(c)(6), EPA is compiling existing emissions information from a variety of efforts - regulatory development, *Locating and Estimating* documents, Toxic Release Inventory (TRI), state and local air agencies, and industry trade associations and is in the process of obtaining additional data for evaluation and analysis. The approaches used in compiling the emissions inventory for each pollutant and source category will be documented. The quantities and percentages of emissions attributable to each source category will also be documented including those emissions associated with area sources per the section 112(a) definition and considering co-located sources. The nominal base year for developing emissions data is 1990. The inventories will provide major (point), area, and mobile source estimates for each HAP. The inventories will be allocated to provide an estimate of urban vs. rural emissions and major vs. area source category emissions.

These inventories will serve as the reference baseline in the development of a national strategy to control the 112(k) pollutant emissions. OAQPS will use these emissions estimates to determine the universe of anthropogenic emissions of pollutants to identify source categories emitting those HAPs already subject to regulation. Detailed source category emissions and monitoring data of the 40 HAPs will be merged to form a consistent source category data file. The definition of urban and rural and the classification of all counties in the U.S. has been recently posted on the Internet.

For More Information

The emissions inventory and documentation will be externally reviewed to improve the quality of the estimates. The review draft report will be posted on the Unified Air Toxics website (www.epa.gov/oar/oaqps/airtox/) by September 1, 1997 for external review and comments. All comments will be due by October 15, 1997, and no extension will be given. The schedule is very short due to a lawsuit and resulting negotiated settlement. Comments and data are encouraged and may be provided in writing, electronically through email, or verbally. The final inventory report will be completed by January 10, 1998.

Comments regarding emissions inventory and any emissions information should be directed to: Ms. Anne Pope, Emission Factor and Inventory Group, U.S. EPA, Mail Drop 14, Research Triangle Park, North Carolina, 27711. Phone: (919)541-5373, email: POPE.ANNE@EPAMAIL.EPA.GOV.

Comments or questions regarding policy should be directed to: Ms. Laura McKelvey, Visibility and Ecosystem Protection Group, U. S. EPA, Mail Drop 15, Research Triangle Park, North Carolina, 27711. Phone: (919)541-5497, email: MCKELVEY.LAURA@EPAMAIL.EPA.GOV.

Share Your Knowledge!

The Emission Factor and Inventory Group is always looking for new ways to bring together the expertise of emission inventory and estimation professionals. One of the biggest goals for EFIG is to maintain open communications between EPA, state/local agencies and the public in as many ways as possible. In light of this goal, we would like to include article contributions from state or local agency members in upcoming issues of the *CHIEF Newsletter*. There are many folks in these agencies who, due to their own specific regulatory needs, or due to the dynamics of their regional environment,

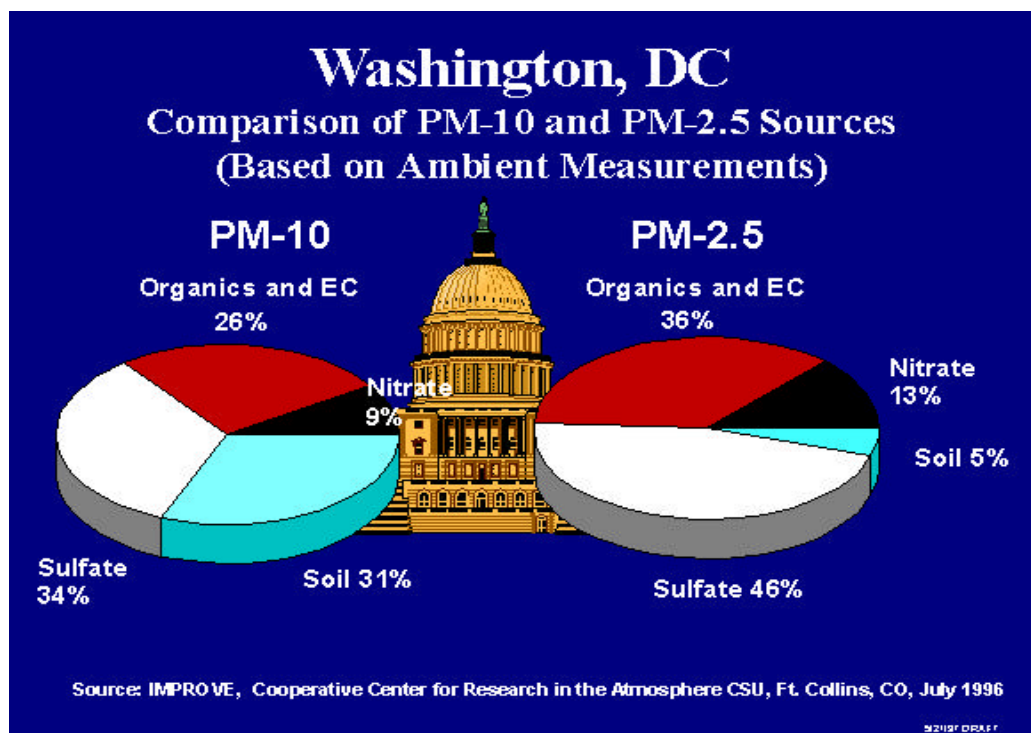
have experience and knowledge about specialized emissions-related information that EFIG does not have internally available at this time. If you

work for a state or local agency and have helpful tips or techniques concerning emission inventories or estimating emissions, we want to hear from you! If you would like to contribute an article to the *CHIEF Newsletter*, please contact David Misenheimer at (919) 541-5473 or the *Info CHIEF* help desk at (919) 541-5285.



Refocusing on PM2.5: Misconceptions Reach the Halls of Congress

What is PM2.5? How is it different from PM10? Unfortunately, many people don't know the answer to these questions and many misconceptions about the nature of PM2.5 have been shared with farmers and their advocates. Very concerned, the farmers have contacted Congress and voiced concerns about how the revised PM NAAQS will affect them. Their concerns are largely based on the misconception that soil will be a large portion of the PM2.5 in the ambient air. Naturally, farmers are concerned, since soil is one of the "tools of a farmer's trade".



Based on the inventory of directly emitted PM2.5, soil appears to dominate PM2.5. However, emission inventories must be interpreted through regional dispersion or receptor modeling to get a complete understanding of the role of the inventoried sources. These models account for the role of SO₂ and NO_x which form sulfate and nitrate particles - sulfate is about 1/2 of PM2.5 in the East and nitrate is important in a few Western areas. Moreover, the spatial distribution of the emissions and their release heights are also im-

portant considerations. The bottom line is that soil will be only a minor part of PM2.5, even in farming communities. This is in sharp contrast to PM10, where soil is the predominant part of PM.

This is good news for farmers, but getting the correct information to them (and gaining their confidence in this "information") has been challenging. Tom Pace of EFIG staff has been charged with getting this information to the Congressmen who have been concerned about how farmers will be affected by the new NAAQS. Tom recently spent 3 days in Congress discussing this issue with the House and Senate Committees and accompanying Carol Browner to a hearing with the Senate Committee on Agriculture and Forestry. The result of Tom's work has been an improved understanding of the role of farmers in the PM2.5 NAAQS and alleviation of their concern about soil. However, concerns remain about agricultural burning, off-road vehicles and other issues.

There will undoubtedly be a huge "relearning" process for all of us as we transition from a PM10 focus to a PM2.5 focus. Did you know that in the Eastern US, over half of PM2.5 will consist of sulfate particles formed from sulfur dioxide gas emitted from power plants and other fossil fuel combustion and that the remainder will be mostly directly emitted particles from motor vehicles, and fossil fuel and biomass combustion? Sulfate is lower in the West, but directly emitted combustion particles are a key component of the Western fine particles. Soil is only about 5-15 % of PM2.5. More information about the composition of PM2.5 can be found on EPA's Federal Advisory Committee Act National and Regional Strategies website at <http://ttnwww.rtpnc.epa.gov/html/ozpmrh/facahome.htm>.

Info CHIEF's Most Frequently Asked Questions

Call (919) 541-5285 or email info.chief@epamail.epa.gov
if you have questions!

Q: I would like to find emissions data for particulate matter broken down by specific industries (such as electric utility generation). How can I get this type of data on the national level or for a particular region?

A: The EPA collects data for criteria pollutants (Lead, NO_x, SO₂, CO, PM, and VOCs) on a national level in the National Emission Trends database. The data that is collected is then distributed to the public in an annual report, the *National Air Pollutant Emission Trends Report*, and the *National Emission Trends (NET) Viewer* CD-ROM. The Trends Report breaks down this pollutant information by industry on a national level, but not on a state or county level. The *NET Viewer* CD-ROM, however, can break down the pollutant information by industry (Tier category) on a state or county level. The *Trends Report* is available online at <http://www.epa.gov/oar/emtrnd/index.htm> or in paper copy from the Info CHIEF help desk, (919) 541-5285. The *NET Viewer* CD-ROM is available from the Government Printing Office (GPO), (202) 512-1800, for \$15.00. The GPO stock number is 055-000-00559-1.

Q: I received a copy of the 1996 Periodic Emission Inventory mail-out, and it says that I can download a copy of the emissions data from the EPA FTP site, but that I need to get a password from Info CHIEF to access the FTP site. Is this password really necessary?

A: If you are using true File Transfer Protocol (FTP) software, then you need to have a password. However, you do not need to call Info CHIEF in order to get the password. Simply login as "anonymous" and then use your email address (or any combination of letters containing the @ symbol) for the password. If you have an Internet World Wide Web browser, such as Netscape®, then all you need to do is type <ftp://www.epa.gov/pub/> for the URL address and then go to the appropriate subdirectories to access this data. If you need more information, Info CHIEF can fax a more detailed instruction sheet about the PEI FTP site to you.

Q: I have a computer running Windows 95 and when I tried to install TANKS 3.0 and run it out of Windows 95, I received an error message. Can I get the TANKS 3.0 program to run on Windows 95?

A: Yes, even though it is a DOS program, you can run TANKS on a Windows 95 system. However, many Windows 95 users make the mistake of trying to run the DOS installation of TANKS from the DOS shell (e.g. by clicking on the MS-DOS Prompt icon in Windows), which often results in error messages. To install TANKS properly, shut down Windows 95, using the "Restart the computer in MS-DOS mode" selection, and then install TANKS from the DOS prompt. If you prefer, you can then create an icon for TANKS 3.0 in Windows 95, so that you do not need to exit Windows every time you wish to use the program. If you continue to have difficulties while running the TANKS program, check to make sure that there is a CONFIG.SYS file in your root directory (C:\) that contains the statements "FILES=80" (or greater) and "BUFFERS=40" (or greater). If you do not know how to edit the CONFIG.SYS file or need further assistance, call the Info CHIEF help desk.

Q: Can I download emission factors for mobile sources from the Internet?

A: The Office of Mobile Sources (OMS) has been working on completing the Fifth Edition *Compilation of Air Pollutant Emission Factors* (AP-42), Volume 2, which contains mobile source emission factors. Once the document is complete (hopefully within the next month), it will be posted on the OMS website at <http://www.epa.gov/omswww/>. AP-42 volume 2 will not be included on the *Air CHIEF* CD-ROM. If you have further questions about mobile source emission factors, please call Terry Newell at (313) 668-4462.

Periodic Emission Inventory June Mail-Out

by Sharon Nizich, EFIG

On June 30th, the Emission Factor and Inventory Group (EFIG) mailed a packet of information on the 1996 Periodic Emission Inventory (PEI) to approximately 200 state and local air agencies. The information contained in the packet is intended to aid in the compilation and submittal of the PEI. The packet included:

1. **Cover memorandum**
2. **Attachment A - National Emission Inventory Documentation** - Discussed the reasons for submitting 1996 data to EPA, the pedigree of the national emission trends (NET) inventory data (both for current and future planned data sources), the confidence EFIG has in the various pollutant data, and included information on data files to be downloaded from the Internet.
3. **Attachment B - National Toxics Inventory Documentation** - Discussed the pedigree of the national toxics inventory (NTI), the history of toxics emissions tracking within EPA, the files to be downloaded from the internet, and a request for data.
4. **Attachment C - Reporting Guidance for 1996 Periodic Emissions Inventories and National Emission Trends (NET) Inventories**, EPA-454/R-97-005 - Guidance on developing a 1996 periodic emission inventory.

To receive a copy of this mail-out, please call Sally Dombrowski at (919) 541-0875. Additional information can be obtained from the 1996 Emission Inventory website at <http://www.epa.gov/oar/oaqps/efig/ei/>.

Who To Call for Emission Factor/Inventory Information

AP-42 Chapter

1. External Combustion
 2. Solid Waste Disposal
 3. Internal Combustion
 4. Evaporation Loss Sources
 5. Petroleum Industry
 6. Organic Chemical Process Industry
 7. Liquid Storage Tanks
 8. Inorganic Chemical Process Industry
 9. Food And Agricultural Industry
 10. Wood Products Industry
 11. Mineral Products Industry
 12. Metallurgical Industry
 13. Miscellaneous Sources
 14. Greenhouse Gases
- "Adopt-A-Factor"
General information, technical support

Contact

Roy Huntley
Roy Huntley
Roy Huntley
Ron Ryan
Ron Ryan
Dennis Beauregard
Dennis Beauregard
Ron Myers
Dallas Safriet
Dallas Safriet
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Ron Myers
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Roy Huntley
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