

## **FY2002/2003 Training Needs Assessment Survey**

# **Final Report**

**April 2001**

**Submitted to:**

Education and Outreach Group  
Office of Air Quality Planning and Standards, Office of Air and Radiation  
United States Environmental Protection Agency  
Research Triangle Park NC 27711

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## Introduction

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One of the primary functions of the Office of Air Quality Planning and Standards (OAQPS), U.S. Environmental Protection Agency (EPA)'s Education and Outreach Group (EOG), is to provide training in air pollution control to employees of State and local agencies. One of the most significant impacts on this activity over recent years has been an extensive, in-depth training needs assessment survey conducted annually under the direction of the State and Territorial Air Pollution Program Administrators (STAPPA) and the Association of Local Air Pollution Control Officials (ALAPCO).

EOG contracted with SYSTANI, Inc. to assist in revising the prior 1999 survey instrument and to compile and analyze the 2001 data collected by STAPPA/ALAPCO in December 2000/January 2001. With input from a STAPPA/ALAPCO working group, a revised survey instrument was developed to assess the FY 2002/FY 2003 Training Needs related to currently available courses and future air pollution control training needs (see *Appendix XXX* for a complete copy of the final survey instrument). Completed surveys were provided to SYSTANI for analysis and presentation. The results of the survey were presented at a meeting of the STAPPA/ALAPCO Joint Training Committee (JTC) Working Session on March 5-6, 2001 in San Diego, California. The findings of the survey and input from the JTC Working Session are summarized in this final report. Comparisons are also made to the 1997 and 1999 survey results. In addition to the final report, all survey data and related queries are included in MS Access 97/2000 database that allows providers to query the data for more detailed analysis.

The following training providers are referred to throughout this report:

APTI	EPA/Air Pollution Training Institute
CARB	California Air Resources Board
NETI	EPA/National Enforcement Training Institute
OMS	EPA/Office of Mobile Sources
Rutgers/ EOHSI	Rutgers University/Environmental and Occupational Health Sciences Institute

Air pollution agencies are organized in several ways: by EPA Region and by Regional Consortia. The regional associations related to air pollution control are:

CENSARA  
LADCO  
MARAMA (Mid-Atlantic Regional Air Management Association)  
METRO-4/SESARM (Southeastern States Air Resources Management)  
NESCAUM (Northeast States for Coordinated Air Use Management)  
WESTAR (Western States Air Resources Council)

## Differences from FY 2000/2001 Survey Instrument

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Several changes were made to the Air Pollution Training Needs Assessment survey instrument with a goal to increase the usefulness of the data and to make it easier for respondents to complete. Key differences from the FY 2000/2001 Training Needs Assessment are:

- **Question A: Current Courses** The question which identifies needs for current courses asks for respondents to indicate courses they are “most likely to send staff to” for training in FY 2002/2003. In the FY 2000/2001 respondents were asked to rank EACH course for importance and then indicate the estimated number of persons needed training in that course for each fiscal year. In the FY 2002/2003 survey, the responses were not split into each Fiscal Year and the ranking and quantities were dropped. It was felt that there needed to be some level of independent evaluation of the data by providers and the break out by year and quantity had not been useful.
- **Question B: Courses Needing Updating** This question asked respondents to identify courses that need to most updating based on courses they have taken in the past two years. This was a new course.
- **Question C: New Topics** The question which identifies needs for future training topics again asked respondents to indicate topics they are “most likely to send staff to” for training in FY 2002/2003. In the FY2000/2001 respondents were asked to rank EACH course for importance and then indicate the estimated number of persons needed training in that course for each fiscal year and the topics for Air Toxics and MACTS were not specified. In the FY 2002/2003 instrument, topics for Air Toxics and MACTs were specified into five categories in addition to the ability to specify. This helped focus the responses to these key training need areas. The responses were not split into each Fiscal Year and the ranking and quantities were dropped. The question also asked respondents to indicate the Preferred Delivery Method for the topics they selected.
- Questions in the previous survey related to barriers and priorities for training and alternative delivery methods were eliminated.
- The FY 2002/2003 survey was distributed earlier than the FY 2000/2001 survey. Respondents received the survey in November 2000 and were asked to submit it by December 8, 2000. All responses were received by January 5, 2001, more than a month earlier than the prior instrument.

## Overview of Survey Responses

### Response Summary

A total of 89 responses were received in 2001 in response to the FY2002/2003 Training Needs Assessment Survey. Surveys were distributed to members of STAPPA and ALAPCO (state and local air agencies) through their web site. In addition, surveys were distributed to each EPA Regional Air Office, EPA Headquarters and to tribal agencies with air concerns. No responses were received from Tribal agencies.

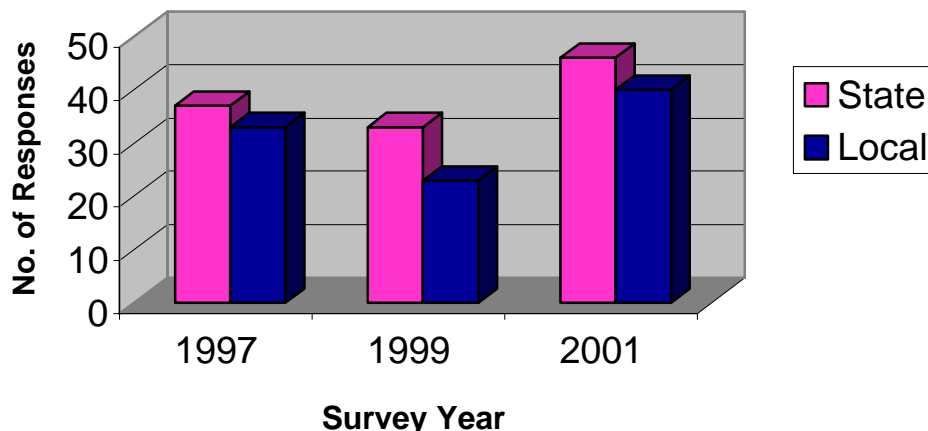
Agency Type*	2001 Responses	1999 Responses	1997 Responses
State Agencies	46	34	37
Local Agencies	40	25	33
Federal Agencies	3	23	0
<b>Total</b>	<b>89</b>	<b>86</b>	<b>70</b>

**\*Note:**

- 85.2% of STAPPA members responded (46 out of 54). The 54 members of STAPPA include 49 in the United States (except SD), the District of Columbia, American Samoa, Puerto Rico, Virgin Islands, and Guam.
- 31.75% of ALAPCO members responded (40 out of 165).
- 30% of EPA regions responded (3 out of 10).

### State and Local Response Summary

#### State and Local Comparisons



**There was a 35.3% increase from 1999 in the number of state responses and a 60.0% increase from 1999 in the number of local responses.**

### **Overall Representation**

- At least one state agency responded from every Regional Consortia.
- At least one local agency responded from every Regional Consortia (except NESCAUM).
- No responses were received from the following states: Arkansas, Hawaii, Nebraska, and South Dakota (which is not a member of STAPPA).
- No Territories were represented (American Samoa, Guam, Puerto Rico, and Virgin Islands).
- There were no Tribal responses received.
- For the three Federal responses received, results were separated out from State and Local responses and are included separately in the Appendix.

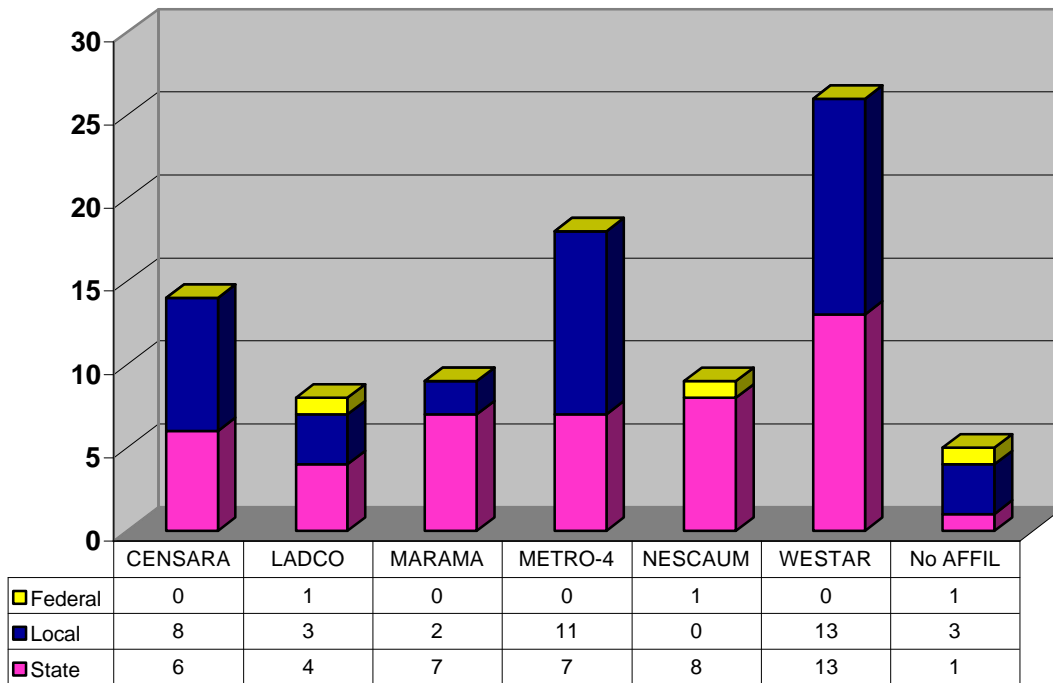
### **Response Distribution**

#### **2001 Response Distribution by Regional Consortia**

<b>Regional Consortia</b>	<b>States in Consortia (bold responded)</b>	<b>No. of Responses</b>	<b>Percent of Total</b>
CENSARA	AR, <b>IA, KS, LA, MN, MO, OK, TX</b>	14	15.73%
LADCO	<b>IL, IN, MI, WI</b>	8	8.90%
MARAMA	<b>DC, DE, MD, NC (State),</b> NJ (local), <b>PA, VA, WV</b>	9	10.11%
METRO-4/SESARM	<b>AL, FL, GA, KY, MS, NC (local), SC,</b> <b>TN</b>	18	20.23%
NESCAUM	<b>CT, MA, ME, NH, NJ (State), NY, RI,</b> <b>VT</b>	9	10.11%
WESTAR	<b>AK, AZ, CA, CO, HI, ID, MT, ND, NM,</b> <b>NV, OR, UT, WA, WY</b>	27	30.34%
No Affiliation	AS, GU, NE, <b>OH,</b> PR, VI	4	4.49%
<b>Totals</b>		<b>89</b>	<b>100.0%</b>

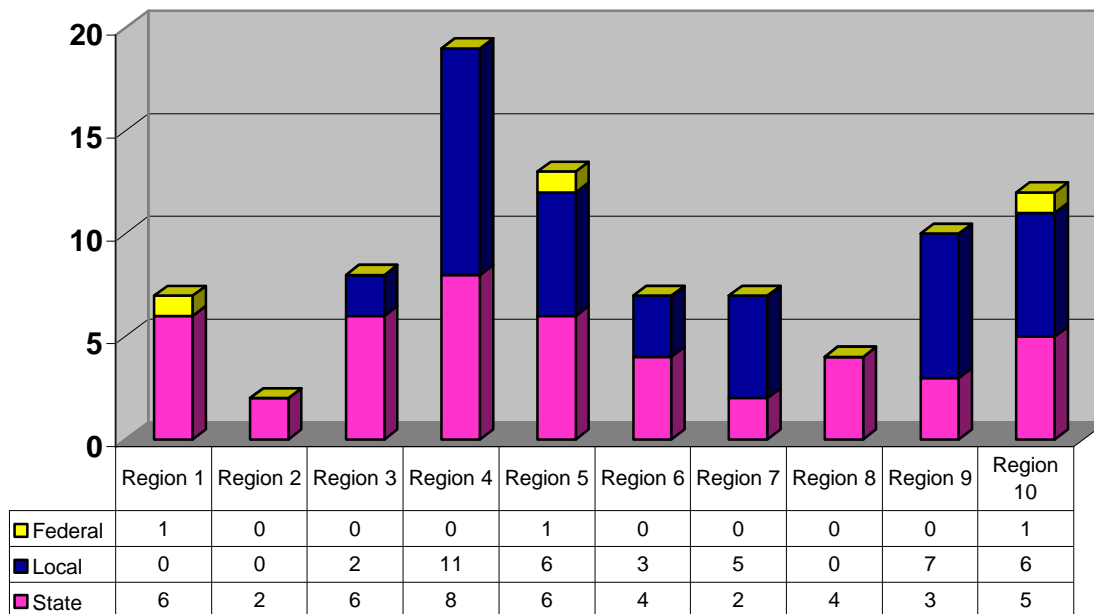
### 2001 Response Distribution by Regional Consortia and Agency Type

(n=89)



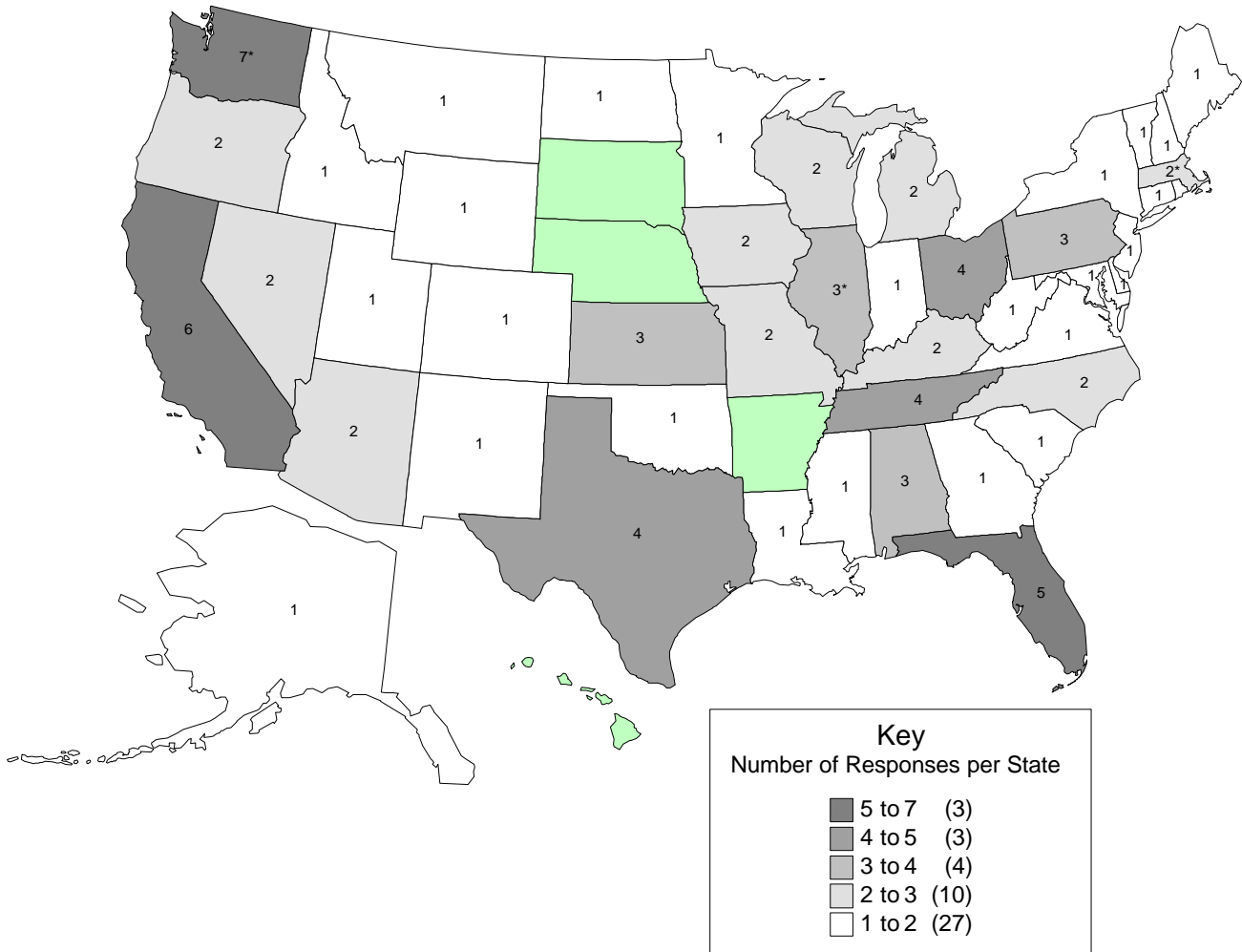
### 2001 Response Distribution by EPA Region and Agency Type

(n=89)



## 2001 Response Distribution by State

(n=89) \* indicates a Federal response is included in the state count (IL, MA, WA)



See *Appendix H*. for a complete listing of respondents by state and agency type.

### **Access to Email at Work**

All 89 respondents indicated that they have access to E-mail at work, with 85 providing E-mail addresses. In the 1997 survey, three state agencies and six local agencies responded they did not have access to E-mail.

### **Budget Authority Review**

In response to the question, “Does this person have budgeting authority?” which related to the person who reviewed the responses, 59.6% of the respondents replied “Yes. This represents a 10.2% increase from the FY 2000/2001 survey where 49.4% answered “Yes”. **Number of Surveys Reviewed by an Official with Budgeting Authority**

<b>Agency Type</b>	<b>Yes</b>	<b>No</b>	<b>No Response</b>	<b>Total</b>
State	24	11	11	46
Local	28	6	6	40
Federal	1	1	1	3
<b>Totals</b>	<b>53</b> <b>(59.6%)</b>	<b>18</b> <b>(20.2%)</b>	<b>18</b> <b>(20.2%)</b>	<b>89</b> <b>(100%)</b>

### **Preferred Delivery Methods**

In response to Question C: New Topics, respondents were asked to indicate their preferred delivery methods for the topics they indicated training was needed. The below table summarizes results from the responses to this question.

#### **Preferred Delivery Methods**

<b>Delivery Method</b>	<b>% Respondents Specified</b>
Classroom	36%
Telecourse	29%
Workshop	18%
No Preference	16%
Blank	10%
Web-Based	11%
Self-Instructional	6%
CD-ROM	7%

- About 40% of the respondents indicated more than one preference per topic.
- Single surveys with multiple respondents completing the question skewed data.

## Results

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The results of the survey responses follow for each question (see *Appendix A* for a complete copy of the survey instrument). Results displayed are for State and Local agencies only. The results from the three Federal Agency responses are included in *Appendix C and G*.

### **Training Needs for Current Courses**

**Question A.** From the list of topics below for which government-sponsored courses are currently available, please check the courses that your agency will be most likely to send staff to for training in FY 2002-FY 2003 (October 2001-September 2003).

There were 34 topic areas and 124 courses listed for Question A. The table below indicates the top ten current courses and the percentage of state and local agencies that selected the course.

#### **Top Ten Current Courses Identified**

<b>Question A. Top Ten Current Courses</b>	<b>Provider</b>	<b>% Selecting*</b>
1. Introduction to Air Toxics/400	APTI	68.8%
2. Control of Gaseous Emission/415	APTI	60.5%
3. Intermediate Permitting/461	APTI	59.3%
4. Control of Particulate Emissions/413	APTI	58.1%
5. Air Pollution Dispersion Models/423	APTI	56.9%
6. Control of Nitrogen Oxides Emissions/418	APTI	56.9%
7. Baseline Source Inspection/445	APTI	54.6%
8. Principles and Practice of Air Pollution Control/452	APTI	53.5%
9. Continuous Emission Monitoring/474	APTI	53.5%
10. Combustion Evaluation/427	APTI	53.5%

\* n=86 (State and Local Response only)

Six of the ten courses were listed in the top ten from the FY 2000/2001 Training Needs Assessment Survey. Details of respondent data for current courses, by Regional Consortia and EPA Region can be found in *Appendix B* with Federal Responses in *Appendix C*.

### ***Courses that Need Updating***

**Question B. Of the current courses taken by staff in your agency in the last two years, what are the top five courses that need updating?**

The intent of the question was to gather data to help prioritize courses for updates. Respondents listed Fifty (50) courses for updating with most courses having only one respondent selecting it. This did not provide the desired results. The top two courses listed (with 5.8% selecting the course) are:

- Sources and Control of Volatile Organics/482 (4 days)
- Air Pollution Dispersion Models/423 (3 days)

A complete list of current courses listed is included in *Appendix D*.

### ***New Topics for Training***

**Question C. Which of the following topics would your agency be most likely to send staff to for training in FY 2002/2003 if a course was available? Please check the topics and specify the preferred delivery mechanism.**

There were 36 topic areas identified, with five topics each for Air Toxics and MACT Standards. Respondents could also specify Air Toxics, MACT Standards or other topic(s). The top ten topics and the preferred delivery methods are listed in the following table.

**Top Ten Current Courses Identified**

<b>Question C. New Topics</b>	<b>Preferred Delivery Method</b>	<b>% Selecting*</b>
1. Permitting–New Sources Review (NSR)/PSD Principles for Permit Writers	Classroom/Telecourse	63.9%
2. Air Toxics–Modeling	Classroom/Telecourse	60.5%
3. New Source Review	Classroom/Workshop	55.8%
4. New National Ambient Air Quality Standards (NAAQS) Including Ozone and PM2.5	Telecourse/ Classroom	55.8%
5. Air Toxics–Emissions Inventory	Classroom/Telecourse	54.7%
6. Emissions Inventory Development for PM2.5 with Emphasis on Area Sources	Classroom/Telecourse	50.0%
7. MACT Standards–Industrial/Commercial/Institutional Boilers	Telecourse/ Classroom	50.0%
8. MACT Standards–Municipal Solid Waste Landfills	Telecourse/ Classroom	47.7%
9. Air Toxics–Monitoring	Classroom/Telecourse	45.3%
10. Regional Haze–Emissions Inventory	Classroom	44.2%

\* n=86 (State and Local Response only)

Four of the ten courses were listed in the top ten from the FY 2000/2001 Training Needs Assessment Survey. In discussions of new topics at the JTC meeting, one of the realities in developing new training programs/courses is that, though there may be a preferred delivery mechanism, other factors, such as budget constraints or the need to reach as broad of an audience as possible, may dictate the delivery method.

Details of respondent data for new topics, by Regional Consortia and EPA Region can be found in *Appendix E and F* with Federal Responses in *Appendix G*. This list also includes new topic areas specified by respondents.

### **Air Toxics and MACTs Training Needs**

A separate discussion was held during the working group session of the Joint Training Committee to discuss training needs related to Air Toxics and MACT Standards. The FY 2002/2003 survey specifically listed several Air Toxics and MACT Standards in the current courses and new topics questions. The results are summarized below.

#### **Identified Air Toxics and MACTs Training Needs**

<b>New Topics - Air Toxics and MACTs</b>	<b>% Selecting</b>
<b>New Topics</b>	
Air Toxics—Modeling	60.5%
Air Toxics—Emissions Inventory	54.7%
MACT Standards—Industrial/Commercial/Institutional Boilers	50.0%
MACT Standards—Municipal Solid Waste Landfills	47.7%
Air Toxics—Monitoring	45.4%
MACT Standards—Miscellaneous Organic NESHAP (MON)	41.9%
MACT Standards—Miscellaneous Metal Parts	39.5%
Air Toxics—Data Analysis	38.4%
MACT Standards—Plywood and Particle Board Manufacturing	33.7%
MACT Standards—Boat Manufacturing	32.6%
Air Toxics—Data Management	27.9%
MACT Standards (Specify)	26.7%
Air Toxics—Other (Specify)	18.6%
<b>Current Courses</b>	
Air Toxics-Basics – Introduction to Air Toxics/400	50.7%
Air Toxics-Basics – Dry Cleaning/287	30.1%
Air Toxics-Basics – Solvent Cleaning/233	19.8%
Air Toxics Advanced-Area Source MACT	31.8%
Air Toxics Advanced-Dry Cleaner/California Certification	3.4%

\* n=86 (State and Local Response only)

Specified New Topics for Air Toxics and MACT Standards are summarized below.

**Air Toxics:**

- Risk Assessment (3)
- Single Responses were provided for the following:
  - Cumulative Assessments
  - General
  - Modeling-Dispersion; Modeling-Atmospheric Deposition; Residual Risk; NATA; Urban Air Toxics Strat.
  - Motor Vehicle/Source
  - Permitting
  - QAPP & SOP Development
  - Qualifying Health and Environmental Effects
  - Quality Assurance (monitoring)
  - RULES
  - Source Sampling
  - Toxicology
  - VOCDAT Software Training

**MACT Standards:**

- Chrome Plating (3 responses)
- Petroleum Refining (4 responses)
- Wood Furniture/Products (2 responses)
- Single responses were provided for the following:
  - Aerospace
  - All the other ones
  - Auto Body Refinishing CFR 59 Part 13
  - Cable Coding Source Specific, Electronics
  - Oil and Gas
  - Polymers & Resins/Haz. Waste Combustion/Pulp & Paper
  - Reinforced Plastics
  - Steel Industry
  - Trans. & Proc. of natural gas, Subpart HHH



## Respondent Comments

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### **Question D. Do you have any additional comments or suggestions related to your agency's training needs?**

The additional comments provided by 35 respondents are listed below. In general, one theme in the comments was that limited training dollars and regional offerings of courses impacted the ability to participate in training.

#### **Comments:**

1. In reference to current courses, only APTI courses are listed just because due to lack of funds we have not been able to travel out of state to attend courses provided by others. We have been able to attend APTI courses simply because we have a local provider.
2. The whole way we certify people under Method 9 needs updating. The VEE certification process is unnecessarily complex. We recommend the rule and the training be re-evaluated.
3. Coordination between State and Federal training agencies is very important to eliminate overlap and duplication and to deliver a good product for a modest amount of money. I have seen a real death of quality enforcement training that was supplied by APTI. But no money has been given the State CARB training division to augment the missing training. Example - meteorology, baseline source inspection and source testing.
4. Permitting-specific to Pennsylvania Regulations. Gap Filling Monitoring. Fugitive Emissions Monitoring.
5. The Bureau of Air Quality Control hopes to fill a number of vacant positions in the coming year and, like everyone else, has to deal with staff turnover. The topics selected will enable us to train new personnel if the classes are held in Texas. Out-of-state travel is more difficult due to the expense. We would not be able to send staff members to all of the topics identified, but only to those courses where there is a need based on the experience of the new personnel. If the vacant positions are not filled, the number of persons going to training will be less because either they already have taken the class or have the experience.
6. Thanks for this opportunity.
7. Would like to see courses for specifics of monitoring and data analysis for criteria pollutants and specialization monitoring.
8. We rely exclusively upon CARB and WESTAR for our training needs. We assume that all courses have been regularly updated. Re Question C, we prefer methods that minimize our travel.
9. Anything related to MACTs needs to be updated.
10. We would like to see training offered for auditing the paperwork/reports that are generated by Title 5 permit.
11. Very basic training in Tscreen and any other screening models. Basic permitting workshop for small sources. MACT implementation training. More likely to take courses that are available regionally.

12. It is extremely difficult to send staff to training classes out of town. We must resort to training at satellite locations or self-instructional videotapes. Please view all responses with this in mind.
13. Training related to NATA (Modeling, Urban Air Toxics Strategy, Residual Risk, Atmospheric Deposition Modeling). The Air Toxics Workshops (STAPP/USEPA) are very good. We encourage their continuation.
14. Better training needs to be available for all NESHAPS.
15. Training material on CD would aid in getting the information out to staff, however the issue of CEUs would need to be addressed. Our agency relies upon training of staff in enforcement cases for credibility purposes. Telecourses have been an economical way to train staff, especially new and mid-level. However, the number of telecourses available has dropped each year over the last 5 years. Training through the Internet should be expanded as it requires less staff travel time. Why haven't we gotten behind this idea?
16. Any additional training regarding refineries.
17. AERMOD Training. Models - 3 Training (CMAQ). Meteorological Modeling (MM5).
18. We have a need for something on 112®, Risk Management Plan review & inspection procedures.
19. All our employees have PCs. Therefore, utilize computer technology (including the Web) to maximize our training efforts. Perhaps we could deliver training in two steps: require participants to complete CD or WB based projects, then follow up with a Telecourse or workshop to discuss findings and review problems and outcomes. Other topics for developing of training include: 1. Non-Attainment Modeling & Inventories, 2. Visibility Protection & Analysis of Data, 3. GIS Tools for Air Quality Sources & Analysis of Data
20. Distributed Power/Energy Supply Issues and Environmental Protection has become a large national issue, yet it appears that a national approach is lacking. Dealing quickly and consistently with this issue is important to insure adequate energy (though it is not AQ's fault that responsible parties were not prepared to head off this shortage or the one in the last 1960's) and to keep AQ from being the bad guy in the public's image.
21. Training on NSR Reform and Program Authorization Issues.
22. I received several requests asking for more basic APTI courses offered in Region IV states (e.g., 400,413,415,427,452,482). There are several 1 or 1/2 day CARB courses in this survey that we checked. Our sending people to these courses is very dependent on location. It is not very likely that we would send someone to California for a one-day course.
23. No one from our office has attended any of the current courses in the last two years. Our training funds have been cut back so that we are generally limited to training provided by WESTAR.
24. Mobile Source/Transportation training need development and expanding--OBD, transient testing, MOBILE 6 modeling, Non-Road, VART, Speeds, MOBTOX, PARTS. Offer: 1. Odor Training (Effective Odor Control Strategies). 2. Noise Compliance 3. Field Monitoring with portable instruments 4. Source Reduction/TURA Implementation techniques in permit approvals/MACT 5. Innovative technology and air pollution control 6. More hands-on training on mobile source/transportation e.g. OBD, transient testing, VACT, speeds, TDM, Mobile 6 + Inputs, PART V (Particulates), MOBTOX & NONROAD Model. 7. More hands-on training on EPA's NEI input formats I.e. how to access, upload and debug database.

25. The most useful training for Maryland's Permitting Staff are local workshops where most permit writers are able to attend (not just one or two people). The next most useful training for permit writers are the regional workshops in specialized areas, such as air dispersion modeling, where the need to develop expertise is required for only a few permit writers. Another important issue is that training needs to be held periodically, due to staff turnover.
26. More advanced modeling courses - AirMod, ISC Prime, CALPUFF
27. We recently contacted LADCO for some financial assistance in planning of a 3-day course on surface coatings. LADCO is not interested in serving its states in the same capacity as the other regional consortia do. Even though LADCO was given money for APTI-type training as was the other regional consortia, they already have ideas for those dollars - those ideas are for the purposes in which LADCO was created and that is not to be a regional consortia. Any suggestions for other sources of funding?
28. This survey was distributed to 4 program sections and our regional office staff.
29. Needed training: Confined space, OSHA, detailed ozone control measure, risk assessment, interpretation of EPA's national-scale Air Toxics Assessment (NATA) project.
30. We are more apt to attend training courses sponsored by WESTAR or by telecourse.
31. Satellite downlinks should be utilized for frequent updates with occasional APTI courses. Those courses should be designed innovatively to hold interest. A growing need in the BAQ is for training opportunities in outreach/education, via app. media.
32. Training course for EPA Mobile 6 Model.
33. Note from page 1: This survey compiles responses for our 4 program managers: Compliance/Inspection, Monitoring, Operating Permits, and NSR/PSD Permits. D. With new AQS system for AIRs, need hands-on training course instead of e-mail or internet notes.
34. In general, the telecourses should be updated. Many users report the speakers are boring and information is outdated. Air Toxics Today telecourses have been very good. The need for more training in Region 5 has been relayed to LADCO. We would like to see more training in 2002/2003. The University of Illinois Area Training Center has provided some training, but it has not been enough to address all of the training needs in the region.
35. All responses for current courses assume course is offered in California or via Telecourse. Other comments include a need for training in mediation techniques for inspectors (e.g., between source and complainants).

## **Appendix A. FY 2002/2003 Training Needs Assessment State and Territorial Air Pollution**

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*State and Territorial Air Pollution Program Administrators (STAPPA)*

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*Association of Local Air Pollution Control Officials (ALAPCO)*

**FY 2002/2003 Training Needs Assessment Survey**

AGENCY NAME: <sup>(02)</sup> \_\_\_\_\_

AGENCY ADDRESS: <sup>(03-07)</sup> \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

EPA REGION: <sup>(08)</sup> \_\_\_\_\_

AGENCY TYPE: <sup>(09)</sup>  STATE  LOCAL/MUNICIPAL  FEDERAL  TRIBAL

PERSON COMPLETING THIS SURVEY:

NAME: <sup>(10)</sup> \_\_\_\_\_

TITLE: <sup>(11)</sup> \_\_\_\_\_

MAILING ADDRESS (IF DIFFERENT): <sup>(12-16)</sup> \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

TELEPHONE: <sup>(17)</sup> \_\_\_\_\_

FAX: <sup>(18)</sup> \_\_\_\_\_

E-MAIL: <sup>(19)</sup> \_\_\_\_\_

<sup>(20)</sup>  IF YOU DO NOT HAVE ACCESS TO E-MAIL AT WORK, CHECK HERE

WHAT ARE YOUR RESPONSIBILITIES FOR TRAINING AT YOUR AGENCY? <sup>(21)</sup>

<sup>(A)</sup>  TRAINING COORDINATOR/MANAGER

<sup>(C)</sup>  AGENCY DIRECTOR

<sup>(B)</sup>  SITE COORDINATOR FOR SATELLITE  
BROADCASTS

<sup>(D)</sup>  OTHER

TITLE OF PERSON WHO REVIEWED RESPONSES: <sup>(22)</sup> \_\_\_\_\_

DOES THIS PERSON HAVE BUDGETING AUTHORITY? <sup>(23)</sup>  YES  NO

IF YOUR AGENCY HAS A TRAINING COORDINATOR, PLEASE PROVIDE HIS/HER NAME AND PHONE NUMBER:

NAME: <sup>(24)</sup> \_\_\_\_\_ TELEPHONE: <sup>(25)</sup> \_\_\_\_\_

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Please complete this training needs assessment survey and return to Dave Wallenberg of STAPPA/ALAPCO via e-mail (davew@sso.org) or fax (202/624-7863) by December 8, 2000.

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**FY2002-2003 STAPPA/ALAPCO TRAINING NEEDS ASSESSMENT SURVEY**

**Note:** The following training providers are referred to throughout this survey:

APTI	EPA/Air Pollution Training Institute
CARB	California Air Resources Board
NETI	EPA/National Enforcement Training Institute
OMS	EPA/Office of Mobile Sources
Rutgers/EOHSI	Rutgers University/Environmental and Occupational Health Sciences Institute
Regional Consortia	NESCAUM, MARAMA, METRO-4, LADCO, CENSARA, WESTAR

A. From the list of topics below for which government-sponsored courses **are currently available**, please check the courses that your agency will be most likely to send staff to for training in FY 2002-FY 2003 (October 2001-September 2003). For more information about the following courses, please visit the various training providers' web sites listed at the end of this survey.

Topic	Course/Provider	Likely to Send Staff to in FY02-FY03 <b>X</b>
<b>AIR TOXICS (including MACT)</b>		
(1) Air Toxics – Basic (including MACT)	(a) Dry Cleaning/287 (1 day) (CARB)	
	(b) Introduction to Air Toxics/400 (2 days) (APTI)	
	(c) Solvent Cleaning/233 (CARB) (1 day)	
(2) Air Toxics – Advanced (including MACT)	(a) Area Source MACT (3 days) (Rutgers/EOHSI)	
	(b) Dry Cleaners/California Certification Only (1 day) (CARB)	
<b>BASIC HEALTH AND SAFETY</b>		
(3) Basic Health and Safety	(a) Advanced Safety/202 (1 day) (CARB)	
	(b) Basic Health and Safety for Field Activities-Level I (3 days) (Rutgers/EOHSI)	
	(c) Inspection Procedures and Safety/446 (3 days) (APTI)	
	(d) Inspector Safety/104 (.5 day) (CARB)	
<b>COMPLIANCE INSPECTION</b>		
(4) Inspection Fundamentals	(a) 100 Series/101-115 (5 days) (CARB)	
	(b) Basic Inspector Course/CST 109 (4 days) (NETI)	
	(c) Fundamentals of Enforcement/100 (3 days) (CARB)	
	(d) Fundamentals of Environmental Compliance Inspections-Level 1 (2 days) (Rutgers/EOHSI)	
(5) Advanced Inspection	(a) Advanced Inspection Techniques (3 days) (Rutgers/EOHSI)	
(6) Baseline Source Inspection Techniques	(a) Basic Air Pollution Control Equipment/107 (.5 days) (CARB)	
	(b) Baseline Source Inspection/445 (3.5 days) (APTI)	
	(c) Baseline Source Inspection Techniques-Level II (3 days) (Rutgers/EOHSI)	
	(d) Emission Capture and Gas Handling System Inspection/345 (3 days) (APTI)	
(7) Combustion Evaluation	(a) Combustion Evaluation/427 (4.5 days) (APTI)	
	(b) Combustion Source Inspection-Level II (3 days) (Rutgers/EOHSI)	
	(c) Industrial Boilers/273 (1 day) (CARB)	

**FY2002-2003 STAPPA/ALAPCO TRAINING NEEDS ASSESSMENT SURVEY**

Topic	Course/Provider	Likely to Send Staff to in FY02-FY03 X
	(d) Stationary Reciprocating Engines/271 (1 day) (CARB)	
(8) Compliance Assurance Monitoring (CAM)	(a) Compliance Assurance Monitoring (2 days) (Rutgers/EOHSI)	
	(b) Monitoring Compliance Test and Source Test Observation/468 (2.5 days) (APTI)	
(9) National Emission Standards for Hazardous Air Pollutants (NESHAP)	(a) Asbestos NESHAP Inspection and Safety Procedures/350 (3 days) (APTI)	
	(b) Asbestos D/R/251 (1 day) (CARB)	
(10) VOC Sampling and Analysis	(a) Aerospace Industry/230.1 (1 day) (CARB)	
	(b) Auto Refinishing/230.2 (1 day) (CARB)	
	(c) Emission Monitoring and Testing: VOC Sampling and Analysis-Level II (Rutgers/EOHSI)	
	(d) General VOC Source Regulation and Inspection-Level III (Rutgers/EOHSI)	
	(e) Graphic Arts/230.4 (1 day) (CARB)	
	(f) Fugitive Source Inspection/380 (3 days) (APTI)	
	(g) Inspection Techniques for Fugitive VOC Emission Sources - Level III (2 days) (Rutgers/EOHSI)	
	(h) Metal Container, Closure and Coil Coating/230.3 (1 day) (CARB)	
	(i) Metal Parts and Products/230 (1 day) (CARB)	
	(j) VOC Emission Source Inspection (3 days) (APTI)	
	(k) VOC Fugitive Emissions- Level III (2 days) (Rutgers/EOHSI)	
	(l) VOC Inspections/262 (1 day) (CARB)	
(11) Gasoline Distribution and Marketing	(a) Air to Liquid Ratio Testing/264 (1 day) (CARB)	
	(b) Gasoline Cargo Tanks/210 (1 day) (CARB)	
	(c) Gasoline Facilities Phase I and II/263 (1 day) (CARB)	
	(d) Oil Field Production/260 (1 day) (CARB)	
	(e) Petroleum Refining/288 (1 day) (CARB)	
(12) Gasoline Facilities	(a) Gasoline Facilities (Vapor Recovery) (3 days) (CARB)	
<b>CONTROL TECHNOLOGIES</b>		
(13) Control of Gaseous Emissions	(a) Control of Gaseous Emissions/415 (4 days) (APTI)	
	(b) Incinerators/270 (1 day) (CARB)	
	(c) Industrial Boilers/273 (1 day) (CARB)	
	(d) Landfill Gas Control/285 (1 day) (CARB)	
	(e) Nitrogen Oxides Emission Control Technology-Level IV (2 days) (Rutgers/EOHSI)	
	(f) Soil Decontamination/283 (1 day) (CARB)	
	(g) Stationary Gas Turbines/272 (1 day) (CARB)	
	(h) VOC Control Devices/284 (1 day) (CARB)	
(14) Control of Particulate Emissions	(a) Aggregate Plants/243 (1 day) (CARB)	
	(b) Baghouses/282 (1 day) (CARB)	

**FY2002-2003 STAPPA/ALAPCO TRAINING NEEDS ASSESSMENT SURVEY**

Topic	Course/Provider	Likely to Send Staff to in FY02-FY03 X
	(c) Cement Plants/245 (1 day) (CARB)	
	(d) Concrete Batch Plants/244 (1 day) (CARB)	
	(e) Control of Particulate Emissions/413 (4 days) (APTI)	
	(f) ESPs/281 (1 day) (CARB)	
	(g) Hot Mix Asphalt Facilities/242 (1 day) (CARB)	
(15) NO <sub>x</sub> Control Technology	(a) Control of Nitrogen Oxides Emissions/418 (3 days) (APTI)	
	(b) NO <sub>x</sub> Control Technology (2 days) (Rutgers/EOHSI)	
(16) VOC RACT	(a) Volatile Organic Compound (VOC) Reasonably Available Control Technology (RACT) (Rutgers/EOHSI)	
	(b) Sources and Control of Volatile Organics/482 (4 days) (APTI)	
	(c) VOC Control Devices/Scrubbers/284 (1 day) (CARB)	
<b>DATA ANALYSIS, QUALITY ASSURANCE AND REPORTING</b>		
(17) Analytical Methods	(a) Analytical Methods for Air Quality Standards/464 (5 days) (APTI)	
(18) Data Management and Reporting	(a) ACTS/NARS Training/AIR 223 (2 days) (NETI)	
	(b) AIRS Input and Reporting/AIR 303 (3 days) (NETI)	
	(c) DOCKET/Data Entry and Retrieval/IMS 104 (NETI)	
	(d) IDEA Advanced Training/CST 220 (.5 day) (NETI)	
	(e) IDEA Basic Training/CST 120 (1 day) (NETI)	
	(f) IDEA WIN for the New User/CST 121 (NETI)	
(19) Quality Assurance	(a) Quality Assurance for Air Pollution Measurement Systems/470 (4 days) (APTI)	
<b>EMISSIONS INVENTORY</b>		
(20) Emissions Inventory	(a) Preparation of Emission Inventories/419 (4 days) (APTI)	
<b>ENFORCEMENT</b>		
(21) Enforcement Fundamentals	(a) Air Pollution Field Enforcement/444 (3.5 days) (APTI)	
	(b) Basic Environmental Enforcement (3 days) (NETI)	
	(c) Fundamentals of Enforcement/100 (3 days) (CARB)	
(22) Advanced Enforcement	(a) Symposium/300 (4 days) (CARB)	
(23) Criminal Enforcement	(a) Basic Criminal Environmental Investigations/CRM 105 (5 days) (NETI)	
	(b) Basic Environmental Enforcement Training/CRM 106 (4 days) (NETI)	
	(c) Basic Environmental Investigations Training/CRM 108 (3 days) (NETI)	
	(d) Basic Environmental Investigations Training/CRM 113 (4 days) (NETI)	
(24) Enforcement Case Development	(a) Basic ABEL/CST 101 (1 day) (NETI)	
	(b) Administrative Hearings and Trials/CST 207 (2 days) (NETI)	
	(c) Advanced Administrative Practice Institute/CST 302 (2 days) (NETI)	
	(d) Advanced Negotiation Skills/CST 204 (2 days) (NETI)	
	(e) Basic BEN/CST 103 (1 day) (NETI)	
	(f) Basic INDIPAY/CST 306 (1 day) (NETI)	

**FY2002-2003 STAPPA/ALAPCO TRAINING NEEDS ASSESSMENT SURVEY**

Topic	Course/Provider	Likely to Send Staff to in FY02-FY03 X
	(g) Enforcement Teamwork: Regulations to Resolutions/CST 201 (5 days)(NETI)	
	(h) Intermediate Ability to Pay/CST 201 (NETI)	
	(i) Interviewing Techniques for Regulators/CST 111 (1 day) (NETI)	
	(j) Basic MUNIPAY/CST 305 (1 day) (NETI)	
	(k) Mutual Settlement Workshop/350 (1 day) (CARB)	
	(l) NSR/PSD Case Development (3 days) (CARB)	
	(m) Pleading and Litigating Civil Penalties/CST 303 (4.5 days) (NETI)	
(25) Multi-Media Enforcement	(a) Advanced Inspection Techniques/455 (APTI)	
	(b) Multi-Media Inspections/MLS 102 (NETI)	
	(c) Multi-Media Training for Regulators/MLS 103 (3 days) (NETI)	
	(d) Multi-Media Enforcement Symposium/300 (4 days) (CARB)	
(26) Pollution Prevention	(a) Pollution Prevention for Enforcement and Compliance Officers/CPA 103 (2 days) (NETI)	
<b>FUNDAMENTALS OF AIR POLLUTION CONTROL</b>		
(27) Fundamentals of Air Pollution Control	(a) 100 Series/101-115 (5 days) (CARB)	
	(b) Principles and Practice of Air Pollution Control/452 (3.5 days) (APTI)	
	(c) Principles and Practice of Air Pollution Control-Level I (4 days) (Rutgers/EOHSI)	
<b>MODELING</b>		
(28) Air Pollution Dispersion Models	(a) Air Pollution Dispersion Models/423 (3 days) (APTI)	
<b>MONITORING AND SOURCE SAMPLING</b>		
(29) Monitoring and Source Sampling	(a) Advanced Continuous Emission Monitoring/222 (1 day) (CARB)	
	(b) Air Quality Monitoring Concepts/114 (.5 day) (CARB)	
	(c) Atmospheric Sampling/435 (4.5 days-lab) (APTI)	
	(d) Compliance Assurance Monitoring-Level IV (2 days) (Rutgers/EOHSI)	
	(e) Continuous Emission Monitoring/474 (4 days) (APTI)	
	(f) Emission Monitoring & Testing: Continuous Emission Monitoring-Level II (1 day) (Rutgers/EOHSI)	
	(g) Monitoring and Evaluation of Toxic Air Pollutants/401 (4 days) (APTI)	
	(h) Observing Source Tests/224 (1 day) (CARB)	
	(i) Principles of Ambient Air Monitoring/222 (1 day) (CARB)	
	(j) Source Sampling for Pollutants/450 (5 days-lab) (APTI)	
	(k) Optical Remote Sensing - UVDOAS/AIR 201(3 days)(NETI)	
<b>MOBILE SOURCES</b>		
(30) Motor Vehicles Fuel Quality Inspection	(a) Motor Vehicles Fuel Quality Inspection (OTAQ)	
(31) Vehicle Emissions	(a) Vehicle Emissions Technician's Course (OTAQ)	
<b>PERMITTING</b>		
(32) Permitting—Basic	(a) Effective Permit Drafting/454 (4 days) (APTI)	

**FY2002-2003 STAPPA/ALAPCO TRAINING NEEDS ASSESSMENT SURVEY**

Topic	Course/Provider	Likely to Send Staff to in FY02-FY03 X
	(b) Introduction to Permits/460 (5 days) (APTI)	
(33) Permitting—Intermediate	(a) Intermediate Permitting/461 (5 days) (APTI)	
<b>VISIBLE EMISSIONS</b>		
(34) Visible Emission Enforcement	(a) VEE Instructors Workshop (3.5 days) (APTI)	
	(b) Fundamentals of Enforcement 100 (3 days) (CARB)	
	(c) Night Certification in VEE/100.2 (.5 day) (CARB)	
	(d) Re-certification in VEE/100.1 (1 day) (CARB)	
	(e) Visible Emission Enforcement Training and Certification (3 days) (Rutgers)	

B. Of the current courses taken by staff in your agency in the last two years, what are the top five courses that need updating? (Please refer to the above list for Course Titles).

- Examples:
1. 31a - Effective Permit Drafting
  2. 34b - Fundamentals of Enforcement

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**FY2002-2003 STAPPA/ALAPCO TRAINING NEEDS ASSESSMENT SURVEY**

C. Which of the following topics would your agency be most likely to send staff to for training in FY2002-2003 if a course was available? Please check the topics and specify the preferred delivery mechanism.

Topic	Likely to Send Staff to in FY02-03 X	Preferred Delivery Mechanism C = Classroom      TC = Tele-Course CD = CD-ROM      WB = Web-Based NP = No Preference      WK = Workshop SI = Self-Instructional
(1) Air Toxics—Emissions Inventory		
(2) Air Toxics—Modeling		
(3) Air Toxics—Monitoring		
(4) Air Toxics—Data Analysis		
(5) Air Toxics—Data Management		
(6) Air Toxics—Other (Specify) _____		
(7) Emissions Inventory—General		
(8) Emission Inventory Development for PM <sub>2.5</sub> with Emphasis on Area Sources		
(9) Greenhouse Gas Reduction Strategies		
(10) MACT Standards—Industrial/Commercial/Institutional Boilers		
(11) MACT Standards—Miscellaneous Metal Parts		
(12) MACT Standards—Miscellaneous Organic NESHAP (MON)		
(13) MACT Standards—Plywood and Particle Board Manufacturing		
(14) MACT Standards—Municipal Solid Waste Landfills		
(15) MACT Standards—Boat Manufacturing		
(16) MACT Standards (Specify) _____		
(17) Market-Based Incentives and Emission Trading Program		
(18) Mobile Sources—Conformity		
(19) Mobile Sources—Inspection and Maintenance (I&M) Techniques		
(20) Mobile Sources—Quality Assurance for I&M		
(21) Mobile Sources—Transportation Control Strategies/TEA21 Act		
(22) New National Ambient Air Quality Standards (NAAQS) Including Ozone and PM <sub>2.5</sub>		
(23) New Source Review		
(24) New Source Performance Standards (NSPS) Development		
(25) Permitting—NSR/PSD Principles for Permit Writers		

**FY2002-2003 STAPPA/ALAPCO TRAINING NEEDS ASSESSMENT SURVEY**

Topic	Likely to Send Staff to in FY02-03 X	Preferred Delivery Mechanism C = Classroom      TC = Tele-Course CD = CD-ROM      WB = Web-Based NP = No Preference      WK = Workshop SI = Self-Instructional
(26) Permitting—Harmonized Energy/Climate Change Strategies for Permit Writers		
(27) PM <sub>2.5</sub> Monitoring, QA/QC, and Laboratory Operations		
(28) PM <sub>2.5</sub> SIP Development Requirements, Timelines, and Procedures		
(29) Regional Haze – Emissions Inventory		
(30) Regional Haze – Data Analysis (Basic)		
(31) Regional Haze – Data Analysis (Advanced)		
(32) Regional Haze – Modeling		
(33) Regional Haze – Speciation Monitoring		
(34) Regional Transport Fundamentals and Emission Management Strategies		
(35) Supplemental Environmental Projects		
(36) Other (Specify) _____ _____		

D. Do you have any additional comments or suggestions related to your agency's training needs?

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Updated information on available courses/workshops is posted on the web sites listed below:

EPA/Air Pollution Training Institute (APTI)	<a href="http://www.epa.gov/oar/oaqps/eog/apticat.html">http://www.epa.gov/oar/oaqps/eog/apticat.html</a>
California Air Resources Board (CARB)	<a href="http://www.arb.ca.gov/cd/training.htm">http://www.arb.ca.gov/cd/training.htm</a>
EPA/National Enforcement Training Institute (NETI)	<a href="http://es.epa.gov/oeca/neti/netisch.html">http://es.epa.gov/oeca/neti/netisch.html</a>
EPA/Office of Mobile Resources	<a href="http://www.epa.gov/oms/">http://www.epa.gov/oms/</a>
Rutgers University/Environment Occupational Safety and Health Institute (EOHSI)	<a href="http://www.eohsi.rutgers/cet/airpoll.edu">http://www.eohsi.rutgers/cet/airpoll.edu</a>
Northeast States for Coordinated Air Use Management	<a href="http://www.nescaum.org">http://www.nescaum.org</a>
Mid-Atlantic Regional Air Management Association	<a href="http://www.marama.org">http://www.marama.org</a>
METRO-4/ Southeastern States Air Resources Agencies)	<a href="http://www.metro4.org">http://www.metro4.org</a>
Lake Michigan Air Directors Consortium (LADCO)	<a href="http://www.ladco.org">http://www.ladco.org</a>
Central States Air Resources Agencies (CENSARA)	<a href="http://www.censara.org">http://www.censara.org</a>
Western States Air Resources Council (WESTAR)	<a href="http://www.westar.org">http://www.westar.org</a>

You may keep this page for easy reference.

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**Please complete this training needs assessment survey and return to Dave Wallenberg of STAPPA/ALAPCO via e-mail ([davew@ssso.org](mailto:davew@ssso.org)) or fax (202/624-7863) by December 8, 2000.**

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*Thank you.*

## Appendix B. Current Courses - by Agency Type, Regional Consortia & EPA Region

ID	Course	Provider	n=86 (state/local only)		Regional Consortia							EPA Region										
			Total	Local	State	Cen	Lad	Mar	Met	Nes	Wes	None	1	2	3	4	5	6	7	8	9	10
01b	Introduction to Air Toxics/400 (2 days)	APTI	59	17	42	9	6	8	12	6	15	3	4	2	7	13	10	5	4	3	4	7
13a	Control of Gaseous Emissions/415 (4 days)	APTI	52	15	37	5	4	8	13	6	13	3	5	1	7	14	8	3	2	3	4	5
33a	Intermediate Permitting/461 (5 days)	APTI	51	14	37	6	6	8	8	7	13	3	5	2	7	9	10	2	4	2	3	7
14e	Control of Particulate Emissions/413 (4 days)	APTI	50	13	37	7	5	7	9	7	12	3	6	1	6	10	9	4	3	2	4	5
28a	Air Pollution Dispersion Models/423 (3 days)	APTI	49	14	35	7	4	8	9	5	13	3	4	1	7	10	8	4	3	3	5	4
15a	Control of Nitrogen Oxides Emissions/418 (3 days)	APTI	49	11	38	7	5	6	10	6	12	3	4	2	5	11	9	5	2	2	4	5
06b	Baseline Source Inspection/445 (3.5 days)	APTI	49	16	33	5	4	6	14	3	13	4	2	1	5	15	9	3	1	3	4	6
27b	Principles and Practice of Air Pollution Control/452 (3.5 days)	APTI	47	12	35	6	5	8	8	5	11	4	3	2	7	9	9	4	3	2	3	5
29e	Continuous Emission Monitoring/474 (4 days)	APTI	46	14	32	5	5	7	10	5	10	4	3	2	6	11	9	3	2	2	5	3
07a	Combustion Evaluation/427 (4.5 days)	APTI	46	12	34	7	4	5	11	7	10	2	5	2	4	12	7	3	4	3	3	3
05a	Advanced Inspection Techniques (3 days)	EOHSI	46	12	34	6	3	9	9	6	10	3	4	2	8	10	7	2	3	3	5	2
21a	Air Pollution Field Enforcement/444 (3.5 days)	APTI	44	14	30	6	3	6	8	5	12	4	3	2	5	9	8	4	1	3	3	6
08b	Monitoring Compliance Test and Source Test Observation/468 (2.5 days)	APTI	44	17	27	6	5	6	8	4	12	3	2	2	5	9	8	2	4	3	5	4
20a	Preparation of Emission Inventories/419 (4 days)	APTI	43	11	32	5	5	5	12	3	12	1	2	1	4	13	6	3	3	3	3	5
29g	Monitoring and Evaluation of Toxic Air Pollutants/401 (4 days)	APTI	43	10	33	5	5	6	7	7	12	1	5	2	5	8	6	4	2	2	1	8
16b	Sources and Control of Volatile Organics/482 (4 days)	APTI	42	11	31	7	4	6	9	6	7	3	4	2	5	10	8	5	2		2	4
03c	Inspection Procedures and Safety/446 (3 days)	APTI	41	15	26	4	3	7	12	5	8	2	4	1	6	13	5	4	1	2	3	2

n=86 (state/local only)

ID Course	Provider	Total	Local	State	Regional Consortia										EPA Region						
					Cen	Lad	Mar	Met	Nes	Wes	None	1	2	3	4	5	6	7	8	9	10
32a Effective Permit Drafting/454 (4 days)	APTI	39	9	30	4	6	7	6	5	9	2	4	1	6	7	8	2	3	1	3	4
13h VOC Control Devices/284 (1 day)	CARB	39	6	33	6	2	6	6	8	11		6	2	5	7	3	4	2	1	4	5
08a Compliance Assurance Monitoring (2 days)	EOHSI	39	9	30	5	3	8	5	6	11	1	4	2	7	6	5	2	3	1	5	4
32b Introduction to Permits/460 (5 days)	APTI	38	7	31	4	6	6	7	5	9	1	4	1	5	8	7	2	3	2	3	3
13g Stationary Gas Turbines/272 (1 day)	CARB	37	8	29	6	2	4	5	6	14		4	2	3	6	3	3	3	1	8	4
02a Area Source MACT (3 days)	EOHSI	37	8	29	4	3	9	4	6	10	1	4	2	8	5	5	3	1	2	3	4
19a Quality Assurance for Air Pollution Measurement Systems/470 (4 days)	APTI	37	12	25	5	4	5	6	5	10	2	3	2	4	7	6	3	3	2	2	5
13d Landfill Gas Control/285 (1 day)	CARB	36	12	24	4	2	6	7	5	11	1	3	2	5	8	3	2	3		4	6
10j VOC Emission Source Inspection (3 days)	APTI	36	13	23	4	5	7	8	3	5	4	2	1	7	8	10	2	1	1		4
04c Fundamentals of Enforcement/100 (3 days)	CARB	36	10	26	4	1	4	5	4	17	1	3	1	3	6	2	3	1	2	8	7
29j Source Sampling for Pollutants/450 (5 days-lab)	APTI	36	12	24	4	5	4	10	4	7	2	3	1	3	11	7	2	2	1	3	3
07c Industrial Boilers/273 (1 day)	CARB	35	9	26	6	1	4	3	7	14		5	2	3	4	2	5	1	2	5	6
16c VOC Control Devices/Scrubbers/284 (1 day)	CARB	35	11	24	7	3	6	4	3	12		2	1	5	5	4	5	2		7	4
01a Dry Cleaning/287 (1 day)	CARB	35	13	22	4	2	7	4	6	11	1	5	1	6	5	3		4		5	6
14a Aggregate Plants/243 (1 day)	CARB	35	10	25	6	3	5	3	5	13		5		4	4	4	3	3		7	5
12a Gasoline Facilities (Vapor Recovery) (3 days)	CARB	35	11	24	5		5	6	7	12		5	2	4	7		3	3		7	4
18b AIRS Input and Reporting/AIR 303 (3 days)	NETI	34	11	23	3	3	6	4	2	15	1	2		5	5	4	2	1	3	5	7
14g Hot Mix Asphalt Facilities/242 (1 day)	CARB	34	9	25	5	2	4	5	5	13		4	1	3	6	3	3	2		6	6
04a 100 Series/101-115 (5 days)	CARB	34	14	20	6	1	4	9	3	11		2	1	4	9	1	4	2		7	4
15b NOX Control Technology (2 days)	EOHSI	33	2	31	7	3	6	4	6	7		4	2	5	5	4	4	3	2	2	2
13b Incinerators/270 (1 day)	CARB	33	5	28	6	2	4	5	6	10		4	2	3	6	2	4	3	1	5	3

n=86 (state/local only)

ID Course	Provider	Total	Local	State	Regional Consortia							EPA Region									
					Cen	Lad	Mar	Met	Nes	Wes	None	1	2	3	4	5	6	7	8	9	10
29h Observing Source Tests/224 (1 day)	CARB	32	12	20	3	3	4	8	3	11		3		3	9	4	1	1		6	5
29c Atmospheric Sampling/435 (4.5 days-lab)	APTI	32	5	27	3	4	6	6	2	9	2	2		5	7	6	2	1	2	2	5
26a Pollution Prevention for Enforcement and Compliance Officers/CPA 103 (2 days)	NETI	32	8	24	2	5	7	7	5	5	1	3	2	6	8	7		1	1	1	3
06c Baseline Source Inspection Techniques-Level II (3 days)	EOHSI	32	7	25	3	2	6	5	5	10	1	4	1	5	6	4	1	1	2	5	3
13c Industrial Boilers/273 (1 day)	CARB	31	6	25	5		4	3	7	12		5	2	3	4		4	2		7	4
06d Emission Capture and Gas Handling System Inspection/345 (3 days)	APTI	31	8	23	2	4	7	4	6	7	1	5	1	6	5	6	2		1	2	3
14b Baghouses/282 (1 day)	CARB	31	7	24	5	3	3	5	5	10		4	1	2	6	4	4	1		6	3
27a 100 Series/101-115 (5 days)	CARB	31	8	23	2	1	6	6	4	12		2	2	5	7	1	2			7	5
17a Analytical Methods for Air Quality Standards/464 (5 days)	APTI	30	6	24	2	4	5	6	3	9	1	3		4	7	5	1	1	3	1	5
24d Advanced Negotiation Skills/CST 204 (2 days)	NETI	30	8	22	4	2	5	5	5	8	1	3	2	4	6	4	3	1		3	4
10f Fugitive Source Inspection/380 (3 days)	APTI	29	8	21	3	3	6	6	4	5	2	2	2	5	7	6	2		2	1	2
09a Asbestos NESHAP Inspection and Safety Procedures/350 (3 days)	APTI	29	11	18	2	2	3	8	2	8	4	2		3	8	6	1	1	1	5	2
04d Fundamentals of Environmental Compliance Inspections-Level 1 (2 days)	EOHSI	29	4	25	3	3	5	5	4	9		3	1	4	6	3	2	1	2	3	4
25a Advanced Inspection Techniques/455	APTI	28	9	19	3	3	5	8	4	4	1	3	1	4	9	5	2			2	2
13e Nitrogen Oxides Emission Control Technology-Level IV (2 days)	EOHSI	28	2	26	5	2	5	5	6	5		4	2	4	6	3	3	2	1	2	1
06a Basic Air Pollution Control Equipment/107 (.5 days)	CARB	28	7	21	3		3	6	5	11		3	2	2	7	1	1	1	2	4	5
29a Advanced Continuous Emission Monitoring/ 222 (1 day)	CARB	27	8	19	3	1	4	4	3	11	1	2	1	3	5	2	3	1	2	5	3

n=86 (state/local only)

ID Course	Provider	Total	Regional Consortia										EPA Region								
			Local	State	Cen	Lad	Mar	Met	Nes	Wes	None	1	2	3	4	5	6	7	8	9	10
21b Basic Environmental Enforcement (3 days)	NETI	27	4	23	3	2	6	4	6	5	1	4	2	5	5	3	2	1		2	3
10c Emission Monitoring and Testing: VOC Sampling and Analysis-Level II	EOHSI	26	3	23	4	1	8	5	6	2		4	2	7	6	1	2	2			2
07b Combustion Source Inspection-Level II (3 days)	EOHSI	26	4	22	3		5	5	6	7		4	2	4	6	1	3		1	3	2
07d Stationary Reciprocating Engines/271 (1 day)	CARB	26	8	18	3		2	2	6	13		5	1	2	2	1	3		2	4	6
16a Volatile Organic Compound (VOC) Reasonably Available Control Technology	EOHSI	26	6	20	6	2	6	3	4	5		2	2	5	4	2	3	3	1	2	2
29b Air Quality Monitoring Concepts/114 (.5 day)	CARB	26	4	22	4	3	4	4	3	8		2	1	3	5	3	3	1	1	4	3
29i Principles of Ambient Air Monitoring/222 (1 day)	CARB	26	4	22	5	2	3	6	4	6		3	1	2	7	2	4	1	1	2	3
14d Concrete Batch Plants/244 (1 day)	CARB	26	8	18	3	2	2	4	3	12		3		1	5	2	3	1		6	5
27c Principles and Practice of Air Pollution Control-Level I (4 days)	EOHSI	25	2	23	2	2	7	4	6	4		4	2	6	5	2	1	1		3	1
22a Symposium/300 (4 days)	CARB	24	8	16	3	2	3	2	2	11	1	2		2	3	4	1	1	2	6	3
21c Fundamentals of Enforcement/100 (3 days)	CARB	24	7	17	3	1	3	4	1	11	1		1	2	5	2	1	2		5	6
04b Basic Inspector Course/CST 109 (4 days)	NETI	24	4	20	3	3	5	2	3	7	1	1	2	4	3	5	1	1		2	5
01c Solvent Cleaning/233 (1 day)	CARB	23	5	18	3	2	2	2	5	9		3	2	2	2	2	2	1		5	4
29d Compliance Assurance Monitoring-Level IV (2 days)	EOHSI	22	1	21	2		5	4	6	5		4	2	4	5		2	1		1	3
24i NSR/PSD Case Development (3 days)	CARB	22	2	20	3	1	7	1	5	5		3	2	6	2	2	1	1		2	3
11c Gasoline Facilities Phase I and II/263 (1 day)	CARB	22	7	15	2		1	2	4	13		2	2	1	2		1	1	1	6	6
29f Emission Monitoring & Testing: Continuous Emission Monitoring-Level II (1 day)	EOHSI	21	3	18	3	1	6	5	3	3		2	1	5	6	1	2	1		2	1
14f ESPs/281 (1 day)	CARB	21	4	17	3	2	2	3	4	7		4		1	4	2	2	2		2	4

n=86 (state/local only)

ID Course	Provider	Total	Regional Consortia								EPA Region										
			Local	State	Cen	Lad	Mar	Met	Nes	Wes	None	1	2	3	4	5	6	7	8	9	10
10d General VOC Source Regulation and Inspection-Level III	EOHSI	20	3	17		2	4	4	6	4		4	2	4	4	2	1		1	2	
03a Advanced Safety/202 (1 day)	CARB	20	9	11	2	1	2	2	4	9		3	1	1	3	1	1	1		6	3
14c Cement Plants/245 (1 day)	CARB	19	5	14	3	2	2	5		7				1	6	3	2	1		3	3
10b Auto Refinishing/230.2 (1 day)	CARB	19	7	12	2	1	2	2	3	9		1	2	2	2	1	2	1		5	3
03b Basic Health and Safety for Field Activities-Level I (3 days)	EOHSI	19	1	18	1	2	5	3	6	2		4	2	4	4	2	1			1	1
24i Interviewing Techniques for Regulators/CST111 (1 day)	NETI	19	3	16	2		7	3	3	4		1	2	6	4	1		1		1	3
10g Inspection Techniques for Fugitive VOC Emission Sources - Level III (2 days)	EOHSI	18	2	16	2	1	5	1	6	3		4	2	4	2	1	2	1		1	1
13f Soil Decontamination/283 (1 day)	CARB	18	3	15	2		2	3	4	7		3	1	2	3		2	1	1	3	2
10l VOC Inspections/262 (1 day)	CARB	18	4	14	4	1	3	2	3	5		2	1	3	2	2	2	1		2	3
10e Graphic Arts/230.4 (1 day)	CARB	17	6	11	2	1	4	3	3	4		1	2	3	4	1	2			3	1
11a Air to Liquid Ratio Testing/264 (1 day)	CARB	17	9	8	1		2	2	4	7	1	3	1	2	2	1		1		5	2
11e Petroleum Refining/288 (1 day)	CARB	17	3	14	4	1	1	1		10				1	1	2	4		3	3	3
31a Vehicle Emissions Technician's Course	OTAQ	17	2	15	1	3	3	3	5	2		3	2	3	3	3		1		1	1
23a Basic Criminal Environmental Investigations/CRM 105 (5 days)	NETI	17	1	16	3		3	4	3	4		3		2	5	1	2		1		3
24g Enforcement Teamwork: Regulations to Resolutions/CST 201 (5 days)	NETI	16	2	14	1	1	4	3	3	4		2	1	3	4	1	1			1	3
10k VOC Fugitive Emissions- Level III (2 days)	EOHSI	15	2	13	3		4	3	3	2		2	1	4	3	1	2	1			1
10i Metal Parts and Products/230 (1 day)	CARB	15	3	12	2	3	2	4	2	2		1	1	2	4	3	2			2	
34b Fundamentals of Enforcement 100 (3 days)	CARB	15	6	9	2	2	1	1		9				2	2	2				7	2
11b Gasoline Cargo Tanks/210 (1 day)	CARB	15	5	10	4		1	3	2	5		2		1	3		3	1		2	3

ID	Course	Provider	Total	Regional Consortia										EPA Region						
				Local	State	Cen	Lad	Mar	Met	Nes	Wes	None	1	2	3	4	5	6	7	8
29k	Optical Remote Sensing - UVDOAS/AIR 201 (3 days)	NETI	14	2	12	2	2	3	1	1	4	1	1	2	2	3	1	1	2	2
03d	Inspector Safety/104 (.5 day)	CARB	14	5	9	3	1	2	1	2	5	1	1	2	1	1	1	2	3	2
24e	Basic BEN/CST 103 (1 day)	NETI	13	1	12	1	1	4	1	1	5	1	3	2	1	1	2	3	2	
34a	VEE Instructors Workshop (3.5 days)	APTI	13	3	10	1	2	4	1	3	2	1	4	4	1	1	1	2	2	
25c	Multi-Media Training for Regulators/MLS 103 (3 days)	NETI	13	2	11	2	1	1	3	3	3	3	1	3	2	2	1	1	1	
25b	Multi-Media Inspections/MLS 102	NETI	13	1	12	2	2	2	3	3	1	3	2	3	4	1				
18a	ACTS/NARS Training/AIR 223 (2 days)	NETI	12	4	8	1	2	4	4	1	2	4	2					2	2	
23b	Basic Environmental Enforcement Training/CRM 106 (4 days)	NETI	12	1	11	5	2	2	3	1	1	4	3					1	2	
23c	Basic Environmental Investigations Training/CRM 108 (3 days)	NETI	12	2	10	6	2	4	1	1	5	1						3	1	
24b	Administrative Hearings and Trials/CST 207 (2 days)	NETI	12	1	11	1	4	2	2	3	2	3	3	1				2	1	
25d	Multi-Media Enforcement Symposium/300 (4 days)	CARB	12	1	11	2	2	2	2	4	2	1	3	1	1	1	1	1	2	
34e	Visible Emission Enforcement Training and Certification (3 days)	EOHSI	12	2	10	1	1	3	1	4	2	3	1	2	2	1	1	1	1	
30a	Motor Vehicles Fuel Quality Inspection	OTAQ	12	12	1	4	2	4	1	2	2	4	2				1	1		
23d	Basic Environmental Investigations Training/CRM 113 (4 days)	NETI	11	2	9	5	1	5	1	5	1	4	1	1				2	2	
09b	Asbestos D/R/251 (1 day)	CARB	11	2	9	1	1	3	1	5	1	1	3	1				1	4	
34d	Re-certification in VEE/100.1 (1 day)	CARB	11	7	4	1	1	1	8	1	1	1	1					7	1	
24k	Mutual Settlement Workshop/350 (1 day)	CARB	10	4	6	1	1	1	1	6	1	2	1	1				1	3	
10h	Metal Container, Closure and Coil Coating/230.3 (1 day)	CARB	10	3	7	2	1	2	2	2	1	1	1	2	2	1	1	1	1	

n=86 (state/local only)

ID Course	Provider	Total	Local	State	Regional Consortia					EPA Region											
					Cen	Lad	Mar	Met	Nes	Wes	None	1	2	3	4	5	6	7	8	9	10
24a Basic ABEL/CST 101 (1 day)	NETI	9		9		1	3	1	1	3		1		2	2	1			1	1	1
11d Oil Field Production/260 (1 day)	CARB	9	2	7	2				1		6				1		3		2	2	1
10a Aerospace Industry/230.1 (1 day)	CARB	8	2	6	2		2	1		3				2	1		3				2
34c Night Certification in VEE/100.2 (.5 day)	CARB	8	3	5	1	1	1			5					1	1	2				4
18e IDEA Basic Training/CST 120 (1 day)	NETI	8	1	7			2	1	2	3		2		2	1		1				2
24 Pleading and Litigating Civil Penalties/ CST/303 (4.5 days)	NETI	7	1	6		1	2	1	1	2		1		1	2	1	1				1
24c Advanced Administrative Practice Institute/ CST/302 (2 days)	NETI	7	1	6			3	1	2	1		2		2	2						1
18d IDEA Advanced Training/CST 220 (.5 day)	NETI	6	1	5		1	2	1		2				2	1	1					2
24f Basic INDIPAY/CST 306 (1 day)	NETI	5		5			3	1		1				3	1						1
18f IDEA WIN for the New User/CST 121	NETI	5	1	4			2	1		2				2	1						2
18c DOCKET/Data Entry and Retrieval/IMS 104	NETI	5		5		1	2		2			1	1	2		1					
02b Dry Cleaners/California Certification Only (1 day)	CARB	4	2	2			1	1		2				1	1						2
24j Basic MUNIPAY/CST 305 (1 day)	NETI	4		4			3			1				3							1
24h Intermediate Ability to Pay/CST 201	NETI	4		4			3			1				3							1

## Appendix C. Current Courses – Federal Responses

Course ID	Course	Provider	Region			
			Total	1	5	10
04b	Basic Inspector Course/CST 109 (4 days)	NETI	3	1	1	1
21a	Air Pollution Field Enforcement/444 (3.5 days)	APTI	2		1	1
07a	Combustion Evaluation/427 (4.5 days)	APTI	2		1	1
13a	Control of Gaseous Emissions/415 (4 days)	APTI	2		1	1
14e	Control of Particulate Emissions/413 (4 days)	APTI	2		1	1
01b	Introduction to Air Toxics/400 (2 days)	APTI	2		1	1
19a	Quality Assurance for Air Pollution Measurement Systems/470 (4 days)	APTI	2	1		1
21b	Basic Environmental Enforcement (3 days)	NETI	2	1		1
24b	Administrative Hearings and Trials/CST 207 (2 days)	NETI	2		1	1
27b	Principles and Practice of Air Pollution Control/452 (3.5 days)	APTI	2		1	1
29e	Continuous Emission Monitoring/474 (4 days)	APTI	2		1	1
32a	Effective Permit Drafting/454 (4 days)	APTI	2		1	1
32b	Introduction to Permits/460 (5 days)	APTI	2		1	1
29j	Source Sampling for Pollutants/450 (5 days-lab)	APTI	2	1		1
33a	Intermediate Permitting/461 (5 days)	APTI	2		1	1
06a	Basic Air Pollution Control Equipment/107 (.5 days)	CARB	1			1
10f	Fugitive Source Inspection/380 (3 days)	APTI	1		1	
20a	Preparation of Emission Inventories/419 (4 days)	APTI	1			1
06b	Baseline Source Inspection/445 (3.5 days)	APTI	1		1	
17a	Analytical Methods for Air Quality Standards/464 (5 days)	APTI	1		1	
04d	Fundamentals of Environmental Compliance Inspections-Level 1 (2dys)	EOHHSI	1			1
04c	Fundamentals of Enforcement/100 (3 days)	CARB	1			1
34b	Fundamentals of Enforcement 100 (3 days)	CARB	1			1
04a	100 Series/101-115 (5 days)	CARB	1			1
03c	Inspection Procedures and Safety/446 (3 days)	APTI	1		1	
03b	Basic Health and Safety for Field Activities-Level I (3 days)	EOHHSI	1			1
02a	Area Source MACT (3 days)	EOHHSI	1			1
06d	Emission Capture and Gas Handling System Inspection/345 (3 days)	APTI	1		1	
23b	Basic Environmental Enforcement Training/CRM 106 (4 days)	NETI	1		1	
28a	Air Pollution Dispersion Models/423 (3 days)	APTI	1		1	
29f	Emission Monitoring & Testing: Continuous Emission Monitoring-Level II (1 day)	EOHHSI	1			1
25d	Multi-Media Enforcement Symposium/300 (4 days)	CARB	1			1
25a	Advanced Inspection Techniques/455	APTI	1		1	
24m	Pleading and Litigating Civil Penalties/CST 303 (4.5 days)	NETI	1		1	
15a	Control of Nitrogen Oxides Emissions/418 (3 days)	APTI	1			1
29h	Observing Source Tests/224 (1 day)	CARB	1			1
16b	Sources and Control of Volatile Organics/482 (4 days)	APTI	1		1	
21c	Fundamentals of Enforcement/100 (3 days)	CARB	1			1
29i	Principles of Ambient Air Monitoring/222 (1 day)	CARB	1			1
34e	Visible Emission Enforcement Training and Certification (3 days)	EOHHSI	1			1
29k	Optical Remote Sensing - UVDOAS/AIR 201(3 days)	NETI	1	1		
18b	AIRS Input and Reporting/AIR 303 (3 days)	NETI	1			1
18a	ACTS/NARS Training/AIR 223 (2 days)	NETI	1			1
24l	NSR/PSD Case Development (3 days)	CARB	1			1

## Appendix D. Current Courses That Need Updating

n=87 (1 Federal for 24I)

ID	Course	Provider	# Selecting
16b	Sources and Control of Volatile Organics/482 (4 days)	APTI	5
28a	Air Pollution Dispersion Models/423 (3 days)	APTI	5
06b	Baseline Source Inspection/445 (3.5 days)	APTI	4
07a	Combustion Evaluation/427 (4.5 days)	APTI	3
21a	Air Pollution Field Enforcement/444 (3.5 days)	APTI	3
24I	NSR/PSD Case Development (3 days)	CARB	3
32a	Effective Permit Drafting/454 (4 days)	APTI	3
03c	Inspection Procedures and Safety/446 (3 days)	APTI	2
05a	Advanced Inspection Techniques (3 days)	EOHSI	2
09a	Asbestos NESHAP Inspection and Safety Procedures/350 (3 days)	APTI	2
10f	Fugitive Source Inspection/380 (3 days)	APTI	2
13a	Control of Gaseous Emissions/415 (4 days)	APTI	2
13c	Industrial Boilers/273 (1 day)	CARB	2
13g	Stationary Gas Turbines/272 (1 day)	CARB	2
14c	Cement Plants/245 (1 day)	CARB	2
14f	ESPs/281 (1 day)	CARB	2
14g	Hot Mix Asphalt Facilities/242 (1 day)	CARB	2
21c	Fundamentals of Enforcement/100 (3 days)	CARB	2
29c	Atmospheric Sampling/435 (4.5 days-lab)	APTI	2
29e	Continuous Emission Monitoring/474 (4 days)	APTI	2
29j	Source Sampling for Pollutants/450 (5 days-lab)	APTI	2
32b	Introduction to Permits/460 (5 days)	APTI	2
33a	Intermediate Permitting/461 (5 days)	APTI	2
01a	Dry Cleaning/287 (1 day)	CARB	1
03b	Basic Health and Safety for Field Activities-Level I (3 days)	EOHSI	1
04a	100 Series/101-115 (5 days)	CARB	1
06d	Emission Capture and Gas Handling System Inspection/345 (3 days)	APTI	1
09b	Asbestos D/R/251 (1 day)	CARB	1
10e	Graphic Arts/230.4 (1 day)	CARB	1
10j	VOC Emission Source Inspection (3 days)	APTI	1
13b	Incinerators/270 (1 day)	CARB	1
13d	Landfill Gas Control/285 (1 day)	CARB	1
13e	Nitrogen Oxides Emission Control Technology-Level IV (2 days)	EOHSI	1
13f	Soil Decontamination/283 (1 day)	CARB	1
13h	VOC Control Devices/284 (1 day)	CARB	1
14a	Aggregate Plants/243 (1 day)	CARB	1
14b	Baghouses/282 (1 day)	CARB	1
14d	Concrete Batch Plants/244 (1 day)	CARB	1
14e	Control of Particulate Emissions/413 (4 days)	APTI	1
15b	NOX Control Technology (2 days)	EOHSI	1
16a	Volatile Organic Compound (VOC) Reasonably Available Control Technology (RACT)	EOHSI	1
18c	DOCKET/Data Entry and Retrieval/IMS 104	NETI	1
20a	Preparation of Emission Inventories/419 (4 days)	APTI	1
27a	100 Series/101-115 (5 days)	CARB	1
27b	Principles and Practice of Air Pollution Control/452 (3.5 days)	APTI	1
27c	Principles and Practice of Air Pollution Control-Level I (4 days)	EOHSI	1
29a	Advanced Continuous Emission Monitoring/222 (1 day)	CARB	1
29h	Observing Source Tests/224 (1 day)	CARB	1
34b	Fundamentals of Enforcement 100 (3 days)	CARB	1
34d	Re-certification in VEE/100.1 (1 day)	CARB	1

## Appendix E. New Topics - by Agency Type, Regional Consortia & EPA Region

ID	Topic	Total	Local	State	Regional Consortia							EPA Region									
					Cen	Lad	Mar	Met	Nes	Wes	None	1	2	3	4	5	6	7	8	9	10
25	Permitting—NSR/PSD Principles for Permit Writers	55	17	38	7	6	8	14	8	10	2	6	2	7	15	9	3	3	2	3	5
02	Air Toxics—Modeling	52	16	36	5	6	7	9	6	17	2	5	1	6	10	9	3	2	3	5	8
23	New Source Review	48	13	35	6	3	7	11	8	11	2	6	2	6	12	6	3	2	2	3	6
22	New National Ambient Air Quality Standards (NAAQS) Including Ozone and PM2.5	48	14	34	7	3	7	13	4	12	2	2	2	6	14	6	4	3	3	5	3
01	Air Toxics—Emissions Inventory	47	17	30	5	4	5	11	6	16		5	1	4	12	4	4	2	3	3	9
08	Emission Inventory Development for PM2.5 with Emphasis on Area Sources	43	15	28	4	5	5	11	2	14	2	2		4	12	7	3	2	1	4	8
10	MACT Standards—Industrial/Commercial/Institutional Boilers	43	13	30	7	5	6	8	4	12	1	2	2	5	9	7	5	2	2	4	5
14	MACT Standards—Municipal Solid Waste Landfills	41	14	27	7	4	5	9	5	11		3	2	4	10	5	5	2	1	3	6
03	Air Toxics—Monitoring	39	10	29	4	5	4	7	5	13	1	4	1	3	8	6	3	2	4	1	7
29	Regional Haze – Emissions Inventory	38	7	31	3	3	8	9	2	13		2		7	10	3	2	2	3	4	5
28	PM2.5 SIP Development Requirements, Timelines, and Procedures	37	10	27	5	4	7	5	4	11	1	3	1	6	6	5	3	3		5	5
18	Mobile Sources—Conformity	37	10	27	3	3	6	10	6	9		4	2	5	11	3	3			4	5
12	MACT Standards—Miscellaneous Organic NESHAP (MON)	36	8	28	7	4	6	7	5	7		4	1	5	8	5	5	2		2	4
32	Regional Haze – Modeling	36	6	30	4	2	7	6	4	13		3	1	6	7	2	3	2	3	3	6
30	Regional Haze – Data Analysis (Basic)	35	4	31	3	2	7	8	3	12		3		6	9	2	1	2	3	3	6
27	PM2.5 Monitoring, QA/QC, and Laboratory Operations	35	12	23	7	5	4	5	3	9	2	3		3	6	7	3	4	2	2	5
07	Emissions Inventory—General	35	11	24	3	4	5	10	3	10		2	1	4	11	4	2	2		3	6

ID	Topic	Total	Local State	Regional Consortia								EPA Region									
				Cen	Lad	Mar	Met	Nes	Wes	None	1	2	3	4	5	6	7	8	9	10	
11	MACT Standards—Miscellaneous Metal Parts	34	9	25	6	4	4	8	5	6	1	3	2	4	8	6	4	2	1	2	2
04	Air Toxics—Data Analysis	33	10	23	3	3	5	5	5	11	1	4	1	5	5	5	2	1	2	1	7
21	Mobile Sources—Transportation Control Strategies/TEA21 Act	32	8	24	1	1	6	11	5	8		4	1	5	12	1	1			4	4
34	Regional Transport Fundamentals and Emission Management Strategies	31	5	26	4	3	6	5	4	9		3	1	5	6	3	3	2		3	5
33	Regional Haze – Speciation Monitoring	30	3	27	4	2	7	6	3	8		3		6	7	2	2	2	3	1	4
13	MACT Standards—Plywood and Particle Board Manufacturing	29	4	25	5	2	4	5	5	8		4	1	3	6	3	3	1	1	1	6
15	MACT Standards—Boat Manufacturing	28	5	23	6	2	4	8	3	5		2	1	3	9	3	3	2		1	4
31	Regional Haze – Data Analysis (Advanced)	28	3	25	3	3	6	7	1	8		1		5	8	3	1	2	3	2	3
35	Supplemental Environmental Projects	25	8	17	3	2	6	6	2	5	1	1	1	6	6	3	2	1		3	2
20	Mobile Sources—Quality Assurance for I&M	25	4	21	3	4	3	8	5	2		3	2	3	8	4	2	1		1	1
05	Air Toxics—Data Management	24	7	17	1	2	4	8	1	7	1	1		4	8	3	2			1	5
19	Mobile Sources—Inspection and Maintenance (I&M) Techniques	24	2	22	4	3	3	6	4	3	1	2	2	2	7	4	2	2		2	1
16	MACT Standards (Specify)	23	6	17	3	4	1	3	2	10		2		1	3	5	4		2	2	4
17	Market-Based Incentives and Emission Trading Program	23	2	21	4	3	4	2	4	6		3	1	4	2	3	4	1	1	2	2
24	New Source Performance Standards (NSPS) Development	20	1	19	2	2	4	3	3	6		1	2	3	4	3	1		1	2	3
36	Other (Specify)	18	1	17			3	2	2	11		1	1	3	2					2	9
06	Air Toxics—Other (Specify)	16	1	15	3	2	2	2	2	5		1	1	1	3	2	2	2		1	3
09	Greenhouse Gas Reduction Strategies	13	5	8	2	1	3	1	4	2		3	1	3	1	1	2			1	1
26	Permitting—Harmonized Energy/Climate Change Strategies for Permit Writers	12	2	10	3	1	2		1	5			1	2		2	2	1			4

## Appendix F. New Topics - Specified Other

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ID	Topic	State	Local State
36	Other (Specify)		
	Blank	CT	1
	Diesel Emission and Their Control (CCDET)	CA	1
	Distributed Power/Energy Supply Issues & Env. Protection	OR	1
	Emission Inventory Development for Ammonia	MD	1
	GIS Training	OR	1
	Indoor Air Quality (spores, molds, biohazards)	NV	1
	Lead Emissions & Evaluation of Existing Standard (per NATA)	OR	1
	Mercury & PBT Issues	OR	1
	Mobile 6	PA	1
	Mobile 6	OR	1
	Mobile Source Onboard Diagnostics	MT	1
	OSHA Training, Confined Space Training	MS	1
	Outdoor Air Quality & Asthma Connections	OR	1
	PM2.5 Source Sampling	NJ	1
	SIP planner training (generic, not just for PM2.5)	OR	1
	State Toxics Program Development	OR	1
	Title V Permitting	MD	1
	Trading, Specifically related to Nox and the SIP Call	AL	1

## Appendix G. New Topics – Federal Responses

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TopicID	Topic	EPA Region		
		Count	1	5 10
01	Air Toxics—Emissions Inventory	1		1
02	Air Toxics—Modeling	1		1
03	Air Toxics—Monitoring	1		1
04	Air Toxics—Data Analysis	1		1
05	Air Toxics—Data Management	1		1
07	Emissions Inventory—General	1		1
08	Emission Inventory Development for PM2.5 with Emphasis on Area Sources	1		1
10	MACT Standards—Industrial/Commercial/Institutional Boilers	1		1
11	MACT Standards—Miscellaneous Metal Parts	1		1
18	Mobile Sources—Conformity	1		1
19	Mobile Sources—Inspection and Maintenance (I&M) Techniques	1		1
20	Mobile Sources—Quality Assurance for I&M	1		1
21	Mobile Sources—Transportation Control Strategies/TEA21 Act	1		1
22	New National Ambient Air Quality Standards (NAAQS) Including Ozone and PM2.5	1		1
23	New Source Review	1		1
27	PM2.5 Monitoring, QA/QC, and Laboratory Operations	1		1
28	PM2.5 SIP Development Requirements, Timelines, and Procedures	1		1
29	Regional Haze – Emissions Inventory	1		1
30	Regional Haze – Data Analysis (Basic)	1		1
31	Regional Haze – Data Analysis (Advanced)	1		1
32	Regional Haze – Modeling	1		1
33	Regional Haze – Speciation Monitoring	1		1
34	Regional Transport Fundamentals and Emission Management Strategies	1		1
35	Supplemental Environmental Projects	1		1

## Appendix H. List of Respondents by State

State	Type	Consortia	EPA Region	Agency Name	Agency City
<b>AK</b>	State	WESTAR	10	Alaska Department of Environmental Conservation	Juneau
<b>AL</b>	Local	Metro-4/SESARM	4	Huntsville Division of Natural Resources	Huntsville
		Metro-4/SESARM	4	Jefferson County Department of Health	Birmingham
	State	Metro-4/SESARM	4	Alabama Department of Environmental Management	Montgomery
<b>AZ</b>	Local	WESTAR	9	Pima County DEQ	Tucson
	State	WESTAR	9	Arizona Department of Environmental Quality	Phoenix
<b>CA</b>	Local	WESTAR	9	MODOC Air Pollution Control Dist	Alturas
		WESTAR	9	San Luis Obispo County Air Pollution Control District	San Luis Obispo
		WESTAR	9	SC AGMD	Diamond Bar
		WESTAR	9	Ventura County Air Pollution Control District	Ventura
		WESTAR	9	Yolo-Solano AQMD	Davis
	State	WESTAR	9	California Air Resources Board	Sacramento
<b>CO</b>	State	WESTAR	8	CDPHE	Denver
<b>CT</b>	State	NESCAUM	1	Connecticut D.E.P.- Bureau of Air Management	Hartford
<b>DC</b>	State	MARAMA	3	District of Columbia Department of Health-Air Quality Division	Washington
<b>DE</b>	State	MARAMA	3	Dept. of Natural Resources and Environmental Control - Air Quality Management Section	Dover
<b>FL</b>	Local	Metro-4/SESARM	4	Air & Water Quality Division	Jacksonville
		Metro-4/SESARM	4	Environmental Protection Commission, Hillsborough County	Tampa
		Metro-4/SESARM	4	Miami-Dade County, Florida, D.E.R.M.	Miami
		Metro-4/SESARM	4	Pinellas County Dept. of Environmental Management	Clearwater
	State	Metro-4/SESARM	4	FDEP Division of Air Resources Management	Tallahassee
<b>GA</b>	State	Metro-4/SESARM	4	Georgia DNR (Air Protection Bureau)	Atlanta
<b>IA</b>	Local	CENSARA	7	Polk County Air Quality	Des Moines
	State	CENSARA	7	Iowa Department of Natural Resources	Urbandale
<b>ID</b>	State	WESTAR	10	Idaho Department of Environmental Quality	Boise
<b>IL</b>	Federal	LADCO	5	Air & Radiation Division	Chicago
	Local	LADCO	5	Cook County Department of Environmental Control	Chicago
	State	LADCO	5	Illinois Environmental Protection Agency	Springfield
<b>IN</b>	State	LADCO	5	Indiana Department of Environmental Management	Indianapolis

State	Type	Consortia	EPA Region	Agency Name	Agency City
<b>KS</b>	Local	CENSARA	7	Johnson County Environmental Department	Lenexa
		CENSARA	7	Kansas City, Missouri Air Quality	Kansas City
		CENSARA	7	Unified Government of Wyandotte County, Kansas City, Kansas	Kansas City
<b>KY</b>	Local	Metro-4/SESARM	4	Air Pollution Control District of Jefferson City	Louisville
	State	Metro-4/SESARM	4	Kentucky Division for Air Quality	Frankfort
<b>LA</b>	State	CENSARA	6	Louisiana Department of Environmental Quality	Baton Rouge
<b>MA</b>	Federal	NESCAUM	1	USEPA-NE, Office of Environmental Monitoring and Evaluation	Lexington
	State	NESCAUM	1	Massachusetts Department of Environmental Protection	Boston
<b>MD</b>	State	MARAMA	3	Maryland Dept. of Environment--Air & Radiation Management Administration	Baltimore
<b>ME</b>	State	NESCAUM	1	Maine DEP, Bureau of Air Quality	Augusta
<b>MI</b>	Local	LADCO	5	Wayne County Dept. of Env. Air Quality Mgmt. Division	Detroit
	State	LADCO	5	Michigan Department of Environmental Quality	Lansing
<b>MN</b>	State	CENSARA	5	Minnesota Pollution Control Agency	St. Paul
<b>MO</b>	Local	CENSARA	7	Springfield Air Quality Control	Springfield
	State	CENSARA	7	Missouri Department of Natural Resources	Jefferson City
<b>MS</b>	State	Metro-4/SESARM	4	Mississippi Department of Environmental Quality	Jackson
<b>MT</b>	State	WESTAR	10	Montana Department of Environmental Quality	Helena
<b>NC</b>	Local	Metro-4/SESARM	4	Mecklenburg County DEP	Charlotte
	State	MARAMA	4	NC DENR/DAQ	Raleigh
<b>ND</b>	State	WESTAR	8	ND Department of Health, Air Quality Division	Bismarck
<b>NH</b>	State	NESCAUM	1	New Hampshire Department of Environmental Services	Concord
<b>NJ</b>	State	NESCAUM	2	Department of Environmental Protection	Trenton
<b>NM</b>	State	WESTAR	6	New Mexico Environment Department, Air Quality Bureau	Santa Fe
<b>NV</b>	Local	WESTAR	9	Washoe County District Health Dept. Air Quality Management	Reno
	State	WESTAR	9	Nevada Division of Environmental Protection, Bureau of Air Quality	Carson City

State	Type	Consortia	EPA Region	Agency Name	Agency City
<b>NY</b>	State	NESCAUM	2	N.Y.S. D.E.C.	Albany
<b>OH</b>	Local	No Affiliation	5	Hamilton County Department of Environmental Services	Cincinnati
		No Affiliation	5	RAPCA	Dayton
		No Affiliation	5	Toledo Division of Environmental Services	Toledo
	State	No Affiliation	5	Ohio E.P.A.	Columbus
<b>OK</b>	State	CENSARA	6	Oklahoma Department of Environmental Quality	Oklahoma City
<b>OR</b>	Local	WESTAR	10	Lane Regional Air Pollution Authority	Springfield
	State	WESTAR	10	Oregon Department of Environmental Quality - Air Quality Division	Portland
<b>PA</b>	Local	MARAMA	3	Air Management Services	Philadelphia
		MARAMA	3	Allegheny County Health Department	Pittsburgh
	State	MARAMA	3	Dept. of Environmental Protection, Bureau of Air Quality	Harrisburg
<b>RI</b>	State	NESCAUM	1	Rhode Island Dept. of Environmental Mgmt.	Providence
<b>SC</b>	State	Metro-4/SESARM	4	S.C. Department of Health & Environmental Control	Columbia
<b>TN</b>	Local	Metro-4/SESARM	4	Chattanooga-Hamilton County Air Pollution Control Bureau	Chattanooga
		Metro-4/SESARM	4	Memphis and Shelby County Health Department	Memphis
		Metro-4/SESARM	4	Metro Health Department, Pollution Control Division	Nashville
	State	Metro-4/SESARM	4	Tennessee Division of Air Pollution Control	Nashville
<b>TX</b>	Local	CENSARA	6	Air Pollution Control, City of Fort Worth	Fort Worth
		CENSARA	6	Bureau of Air Quality Control	Houston
		CENSARA	6	El Paso City-County Health and Environment District	El Paso
	State	CENSARA	6	Texas Natural Resource Conservation Commission	Austin
<b>UT</b>	State	WESTAR	8	Utah Division of Air Quality	Salt Lake City
<b>VA</b>	State	MARAMA	3	Virginia Department of Environmental Quality	Richmond
<b>VT</b>	State	NESCAUM	1	Agency of Natural Resources/Dept. of Environmental Conservation	Waterbury
<b>WA</b>	Federal	WESTAR	10	USEPA Region 10	Seattle
	Local	WESTAR	10	Northwest Air Pollution Authority	Mt. Vernon
		WESTAR	10	Olympic Air Pollution Control Authority	Lacey
		WESTAR	10	Puget Sound Clean Air Agency	Seattle
		WESTAR	10	Southwest Clean Air Agency	Vancouver
		WESTAR	10	Spokane County Air Pollution Control Authority	Spokane
	State	WESTAR	10	State of Washington, Department of Ecology	Olympia

State	Type	Consortia	EPA Region	Agency Name	Agency City
<b>WI</b>	Local	LADCO	5	Madison Public Health	Madison
	State	LADCO	5	Wisconsin Department of Natural Resources	Madison
<b>WV</b>	State	MARAMA	3	West Virginia Office of Air Quality	Charleston
<b>WY</b>	State	WESTAR	8	Wyoming Department of Environmental Quality/Air Quality Division	Cheyenne