

# THE RUTGERS AIR COMPLIANCE CENTER

Rutgers University  
New Brunswick, NJ

# Overview of the Rutgers Air Compliance Center

- In operation since October, 1991
  - Currently in its thirteenth year of continuous funding
- Approximately 8,500 students trained
  - 395 courses presented
  - approximately 19,420 student days
- The Center has been exclusively an off-site, nationwide center since 1999

# The Faces behind the Center

- Co-Principal Investigators
  - Michael Gallo
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- Graduate Assistants
  - Kelly Francisco
  - Matthew Giacalone

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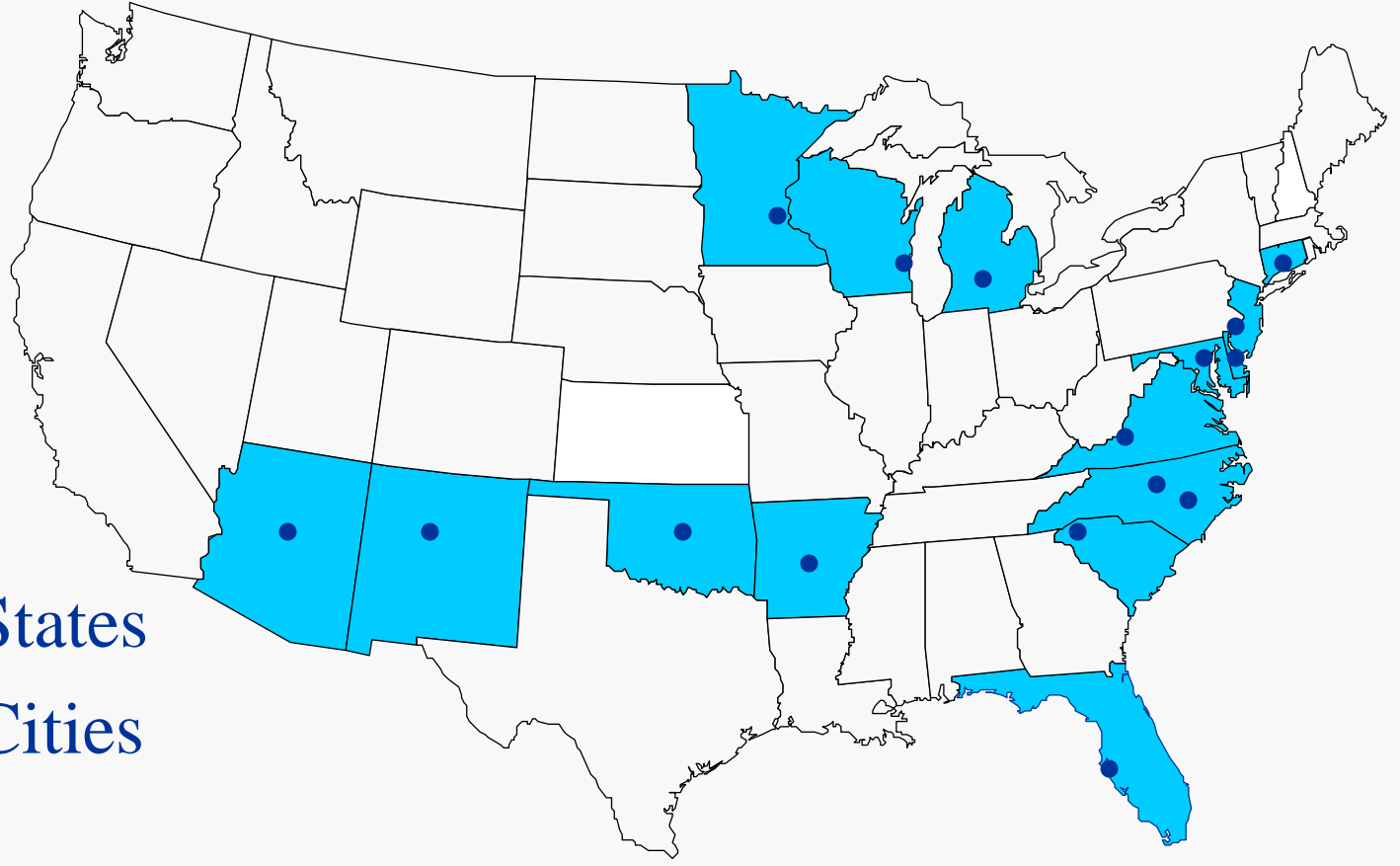
# Rutgers Air Compliance Center

## Fiscal Year 2003 Accomplishments

# The Center's Accomplishments in Fiscal Year 2003

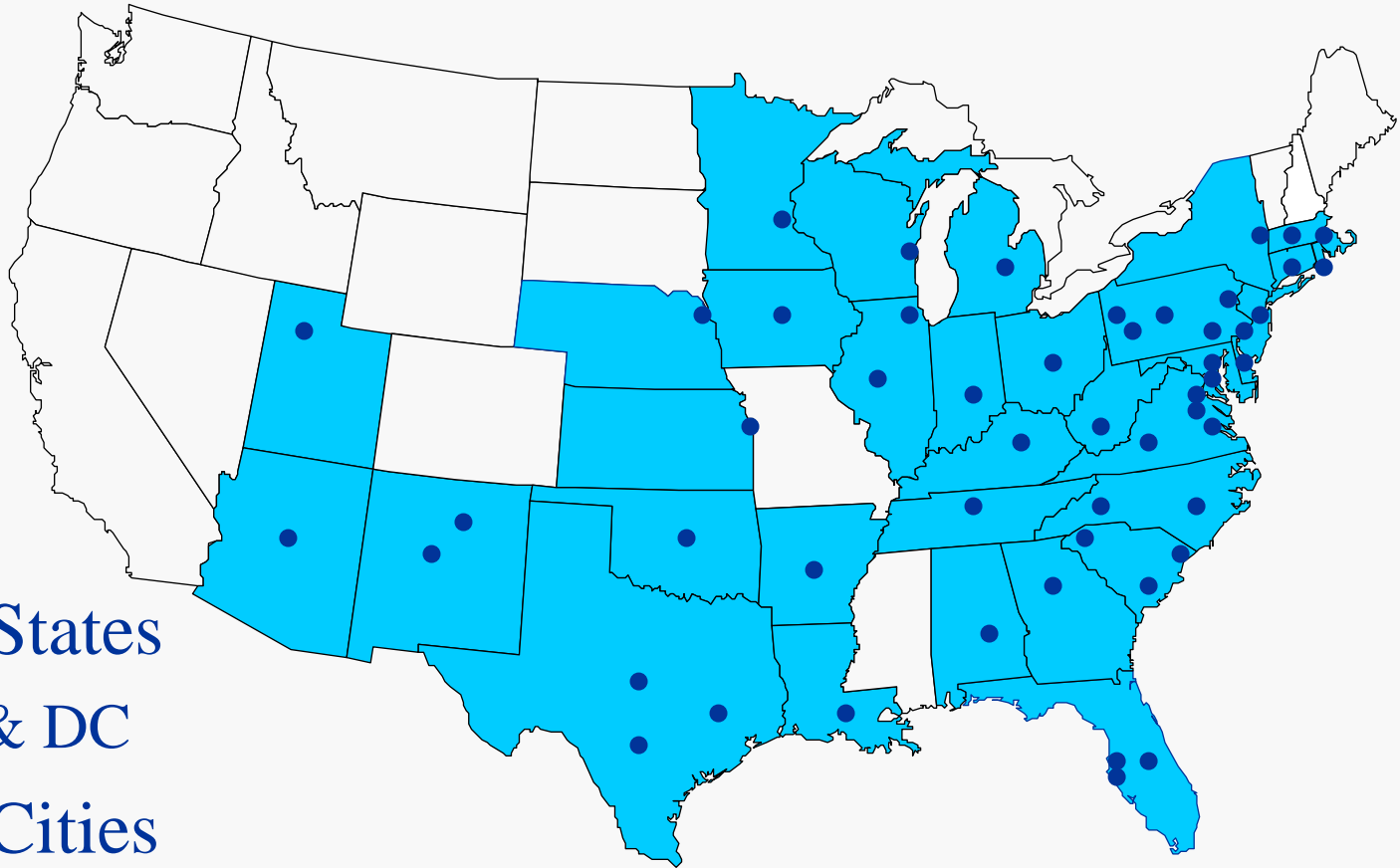
- The Center presented seventeen (17) courses to the regional consortia
  - 43 days of training
    - of which 3 were unsubsidized
  - 542 students were trained
    - Which represents 1,322 student days
      - With an average of 32 students per course
- The average course rating was 3.30
  - On a scale of 1.00 – 4.00

# Fiscal Year 2003 Training Locations



- 15 States
- 15 Cities

# Off-Site Training Locations (1999-2004)



- 33 States  
– & DC
- 51 Cities



# Rutgers Air Compliance Center

## New Course Development

# New Course Development

- Fiscal Year 2003
  - Surface Coating Sampling, Transport & VOC Content Calculations
    - Course development funded by MARAMA
- Fiscal Year 2004
  - The Clean Air Act Today
    - Course development funded by the United States General Accounting Office (GAO)

# New Course Development (Cont'd)

- Fiscal Year 2004
  - Basic Health & Safety/8-hour OSHA Refresher
    - Course developed to meet the needs of LADCO personnel
      - Available to be presented nationwide

# Surface Coating Sampling, Transport and VOC Content Calculations course

- Course was developed by Dr. Larry Bernson
  - Our instructor for:
    - Area Source MACT
    - CEMS
    - VOC Sampling and Analysis courses
  - The course was offered on July 14-16, 2003
    - In Annapolis, Maryland
    - And was taught by Larry Bernson and Gary Saunders of the NCDENR

# Surface Coating Sampling, Transport and VOC Content Calculations course

- The focus of the course was two-fold
  - The “how to” of sampling liquid samples
    - The regulations governing the sampling activity
    - Practical techniques of sampling
    - Preserving the integrity of the sample
    - Chain of custody and shipping issues
  - How to determine compliance once the sampling data has returned from the lab

# The Clean Air Act Today

- The course was developed and taught by Mr. Chuck Solt
  - One of the instructors in our NO<sub>x</sub> Emissions Control course
    - Assistance and guidance was provided by Laura Yannayon of GAO
- This course was designed as a Clean Air Act primer for GAO personnel
  - Personnel from the EPA Office of the Inspector General's Office also attended

# The Clean Air Act Today (Cont'd)

- The course addressed the specific Titles of the Act
  - The programs that developed out of the Titles
  - And future regulatory trends
    - Discussion of potential issues to be dealt with in the future

# Basic Health & Safety/8-Hour OSHA Refresher Training

- Course will be taught by Mitchel Rosen
  - NIEHS Center Manager of the Worker Education and Training Program in Region II
- This course now addresses both the topics traditionally covered in a compliance inspector safety course
  - And those referenced in 29CFR1910.120 (OSHA regulations)



# Basic Health & Safety/8-Hour OSHA Refresher Training (Cont'd)

- This course will first be taught in Indianapolis on March 8-9<sup>th</sup>
  - Then again in Springfield and Chicago, IL on May 3-4<sup>th</sup>

# Proposed Fiscal Year 2005 Course Development Projects

# Proposed Fiscal Year 2005 Course Development Projects

- Redesigning the Area Source MACT course for Computer-based delivery
  - A collaborative effort with the USEPA-EOG
  - A 2-phase project
    - Outlining and Revising the course content
    - Developing blended media follow-up products
      - Satellite broadcasts with same-time audio
      - Live satellite Q & A sessions

# The Proposed Fiscal Year 2005 Course Development Projects (Cont'd)

- The proposed budget for the Computer-based, Area Source MACT course would be \$30,000
  - Allocated to the content expert, Dr. Larry Bernson
    - For development and revision of course content
    - Development of course update presentations
    - Satellite presentation time
    - Travel costs

# Proposed Fiscal Year 2005 Course Development Projects

- Development of an “Emissions Calculations and Data Reduction” course
  - Would be designed to accompany courses that focus on reference method and CEMS data
    - Topics would include
      - Converting from raw data to regulatory units (lb/hr, lb/mmbtu, etc.)
      - What data are critical and what are less significant
      - Water vapor – when it matters and how to deal with wet and dry sample data
      - Dilution corrections for combustion source data
      - Exact results versus very good approximate results

# The Proposed Fiscal Year 2005 Course Development Projects (Cont'd)

- The proposed budget for the Emissions Calculations and Data Reduction course would be approximately \$20,000
  - Allocated to Dr. Brian Doyle and Mr. Bob Machaver
    - For development of student manual and problem sets
    - Presentation fees
    - Materials reproduction
    - Travel costs

# Proposed Fiscal Year 2005 Course Development Projects (Cont'd)

- Development of a MACT standards for combustion sources course
  - Would focus on the controls needed for the following sources:
    - Industrial boilers
    - Electric utility steam generators
    - Turbines
  - We may want to wait until the regulations are formally promulgated and challenged before we begin developing this course
    - But, this is a topic in which my instructors have an expertise

# Rutgers Air Compliance Center

Fiscal Year 2005

Grant Proposal



# Rutgers Air Compliance Center's Fiscal Year 2004 Grant Proposal at the \$270,000 funding level

- With funding at the \$270,000 level, the Center will continue to:
  - Present forty-two (42) days of subsidized training
    - Seven (7) days of subsidized training for
      - CenSARA
      - LADCO
      - MARAMA
      - NESCAUM
      - SESARM
      - WESTAR

# Rutgers Air Compliance Center

Levels I –IV Training Courses

# Level I

- Overview of the Clean Air Act Amendments of 1990
  - The Clean Air Act Today
- Principles and Practices of Air Pollution Control
- Basic Health and Safety for Field Activities
  - Inspection Procedures and Safety (#446)
- Basic Health and Safety/8-Hour OSHA Refresher
- Fundamentals of Environmental Compliance Inspections

## Level II

- Inspection of Particle Control Devices
- Evaluation of Stationary Source Emission Capture, Transport and Testing Systems
- Continuous Emissions Monitoring Systems
- VOC Sampling and Analysis

# Level III

- Combustion Source Inspection
- General VOC Source Regulation and Inspection
- Inspection Techniques for Fugitive VOC Emission Sources

# Level IV

- Advanced NO<sub>x</sub> Emissions Control
- Compliance Assurance (and Periodic) Monitoring
- Inspection of Gas Control Devices and Selected Industries
- Area Source MACT
- Surface Coating Sampling, Transport and VOC Content Calculations