Module 1
Overview of Course:

Fundamentals of Emission Inventory Development

Training Modules

• Day 1:
  > Module 1: Principles of Air Pollution
  > Module 2: Pollutant Types, Effects, and Emission Sources
  > Module 3: Emission Inventory Fundamentals
  > Module 4: Quality Assurance and Quality Control
  > Case Study #1: Inventory Preparation Plan and Quality Assurance Plan (IPP/QAP)
Training Modules (continued)

- Day 2:
  - Module 5: Point Source Emissions Inventory
  - Harmonized Emission Analysis Tool
  - Case Study #2: Point Source – Foundry Source
  - Case Study #3: Point Source – Energy Sector

Training Modules (continued)

- Day 3:
  - Module 6: Nonpoint Source Emissions Inventory
  - Case Study #4: Nonpoint Sources – Residential Combustion and Prescribed Burning
  - Case Study #5: Nonpoint Sources – Livestock Sources
  - Module 7: Natural Sources
### Training Modules (continued)

- **Day 4:**
  - Module 8: On-Road Mobile Source Emissions Inventory
  - Module 9: Nonroad Mobile Source Emissions Inventory
  - Conclusions and Wrap-up

### Student Goal #1: Learn

- Learn emission inventory terms and concepts
- Evaluate the quality and usability of emission inventory information
- Understand uses of emission inventory data
- Learn six primary methods for estimating emissions
- Obtain exposure to elements of a complete emission inventory program
Student Goal #2: Develop Skills

- Estimate emissions for a well-defined point or nonpoint (area) source
- Know how to locate available emission factors and sources of some activity data information

Focus of the Training Program

- Criteria pollutant emissions inventory development
  > Nitrogen oxides (NOx)
  > Sulfur oxides (SOx)
  > Volatile organic compounds (VOCs)
  > Carbon monoxide (CO)
  > Particulate matter 10 microns or less in aerodynamic diameter (PM_{10})
  > Particulate matter 2.5 microns or less in aerodynamic diameter (PM_{2.5})
  > Ammonia (NH3)
  > Lead

- Hazardous Air Pollutants
- Green house gases
Your Instructors

- Laurel Driver, US Environmental Protection Agency
  > driver.laurel@epa.gov

- Bill Kuykendal, US Environmental Protection Agency
  > kuykendal@epa.gov

- Patrick Gaffney, California Air Resources Board
  > pgaffney@arb.ca.gov

Questions or Comments?
Overview of the Course:
Basic Emission Inventory Training