

# Emissions View

## GIS Based Emission Inventory & Estimation

### GIS-Emissions Management

Designed for facility to state-wide to nationwide coverage, this powerful package features a unique spatial and temporal GIS-based platform that enables users to create and maintain a comprehensive emissions inventory of a variety of sources including point, area, and mobile.

A series of wizards guides inexperienced emissions inventory managers through essential steps, while advanced users are free to edit and create data via additional options.

### Emissions Estimation

For sources where no measurements are available, emissions can be based on processes using any of the hundreds of emissions estimation calculators for all processes contained in the US AP-42 and the Emissions Inventory Improvement Program (EIIP). These include processes in the Petroleum Industry, Wood & Paper Industry, Metallurgical Industry, Chemical Processing and others.

Also included are estimation tools for mobile sources and nonroad mobile sources (construction equipment, etc.) All of the estimation tools are integrated with the primary GIS interface to facilitate easy updating of the central emissions inventory and subsequent comprehensive reporting.

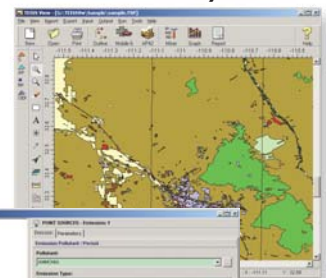
The GIS-based system allows for quick review and identification of emission sources within a visual, spatial context.

### Several Package Options are Available:

- ▶ Emissions Estimation - Calculators only (no GIS)
- ▶ Facility level GIS package
- ▶ State-wide package with all calculators, GIS and full functionality including:
  - ▶ Support for MOBILE6 emissions estimation model with a complete graphical user interface: MOBILE View which simplifies creating and performing MOBILE6 projects.
  - ▶ Integrated data handling with U.S. EPA emissions estimation models including:
    - NONROAD (EPA Nonroad Emissions Model)
    - LandGEM (EPA Landfill Gas Emissions Model)
    - WATER9 (EPA Wastewater and Treatment Emissions Routines)
    - TANKS (EPA Storage Tank Emissions Calculation Software)
    - BEIS (Biogenic Emissions)
    - PMCalc (PM2.5 filterable emissions from point sources)
  - ▶ Powered by an integrated complete Geospatial Database Engine.
  - ▶ Graphical and manual delineation of sites and sources.
  - ▶ Completely integrated GIS no need to purchase additional software. 100% ESRI compatible.
  - ▶ GIS Metadata creation and export following the FGDC Content Standard for Digital Geospatial Metadata.
  - ▶ Historical emissions tracking with complete charting.
  - ▶ Professional reporting for hard copy records, includes complete preview of all reports.
  - ▶ Data mining - efficient approach to obtaining the data of interest from large environmental databases without straining computer resources.



### Sample implementation of Arizona state wide system

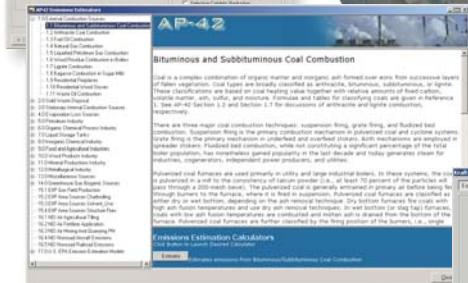
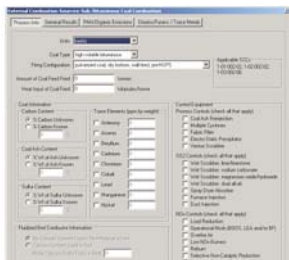


**Visual tree structure and data summaries provide easy control and review of emissions data**

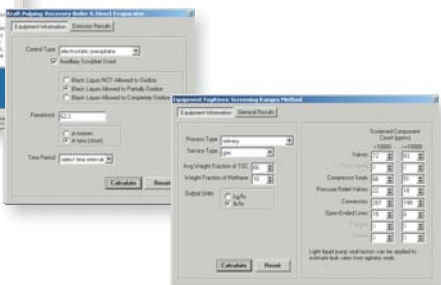
# Emissions View

EI From Small Units to Statewide

**Hundreds of calculators - such as the one below for Sub/Bituminous Coal Combustion - are part of the Emissions View Package**



**Emissions View contains calculators for AP-42, EIIP and NEI all accessible through a central menu with extensive online help.**



Comprehensive emissions estimation calculator toolset based on industry standard approaches including AP-42, EIIP, and NEI. Over 300 validated emissions calculators produce the emissions data you are seeking. A brief overview of calculator categories include:

- ▶ External Combustion Sources
- ▶ Solid Waste Disposal
- ▶ Stationary Internal Combustion Sources
- ▶ Evaporation Loss Sources
- ▶ Petroleum Industry
- ▶ Organic Chemical Process Industry
- ▶ Liquid Storage Tanks
- ▶ Inorganic Chemical Industry
- ▶ Food and Agricultural Industries
- ▶ Wood Products Industry
- ▶ Mineral Productions Industry
- ▶ Metallurgical Industry
- ▶ Miscellaneous Sources
- ▶ Greenhouse Gas Biogenic Sources
- ▶ Gas Field Production
- ▶ Area Sources Charbroiling
- ▶ Area Sources Solvent Use
- ▶ Area Sources Structural Fires
- ▶ Agricultural Tilling
- ▶ Fertilizer Application
- ▶ Mining and Quarrying PM
- ▶ Aircraft Emissions
- ▶ Railroad Emissions

Import & Export for NIF2.0 and NIF3.0 (National Emissions Inventory Input File)

Completely integrated GIS – no need to purchase additional software. 100% ESRI compatible.

Incorporates all related emissions guidance and models into one central, unified interface where results and computations are compiled and stored in an SQL database.

Flexibility is extended with an intuitive interface to create and implement user-defined emissions calculators at any time.

Complete support for GIS standard metadata is provided through an integrated utility that fully implements the Federal Geographic Data Committee's Content Standard for Digital Geospatial Metadata.

Emissions estimation models are tightly integrated allowing for seamless model execution and sharing of data from models such as NONROAD, MOBILE6, WATER9, LandGEM, and TANKS.

Professional reports can be printed and exported to a variety of formats such as:

- ▶ MS Word
- ▶ MS Excel
- ▶ HTML
- ▶ XML
- ▶ PDF
- ▶ Text
- ▶ Database Formats

## Users

- ▶ In use across the entire United States.
- ▶ Worldwide application.
- ▶ Over 200 installations.

