



CAPCA 2008 Fall Conference

The TRI and NEI

How are they different?



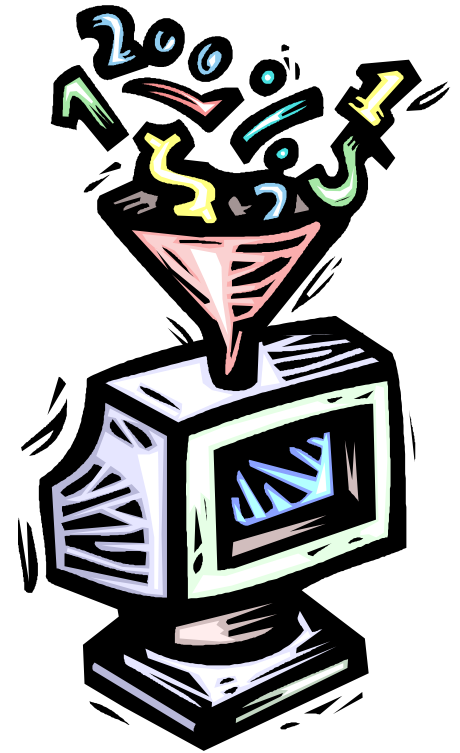
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Air Pollution Sources are Everywhere!



What's an "Emissions Inventory"?

- A collection of information about releases of chemicals into the environment (air, water, land)
- Usually focuses on a specific set of sources and chemicals and time period
- Typically, there are established criteria for reporting
- The amount and type of data collected determines the questions you can answer with the inventory



Two Key Air Emissions Inventories

- **Hazardous Air Pollutant (HAP) National Emissions Inventory (NEI)**

- Companion to Criteria Air Pollutant (CAP) NEI
- CAP NEI is required by federal rules under the Clean Air Act; currently, HAP NEI is not required
- NEI Managed out of EPA's Office of Air Quality Planning and Standards (OAQPS)

- **Toxics Release Inventory (TRI)**

- Required by federal law under SARA Section 313
- Managed out of EPA's Office of Environmental Information (OEI)

**TRI requirements at:
www.epa.gov/tri**

**NEI Information at:
www.epa.gov/ttn/chief**

TRI and NEI – What are the differences?

INVENTORY CHARACTERISTICS	TRI	NEI
Inventory Purpose	Right To Know Inventory	2 Primary purposes are: <ul style="list-style-type: none"> • Modeling Inventory to support regulatory development and risk assessments • Trends Analyses
Geographic Coverage	50 states, DC, Territories	50 states, DC, Territories
Media Coverage	Air Water Land	Air
Source Category Coverage	Facility	<ul style="list-style-type: none"> • Facility (major and area sources) • Nonpoint stationary emissions • Fires – wildfires/prescribed burns • Onroad Mobile • Nonroad Mobile • Airport Mobile (facility) • Marine Vessels Mobile • Railroad Mobile • Offshore Platforms (facility)

TRI and NEI – What are the differences?

INVENTORY CHARACTERISTICS	TRI	NEI
Resolution of Air Data (level of detail)	<ul style="list-style-type: none"> • Facility sum of stack releases • Facility sum of fugitive releases 	<ul style="list-style-type: none"> • Facility (point) data at individual process level with stack and fugitive releases • Offshore Platforms – point data at individual process level individual stack and fugitive releases • Airports (point) data at individual process level with fugitive releases for each runway • Fires – individual points with hourly data; lat/long • Nonpoint Stationary* – county level Onroad Mobile* – county level Nonroad Mobile* – county level • Marine Vessel Mobile* – county level • Railroad Mobile* – county level <p>*Currently at county level; will be more refined in 2008</p>
Pollutant Coverage	<ul style="list-style-type: none"> • Air toxics > 600 compounds • Includes all HAPs on CAA list 	<ul style="list-style-type: none"> • CAPs: VOC, NOx, CO, NH3, PM10, PM2.5, SO2 • HAPs: CAA list of HAPs and individual compounds for compounds groups (> 400 individual compounds)

TRI and NEI – What are the differences?

INVENTORY CHARACTERISTICS	TRI	NEI
Speciation of HAP Compounds	Dioxin only, Some individual PAHs reported	Speciation of all compounds groups including Hg (elemental gaseous/divalent particulate/divalent gaseous), Cr (Cr+6/Cr+3), POM (individual PAHs), Dioxins (congeners), etc.
Timeframe	Annual, 1987 – 2006	<ul style="list-style-type: none"> • Annual for CAPs 1990 - 2005 • HAPs – every 3 yrs, 1990, 1996, 1999, 2002, 2005
Number Facilities in 2002 inventory emitting CAA HAPs	25,000	90,000
Modeling Parameters	None (latitude/longitude reported at facility level only)	<ul style="list-style-type: none"> • Stack parameters for individual processes • Latitude/longitude for individual processes • Control devices and efficiencies

TRI and NEI – What are the differences?

INVENTORY CHARACTERISTICS	TRI	NEI
Category Descriptions	SIC/NAICS Codes – describe type of business or products	<ul style="list-style-type: none"> • SIC/NAICS Codes – describe type of business or products • MACT Codes – identify processes within facilities subject to EPA regulations • Source Classification Codes that describe specific emitting processes, fuel type, etc.
Reporting Thresholds	<ul style="list-style-type: none"> • Facilities with > 10 employees • Facilities that manufacture or process > 25,000 lbs, or otherwise use > 10,000 lbs of listed substance* • Manufacturing Sectors primarily • Some exemptions apply <p>* lower reporting thresholds for persistent bioaccumulative toxics (PBTs)</p>	<ul style="list-style-type: none"> • No reporting thresholds for HAPs • CAP reporting thresholds – emissions based; required by Consolidated Emission Reporting Rule (CERR)

TRI and NEI – What are the differences?

INVENTORY CHARACTERISTICS	TRI	NEI
Temporal Coverage	Annual	<ul style="list-style-type: none"> • Annual emissions • Non-annual emissions for pollutants <ul style="list-style-type: none"> - Ozone precursors - PM direct emissions and precursors • Non-annual emissions for source categories <ul style="list-style-type: none"> - Fires – hourly data - Mobile Onroad/Nonroad – daily • Operating schedule and Temporal factors in NEI to create Emissions for non-annual time periods
Source of Data	Industry	<ul style="list-style-type: none"> • State and local agencies • Tribes • CEM data for electric utilities • Compliance Source Testing • EPA regulatory development data, e.g., RTR • EPA developed data for nonpoint categories • MMS data for offshore platforms • Fires developed from satellite data • Mobile source data developed by OTAQ using state and local input data for onroad and nonroad sources • TRI

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Questions?

