



# **BART Identification Project Update**

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# Background

- Identification of BART-eligible sources is required for RH BART and any alternative program
- What is a BART-eligible source?
  - Only applies to power plants, industrial boilers, and 24 other types of facilities
  - The eligible “source” is defined as all units at a facility “constructed” or reconstructed between 8/2/62 and 8/2/77
  - Source must have a PTE > 250 tpy (summed across all eligible units) for any visibility impairing pollutant (SO<sub>2</sub>, NO<sub>x</sub>, PM, VOC)

# Background

- Until now, WRAP has only identified sources eligible on the basis of SO<sub>2</sub> emissions
  - Need to consider NO<sub>x</sub>, VOC, PM (and NH<sub>3</sub>?)
- WGA recently hired Eastern Research Group to provide assistance
- Knowing who, what, where the eligible sources are will provide a much better picture of the issues / workload involved in RH BART and the design of an alternative program

# Project Objectives

- Develop and maintain a regional database of eligible and potentially-eligible sources, their emissions, and current controls
- Promote consistency in how sources are being identified across the region
- Establish a common method and preliminary list of sources ...
  - for states that have not begun their process
  - for states wishing to verify their results
- Provide direct support to some states/tribes in identifying their eligible sources
- Establish an alternative method for CA

# Project Team

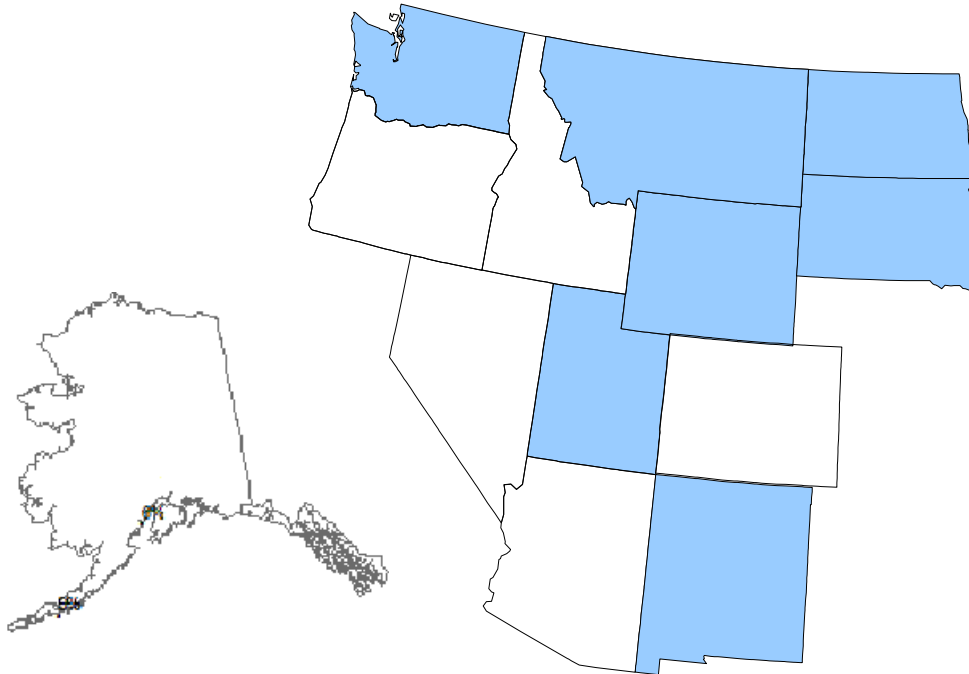
- Lee Alter, WGA
- Don Arkell, WESTAR
- Steve Body, EPA Region 10
- Steve Frey, EPA Region 9
- Bob Gruenig, NTEC
- Eric Massey, AZ
- Al Newman, WA
- Chad Schlichtemeier, WY
- Tina Suarez-Murias, CA
- ERG staff

# Status

- Established contacts and identified databases
  - Various Title V databases
  - National Emission Inventory (NEI)
  - Acid rain and EIA data
  - CA District Rules Database
  - ITEP tribal source data
- Refining list of SIC, SCC, and MACT codes used to identify category-eligibility
- Surveying states and compiling preliminary lists of eligible sources
- Drafting common method to identify sources
- Drafting method for CA
- Identifying tribal sources

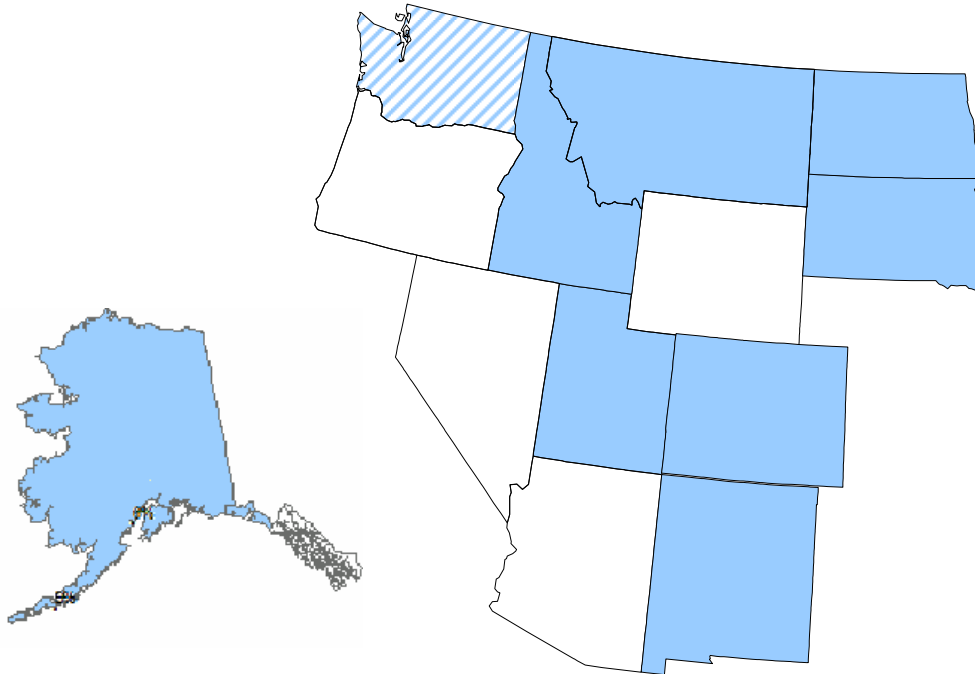
# Status

- States which have responded to survey
- Several more responses expected



# Status

- States which have submitted preliminary lists of BART-eligible sources
- No more lists expected



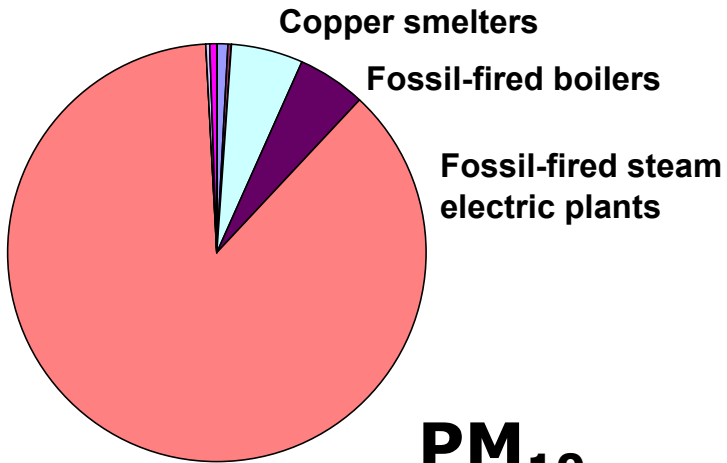
# State BART Emission (8 states)

## Preliminary BART-Eligible Sources

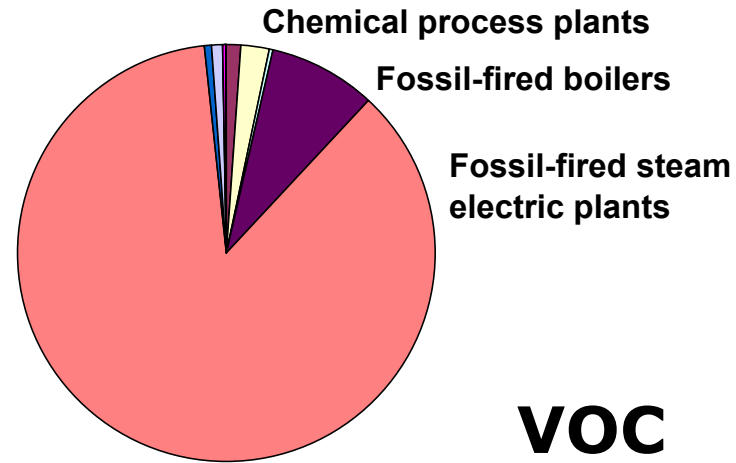
State	Facilities	SO <sub>2</sub>		NO <sub>x</sub>		VOC		PM <sub>10</sub>	
		tons	%	tons	%	tons	%	tons	%
AK	27	3,056	96%	15,154	99%	1,652	98%	3,283	98%
CO	23	59,246	61%	58,032	52%	2,646	7%	2,993	10%
ID	8	5,861	30%	3,319	26%			1,129	14%
MT	2	14,565	33%	12,481	24%				
ND	6	99,439	48%	44,974	54%	556	52%	3,134	30%
NM	17	59,917	73%	65,050	45%	207	1%	1,611	10%
SD	1	11,756	90%	14,954	77%				
UT	2	19,366	43%	24,381	25%	158	2%	2,425	14%
<b>Total</b>	<b>86</b>	<b>273,207</b>	<b>54%</b>	<b>238,343</b>	<b>44%</b>	<b>5,218</b>	<b>7%</b>	<b>14,575</b>	<b>14%</b>

# Category BART Emissions (8 states)

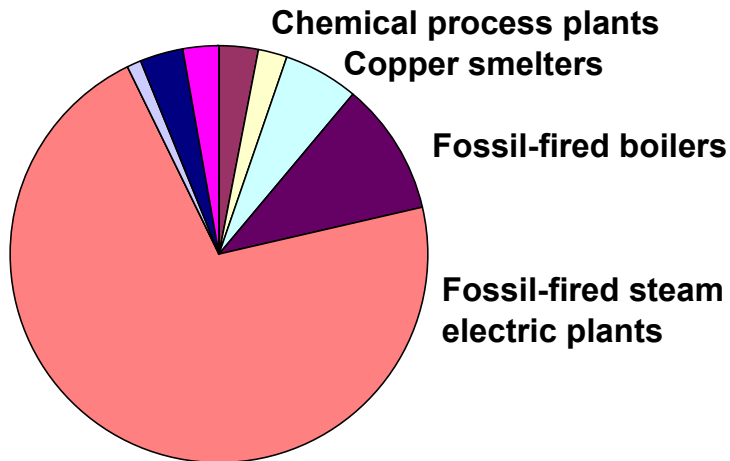
## SO<sub>2</sub>



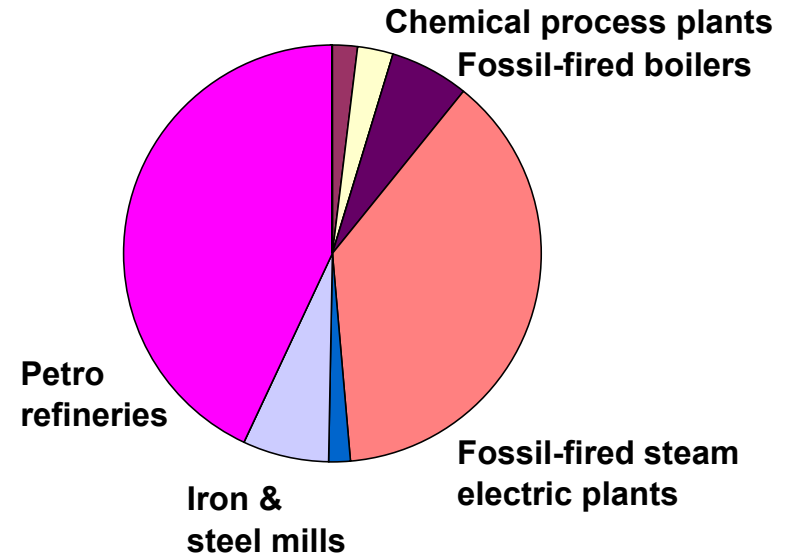
## NOx



## PM<sub>10</sub>



## VOC



# California Method

- Given large number of CA sources and likelihood that vast majority are already controlled at BART levels (or better), an alternative method is being developed which may demonstrate compliance with BART and make explicit source identification unnecessary
- Using Title V and NEI data to identify which BART categories are in which air management districts
- Will examine rules (and if necessary some permits) in each district pertaining to each category present
- Smaller / attainment districts may have rules that would not be as strict as BART
  - Need to examine these rules and sources more closely
  - May have to follow standard RH BART process
- Testing method against South Coast sources
- May be useful for VOC & PM sources in other states

# Tribal Sources

- Using 2 methods to develop a preliminary list
  - Use GIS to identify NEI sources on tribal lands (already done by ITEP) and then identify those with emissions > 100 tpy and belonging to one of 26 BART categories
  - Obtain lists of Part 71 sources from EPA regional offices and identify those belonging to a BART category
    - Compare results and identify discrepancies
    - Several sources will appear on state lists too
- After preliminary list is developed, tribes will be informed of efforts/results and may be asked for additional information

# Next Steps

- Determine appropriate design and location of database (WRAP's EDMS or independent)
- Provide feedback to states, verify misc. sources
- Provide direct assistance to some states/tribes
- Gather emission control information
- Plot sources on maps
- Consult with other RPOs
- Talk with EPA about CA method
- No plans for ERG to contact sources

# Status of Other RPOs

- MANE-VU (northeast)
  - Not counting EGUs or any PA sources, identified 66 eligible and 90 potential sources
  - Construction dates are largest uncertainty
- Midwest RPO
  - States have identified ~ 200 sources
  - > 90% of SO<sub>2</sub> and NO<sub>x</sub> emissions from EGUs
  - Awarding contract next week to support engineering analysis of categories & sources
- VISTAS (southeast)
  - Contactor currently helping develop a list
  - Final report expected in September

# Status of Other RPOs

- CENRAP
  - 7 of 9 states have lists, but inconsistencies and QA issues expected
  - TX not done, plans to rely on source surveys
  - Intends to complete most work this summer
- Some sense of urgency in Midwest and Southeast to identify eligible sources in order to proceed with next step (determination of those subject to BART)
- Not having a final rule/guidelines until April 2005 makes the job more uncertain.

# NH<sub>3</sub>, VOC, and PM

- Emissions of these pollutants from BART-eligible sources may not be significant contributors to regional haze and/or may already be controlled at BART or near-BART levels.
  - Recall how VOC and PM<sub>10</sub> compared to SO<sub>2</sub> and NO<sub>x</sub>
- EPA proposing to exempt NH<sub>3</sub> on basis of uncertain inventories and marginal effectiveness given concurrent reductions of SO<sub>2</sub> and NO<sub>x</sub>.
- EPA taking comment on allowing less focus on rural (as opposed to urban) VOC sources.
- Are these policies and rationales appropriate?
- Are there better means to achieve the same ends?

# NH<sub>3</sub>, VOC, and PM

- The administrative and compliance burden for implementing RH BART for these pollutants should be proportional to their contribution to haze.
- Exempting or permitting less focus on certain pollutants should be based on a technically-sound, no-regrets policy that works for each pollutant.
- One such approach is outlined below:
  - First, compare emissions from BART-eligible sources to the total anthropogenic inventory
  - Second, determine the level of emission controls at these sources
  - Third, assess their probable impact based on best available science (e.g., analysis of ambient data, modeling results, etc.)

# NH<sub>3</sub>, VOC, and PM

- If emissions of a given pollutant from all BART-eligible sources in a state or region ...
  - contribute only a small amount to the inventory,
  - are reasonably well controlled (see CA method), and/or
  - may not be reasonably anticipated to cause or contribute to regional haze (similar to EPA's 2<sup>nd</sup> option for exempting all sources in a state, but on a pollutant-specific basis),then no further BART analysis or control is necessary.

# NH<sub>3</sub>, VOC, and PM

- If not, then implement either ...
  - RH BART for that pollutant,
  - an alternative program for that pollutant, or
  - an alternative program for another pollutant (e.g. SO<sub>2</sub> or NO<sub>x</sub>) which compensates for the NH<sub>3</sub>, VOC, or PM exemption in an equitable way (e.g., sources with less NH<sub>3</sub>, VOC, or PM controls would be expected to reduce their SO<sub>2</sub> or NO<sub>x</sub> emissions proportionately).