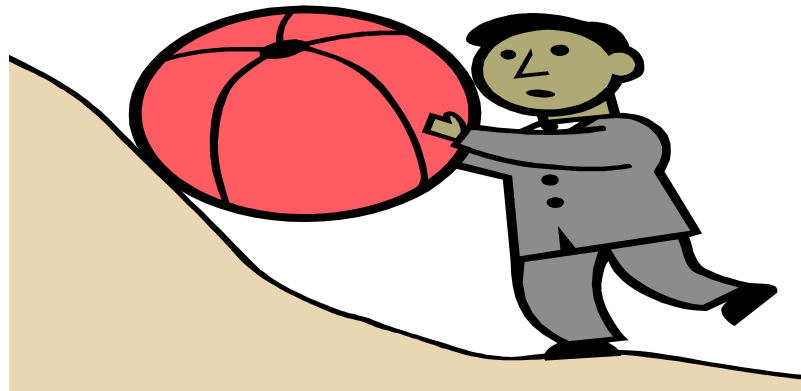


Sisyphus Isn't Alone: Getting an NSR/PSD Permit is Hard!



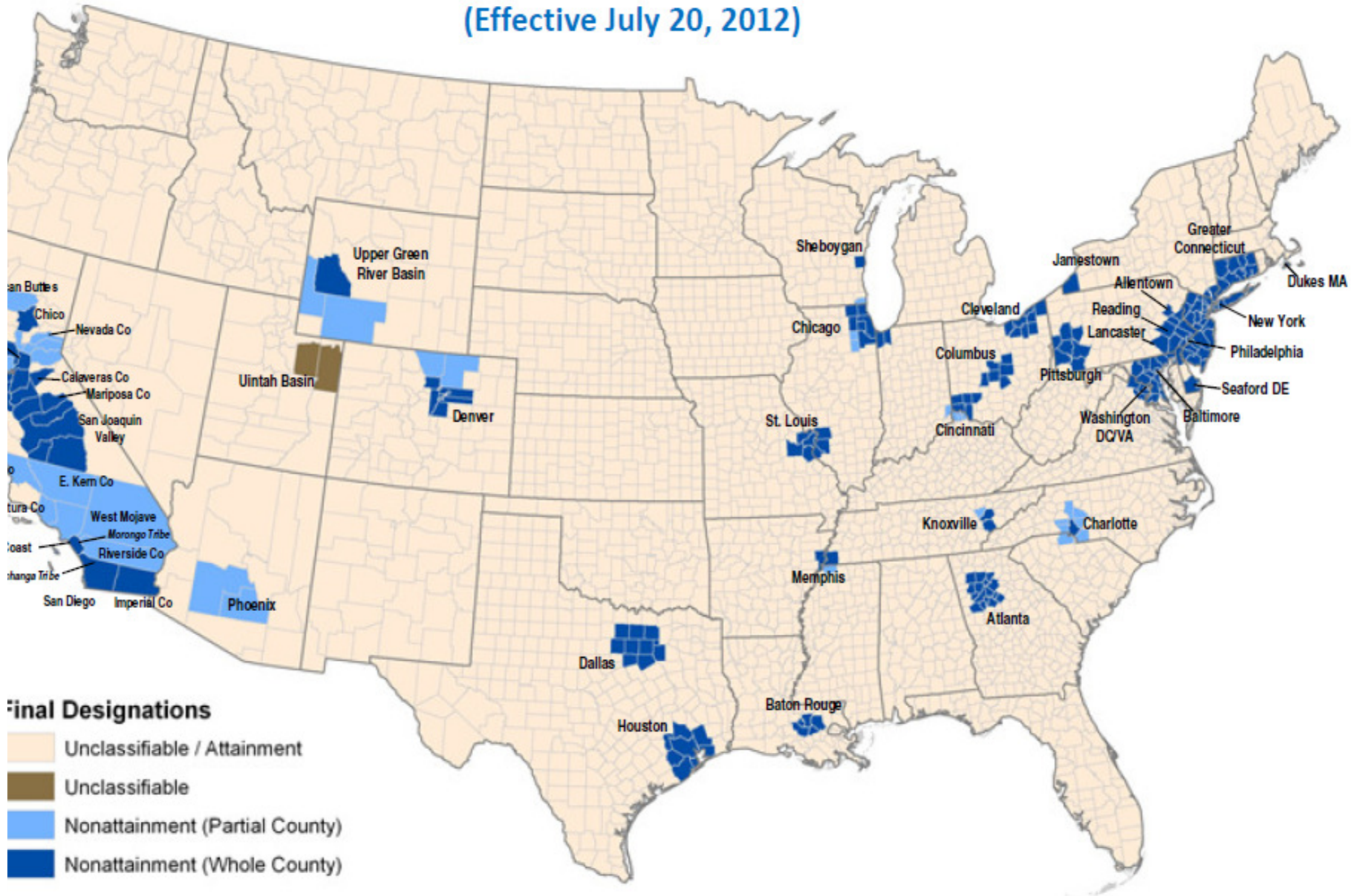
CIBO Annual Meeting
October 12, 2012
San Diego, California

Why is Getting a PSD Permit So Difficult?

- As NAAQS get tighter, more nonattainment areas, so NSR permitting issues arise
- As NAAQS get tighter, modeling compliance in attainment areas has become a big issue
- Triggering PSD for GHGs adds new complexities
- Environmental justice (EJ) concerns have become a new hurdle for many projects

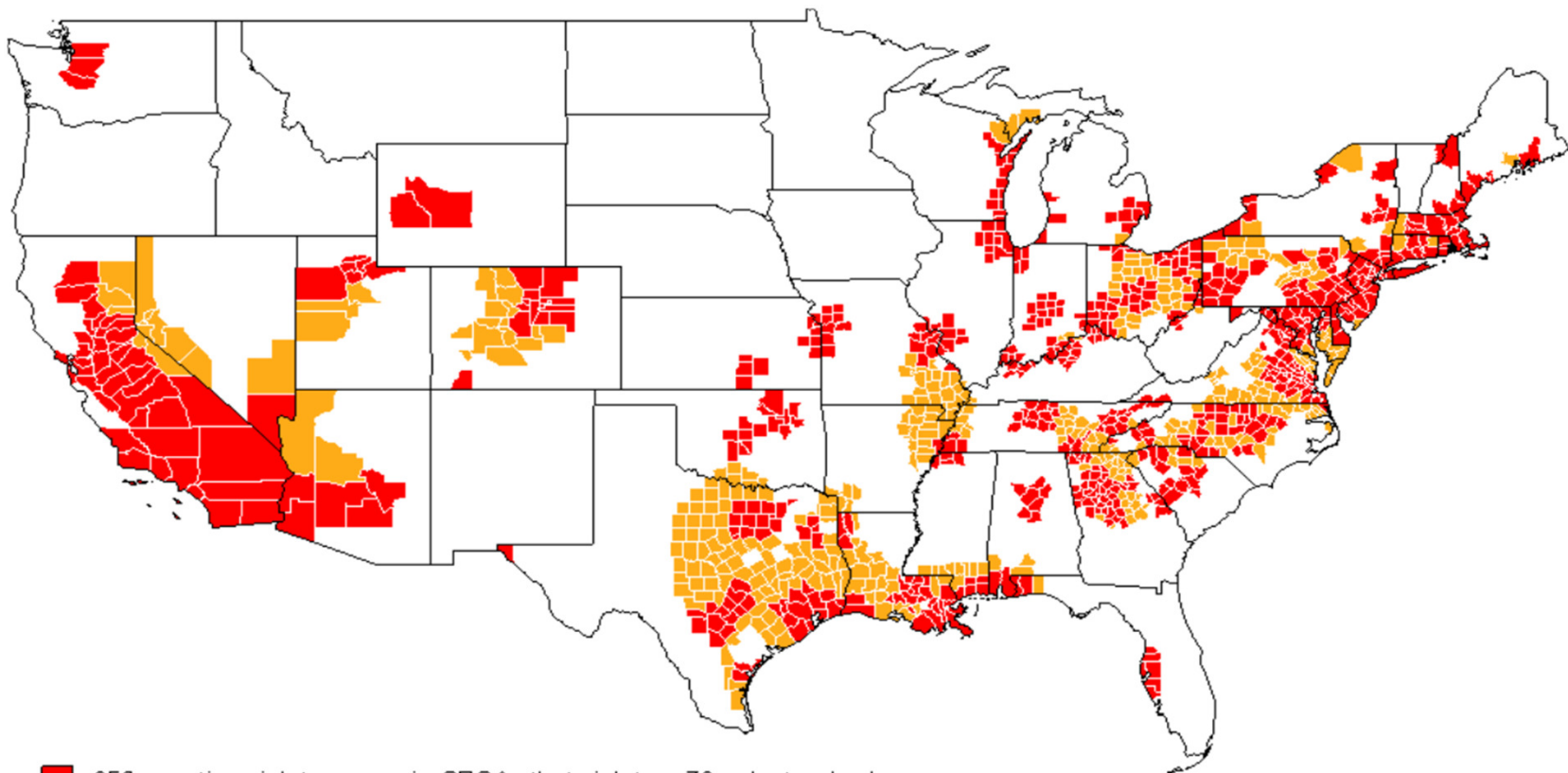
Nonattainment Areas for 2008 Ozone NAAQS

(Effective July 20, 2012)



Ozone

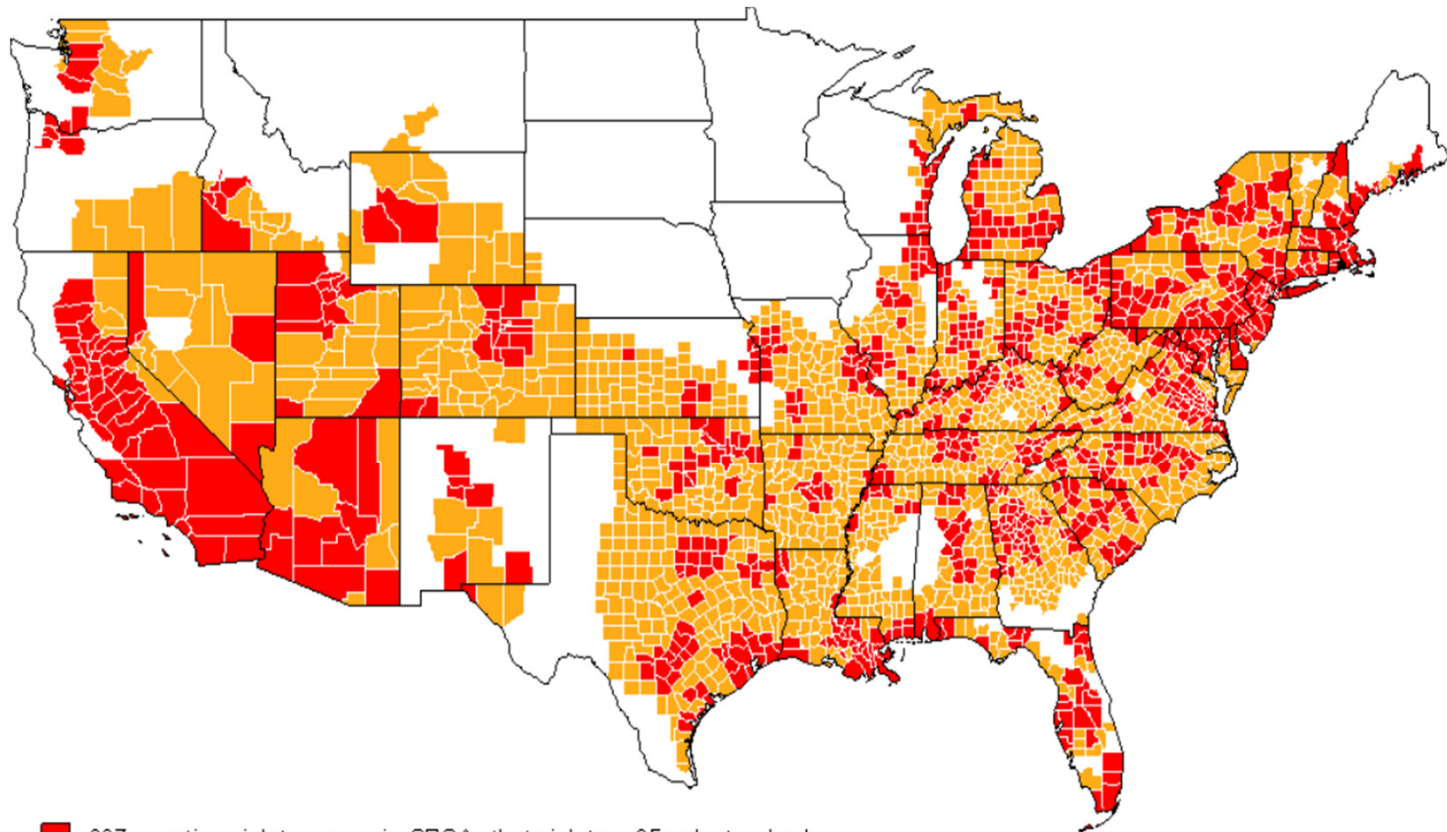
- However, future revisions to more stringent standard in next review cycle (2014) could greatly increase nonattainment areas
 - 70 ppb



- 652 counties violate, or are in CBSAs that violate a 70 ppb standard
- 401 additional counties are anticipated to violate a 70 ppb standard based on spatial interpolation

Ozone

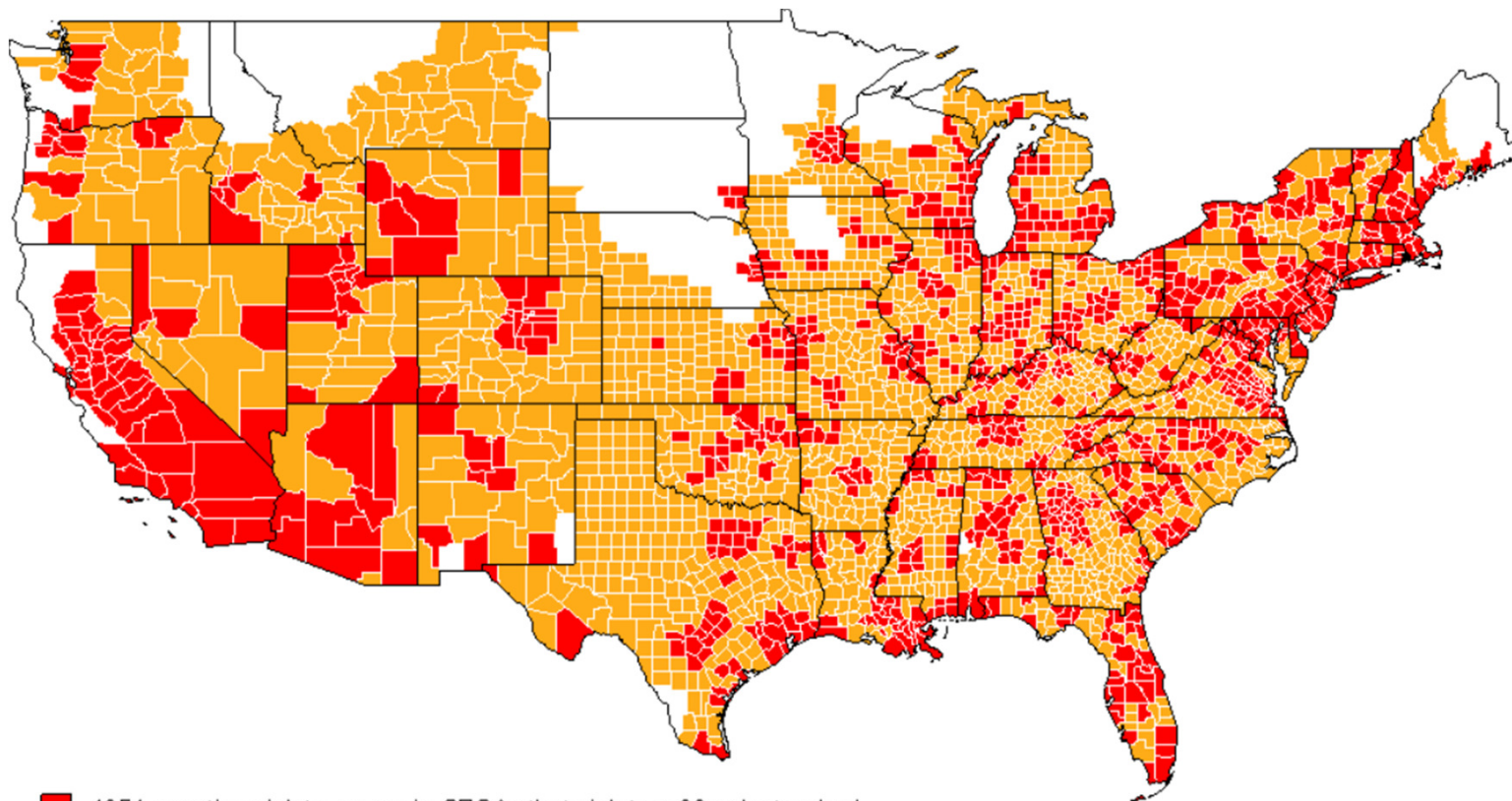
- However, future revisions to more stringent standard in next review cycle (2014) could greatly increase nonattainment areas
 - 65 ppb



- 897 counties violate, or are in CBSAs that violate a 65 ppb standard
- 1320 additional counties are anticipated to violate a 65 ppb standard based on spatial interpolation

Ozone

- However, future revisions to more stringent standard in next review cycle (2014) could greatly increase nonattainment areas
 - 60 ppb

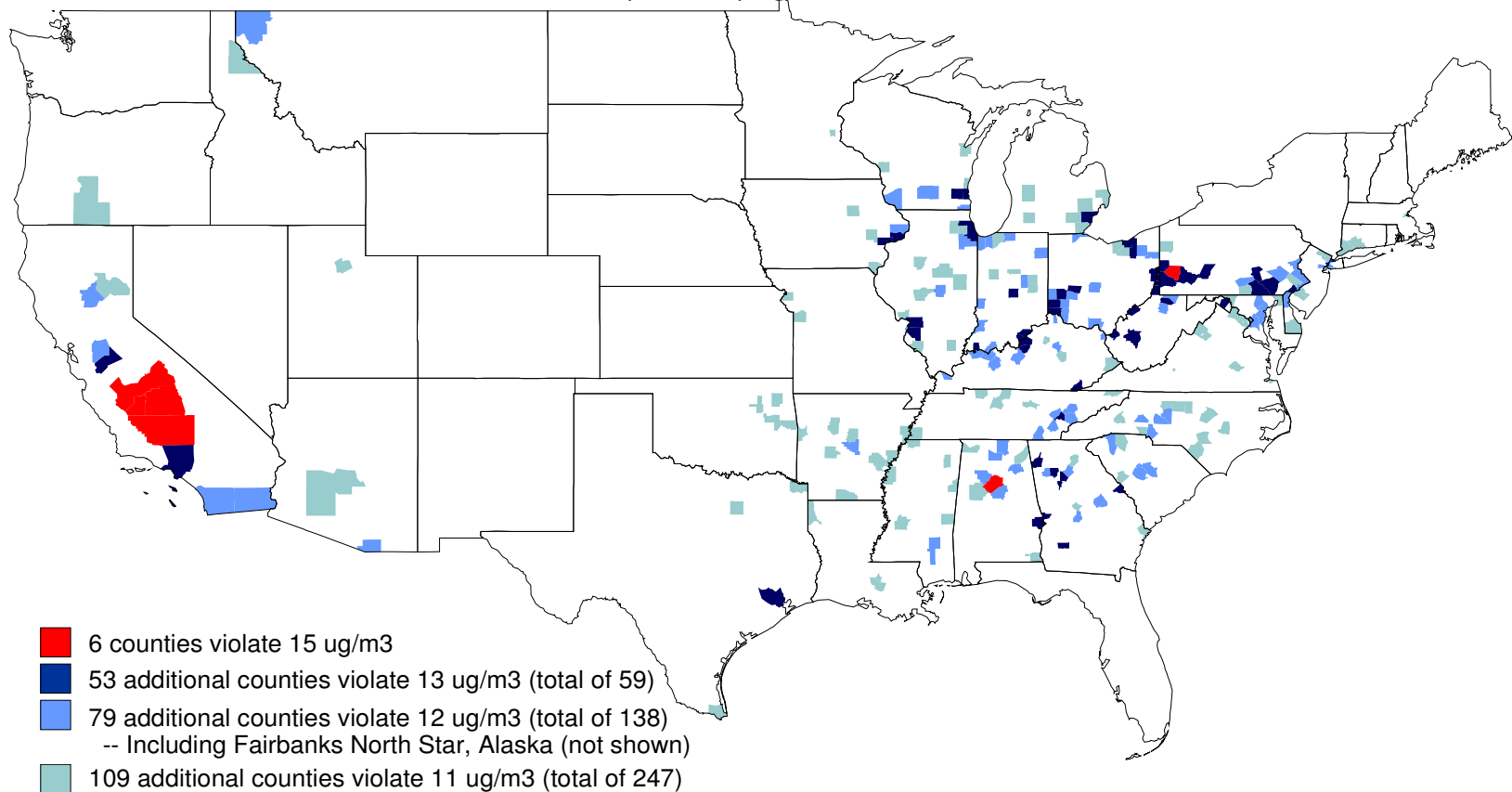


■ 1051 counties violate, or are in CBSAs that violate a 60 ppb standard
■ 1744 additional counties are anticipated to violate a 60 ppb standard based on spatial interpolation

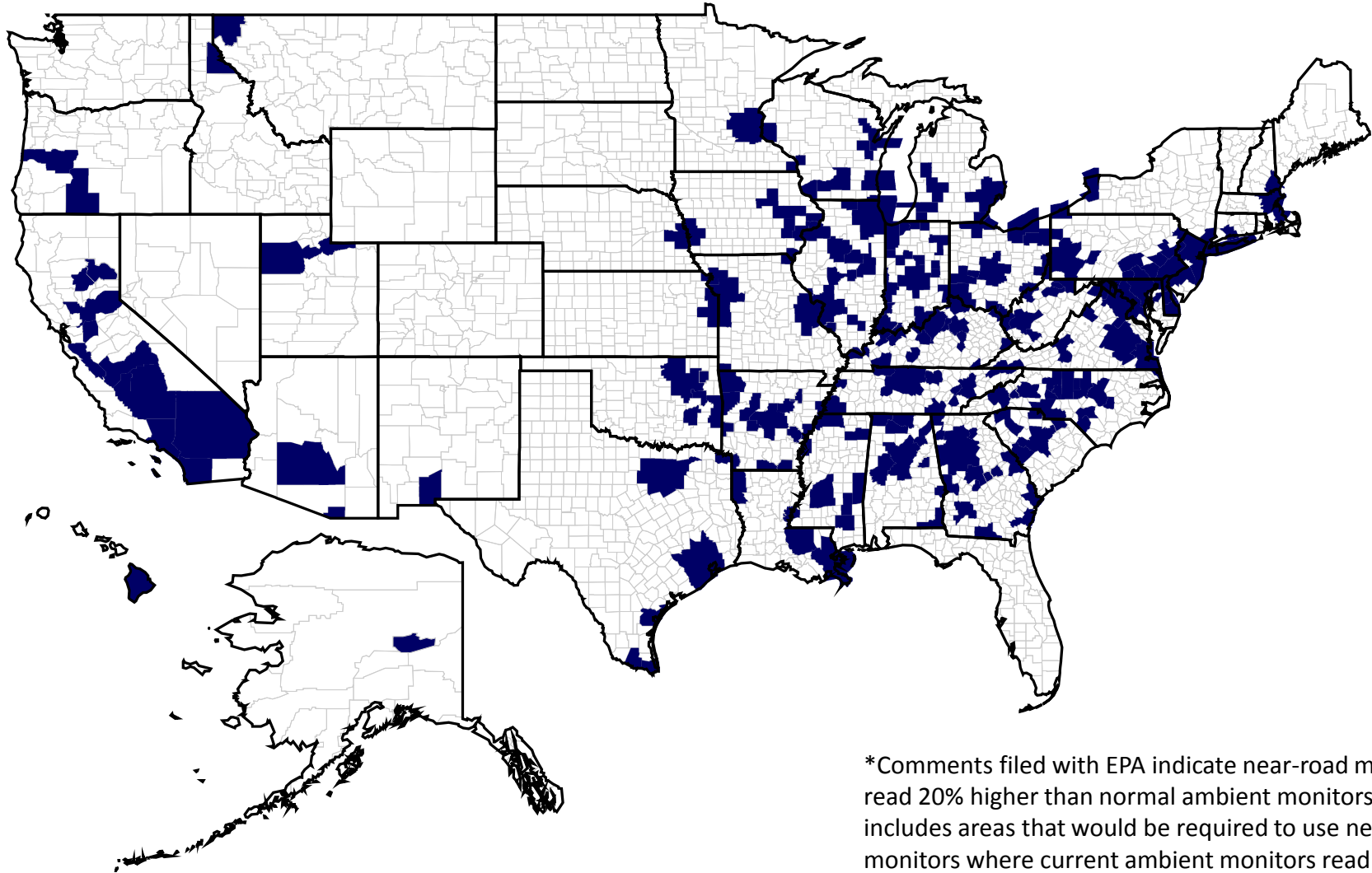
PM_{2.5}

Counties Violating Existing PM_{2.5} 15 ug/m³ Annual Standard And Hypothetical Lower Standards of 13, 12, and 11 ug/m³

Data Source: <http://www.epa.gov/airtrends/values.html>



Non-Attainment Areas at $12 \mu\text{g}/\text{m}^3$ With Near-Road Monitors*



*Comments filed with EPA indicate near-road monitors read 20% higher than normal ambient monitors. Map includes areas that would be required to use near-road monitors where current ambient monitors read $10 \mu\text{g}/\text{m}^3$ or higher.

Based on 2008-2010 data accessed from <http://www.epa.gov/airtrends/values.html>

NAAQS Issues

- **Requirements for nonattainment areas**
 - **Installation of controls for larger sources (Reasonably Available Control Technology (RACT), or Reasonably Available Control measures (RACM))**
 - **Special NSR permitting**
 - **Very low trigger thresholds for major source permitting**
 - **Lowest Achievable Emissions Rate (LAER) technology**
 - **Emissions must be offset (direct and/or precursors)**
- **Requirements for projects that trip PSD (attainment areas)**
 - **Install BACT**
 - **Must model compliance with NAAQS**
 - **Models not well-suited to levels/forms of new standards**
 - **Model assumptions include worst-case meteorology, emissions, and background concentrations, plus consideration of fugitives and perhaps precursors**
 - **Additional issues if roads, railroads, or navigable waters bisect your facility**
 - **Some boiler upgrades can't comply even with new source MACT, 500' stacks**

GHG Regulations

- **GHG Permitting**
 - **GHGs now subject to PSD permitting; BACT analyses still painful despite lack of end-of-pipe controls—CCS analysis, EPA permit review**
 - **EPA is in year 2 of a 3-year deferral from PSD/NSR permitting for CO2 emissions from biomass; SAB just issued recommendations for EPA accounting system.**
 - **Virtually all big facility GHG permits are being challenged and/or delayed, particularly where EPA runs the program (e.g. Texas): 160 permit applications, 50 permits issued since 2011. Permits may take 2 years+ in some states or where EPA runs program**
 - **EPA Clean Air Act Advisory Committee has recommended Agency examine GHG permit streamlining**

Environmental Justice (EJ): What is It?

- Focus area at EPA since a Clinton Executive Order
 - One of current EPA Administrator Lisa Jackson’s highest priorities
- Definition
 - **“the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of laws, regulations, and policies. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.”**
- Aim
 - Prevent **“disproportionate impacts”** on **“disadvantaged communities”**; neither phrase has been defined by EPA

What EJ Could Mean for CIBO Members

- **More time to get permits, changed project scopes, equipment additions**
 - **Enhanced community outreach, including pre-project, during permitting, and perhaps afterwards**
 - **Increased permit scrutiny if outreach doesn't meet yet-to-be-specified EPA benchmarks**
 - **Permit delays and challenges, particularly if outside groups get involved and use EJ as a weapon**
 - **More community permit scrutiny, as EPA plans to train community activists and may look to industry to fund lawyers/scientists to educate communities**
 - **Required (or strongly suggested) fence-line monitoring**
 - **Potential mitigation projects to address “disproportionate impacts”**
 - **Focus on non-project issues such as truck traffic, noise, excessive lighting, aesthetics, improved medical care, plant entrances**

What Can You Minimize Permitting Problems?

- Avoid PSD/NSR
- If in a nonattainment area, line up offsets
- If contemplating PSD project:
 - Initiate NAAQS modeling early, work with state, EPA Region, OAQPS staff to address problems; remember post-construction monitoring is an option
 - For GHGs, use EPA BACT guidance carefully, work closely with state/EPA, start discussions early
 - To address potential EJ concerns, explain project & its benefits to community, state, and EPA Regional Office early and often, listen carefully for feedback