NSR/GHG/CAA Update - 2013

AWMA Louisiana Section
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HUNTON& WILLIAMS

ERM

2013 Topics

- NSR Reform – Report Card
- Key Court Decisions
  - *Source Aggregation - Summit Petroleum Corp. v. EPA, (6th Cir. 2013)*
  - *Applicability - United States v. DTE Energy Co., (6th Cir. 2013)*
  - *Enforcement - United States of America et al. v EME Homer City Generation L.P. (3'rd Cir 2013)*
- SSM Policy and SIP Call
- PM2.5 SILs and SMCs
- GHG Issues
  - Supreme Court grants Cert and will review EPA's GHG PSD authority
  - Impact of GWP Revisions
  - Recent BACT Decisions
  - Biomass GHG Emissions Deferral
  - EGU NSPS

NSR Reform

	Scorecard In Effect	Abandoned, Stayed Vacated or Revoked
10 yr Baseline Emissions Lookback	✔	
Actual to Future Actual Methodology	✔	DTE Impacts
Actual PALS	✔	
Clean Unit Test		X
Pollution Control Project Exclusion		X
Flexible Permitting and NSR Green Groups		X
RMRR Bright-Line Test		X
Project Aggregation Rule		X
Source Aggregation Policy	Summit Petroleum Discussion	

NSR Reform Continued

	Scorecard In Effect	Abandoned, Stayed Vacated or Revoked
Hourly Test for EGUs		X
Reasonable Possibility Rule	✔	
Fugitive Emissions Rule		X
Deferral for GHG Emissions from Bioenergy		X

Summit Petroleum Corp. v. EPA

Summit Petroleum Corp. v. EPA

- U.S. Court of Appeals for the Sixth Circuit, August 7, 2012.
- Involved the definition of "stationary source" and the question of whether/how oil and gas production operations should be aggregated for CAA permitting.
  - Natural gas sweetening plant and 100 associated sour gas wells.
  - 43 square miles, wells 500 ft. to 8 miles from the plant.
- A stationary source consists of operations that:
  - Are under common ownership or control;
  - Belong to the same 2-digit major SIC code; and
  - Are contiguous or adjacent.

Summit Petroleum Corp. v. EPA

Case centered on what it means to be "contiguous or adjacent"

- EPA asserted that all operations should be aggregated into a single stationary source.
- EPA asserted that the functional relationship of the various operations should be considered in deciding if the operations were contiguous or adjacent – operations were "truly interdependent."
- Summit argued that the term "adjacent" is unambiguous – requires physical proximity.
- Court sided with Summit: "We conclude that both the dictionary definition and etymological history of the term 'adjacent,' as well as applicable case law, support Summit's position."

Current EPA Policy

December 21, 2012 Guidance Memo – Summit decision applies only in the 6th Circuit (Michigan, Ohio, Tennessee and Kentucky).

Remainder of Country – EPA will continue to apply its "longstanding practice of considering interrelatedness" in making stationary source decisions in other jurisdictions.

February 21, 2013 - NEDA/CAP petitioned the DC Circuit to review EPA's policy guidance.

United States v. DTE Energy Co.

United States v. DTE Energy Co.

- U.S. Court of Appeals for the Sixth Circuit, March 28, 2013.
- Typical tube replacement NSR enforcement case.
- First decision involving revised applicability provisions in the 2002 NSR reform rules.
- At the district court (U.S. District Court for the Eastern District of Michigan):
  - Summary judgment ruling for DTE
  - Determination of whether projects at issue constitute a major modification is premature because EPA “may pursue [NSR] enforcement if and when post-construction monitoring shows a need to do so”

United States v. DTE Energy Co.

Submitting pre-project notice one day before the project starts "is fully consistent with a project-and-report scheme."

- And the "project-and-report scheme is entirely compatible with the statute's intent, which, as the EPA stated at oral argument, is 'to prevent increases in air pollution'"

Purposefully managing post-project emissions is "entirely consistent with the statute and regulations."

- Not "bad faith"

Rejected EPA's argument that NSR is "designed to force every source to eventually adopt modern emission control technology."

- Noted that EPA conceded at oral argument that sources are allowed "to replace parts indefinitely without losing their grandfathered status so long as none of those changes cause an emissions increase."

United States v. DTE Energy Co.

Court noted that "[i]f a company's projections are later proven incorrect, EPA can bring an enforcement action," and "[a]n operator takes a major risk if it underestimates projected emissions" because it will face large fines and would have to install pollution control technology, which "will almost certainly be more expensive than installing pollution-control technology at the time of the modification."

- Thus, court found that "operators have great incentives to make cautious projections."

No realistic possibility that an operator will "surreptitiously increase its emissions" after the 5-year post-project reporting period.

United States v. DTE Energy Co.

Sixth Circuit overturned the district court decision:

- "The operator has to make projections according to the requirements for such projections contained in the regulations. If the operator does not do so, and proceeds to construction, it is subject to an enforcement proceeding."

However, the Sixth Circuit upheld key elements of DTE's case:

- [I]f the agency can second-guess the making of the projections, then a project-and-report scheme would be transformed into a prior approval scheme."

United States of America et al. v EME Homer City Generation L.P.

- Court of Appeals confirmed failure to obtain a PSD permit is a point in time violation and not a continuing violation.
- Effectively this means PSD claims must be brought within the five year statute of limitations.
- Consistent with 7th Circuit decision (2013) *United States of America, et al. v. Midwest Generation et al.*, where that court dismissed EPA enforcement claims against five Illinois power plants for allegedly illegal modifications that the agency viewed as ongoing violations.
- Consistent with (2007) 8th Circuit and 11th Circuit (2010) decisions that the lack of a PSD permit is not a continuing violation.
- 7th Circuit rejected EPA's bid for a rehearing – Sept. 20
- EPA may seek Supreme Court review.

EPA's SSM SIP Call

- Proposed Action announced Feb. 22, 2013, 78 Fed. Reg. 12460.
- Promulgation delayed until May 15, 2014
- Responds to Petition of The Sierra Club filed June 30, 2011.
- Affects SIPs for 36 of 39 States addressed in the Petition.
- EPA to Issue a SIP Call to Affected States once promulgated.
- States will have 18 months to submit revisions, *after* State Rulemaking.
- PSD Impacts could be substantial.

Challenges Created by New SSM Rule

- How will new sources and modified sources set SU/SD Limits
- Can emissions allowance for SU/SD demonstrate compliance with short-term NAAQS and SILs
  - Example – SCR's typically must reach temperature before they can be operated
  - During boiler start-up the SCR will not operate
- Impact on PSD increment and Air Quality Analyses
  - NAAQS model demonstrations issues
  - Test and CEMS issues

PM2.5 SILs and SMCs

The PSD Air Quality Analysis – Role of SMCs and SILs

- SILs → Single Source or Multi-Source Air Quality Analysis
- SMCs → Historically, preconstruction ambient monitoring data needs

The Court Decision and Impacts on Project Schedules

- Using SILs going forward for all pollutants
- The need for preconstruction monitoring data

Practical Strategies

- New SIL calculus
- Satisfying the need for preconstruction monitoring data

SILs; and SMCs – Role in New Source Permitting

Background

- SILs and SMCs have been used by States and EPA for many years.
- Used as screening tools to streamline air quality impact analysis.
  - SILs address the need for multi-source modeling.
  - SMCs historically address the need the need to monitor for a year prior to submitting an application (SMCs).
- SILs are also used to determine if a new source “causes or contributes” to violations of the NAAQS.

Recent Developments

- January 23, 2013: DC Circuit ruling on SILs and SMCs for PM2.5.
- March 4, 2013: EPA preliminary positions on court ruling and related Implications for Major New Sources/Modifications .
  - Best Case: New requirements can be addressed with additional analysis.
  - Worst Case: One year of preconstruction monitoring and multi-source modeling.

PM2.5 SILs/SMC Remand

Before October 2010 action, SILs existed by guidance only as a *de facto de minimis* level

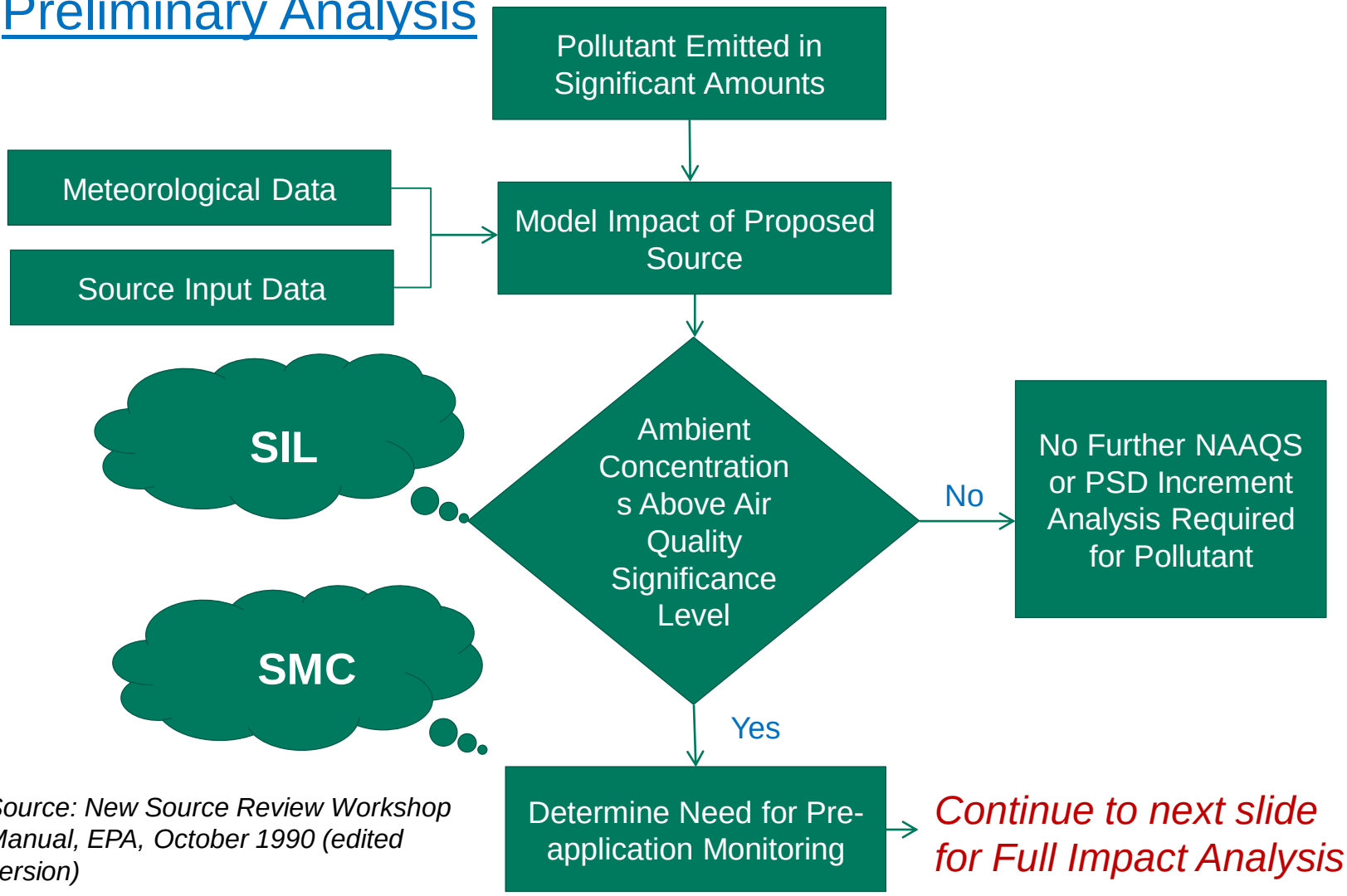
- Emissions increases causing impacts below SIL exempt from full PSD air quality analysis (adopted for PM2.5 as 51.166(k)(2) and 52.21(k)(2)) – **vacated and remanded**
- Facility impacts below SIL demonstrates that neither causes nor contributes to an exceedance of an ambient standard (adopted for PM2.5 as 51.165 (b)(2)) – **not vacated and remains in effect**
- Utilized for all regulated NSR pollutants

SMCs used to exempt a project from pre-construction monitoring

- Court found that the **EPA was precluded from using the SMC as a *de minimis* exemption** from the statutory requirement to do preconstruction monitoring
- EPA must re-consider use of SMCs for other pollutants

Basic Steps in the Air Quality Analysis

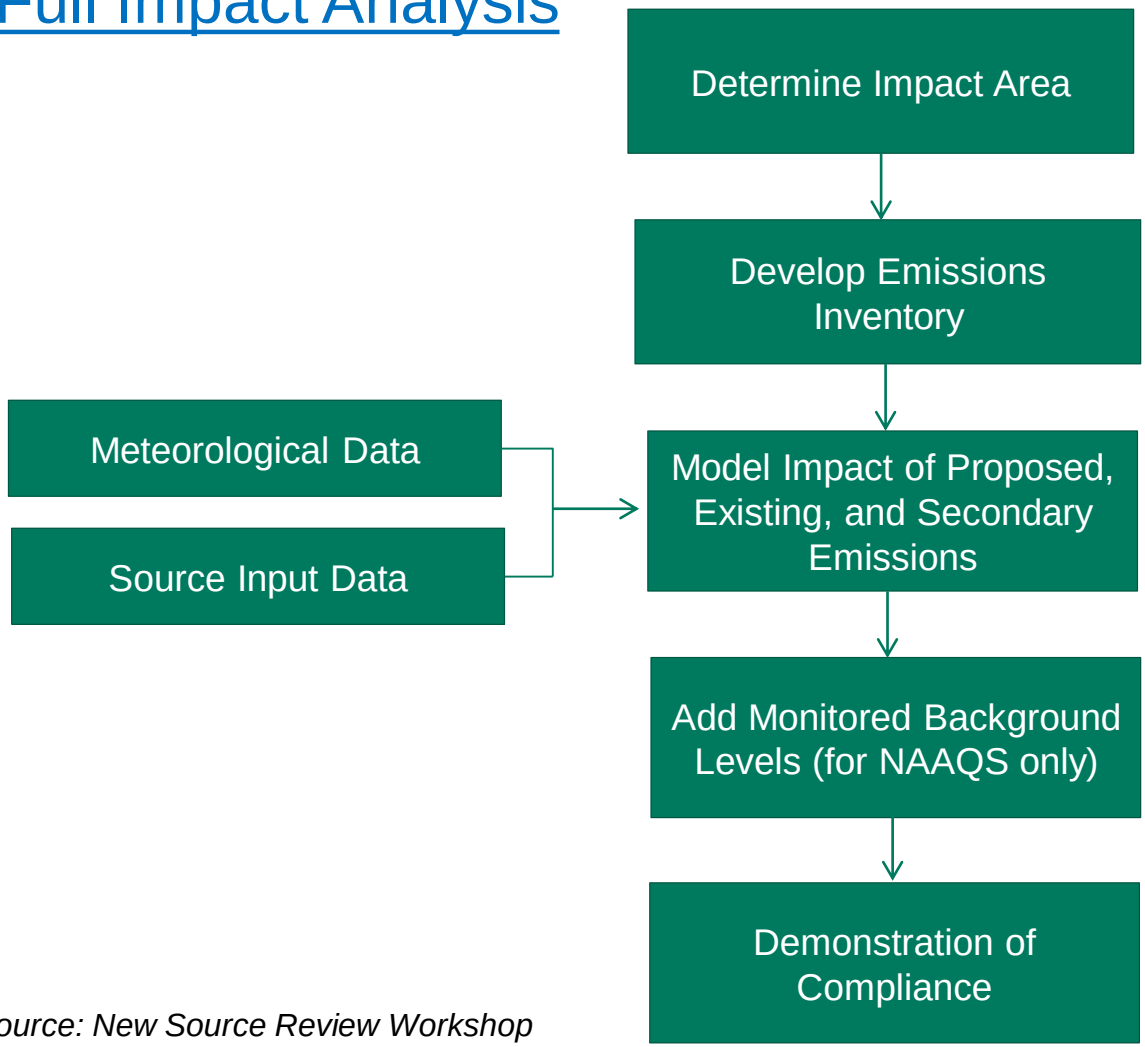
Preliminary Analysis



Source: New Source Review Workshop Manual, EPA, October 1990 (edited version)

Basic Steps in the Air Quality Analysis

Full Impact Analysis



Source: New Source Review Workshop Manual, EPA, October 1990

Path Forward Based on EPA – Preliminary Guidance

Q & A Issued March 4, 2013

EPA "..advises permitting authorities to immediately align their permitting actions with the decision"

Issued Permits – Sources may want to supplement application to support SIL Use and existing monitoring data

- EPA says, "No Effect", i.e. No Recall
- "States should be advised that permits issued on the basis of these provisions may be inconsistent with the Clean Air Act and may be difficult to defend in administrative and judicial challenges."

Pending Permits (Federal and delegated states)

- Cannot rely on SMCs to avoid "compiling air quality monitoring data for PM2.5".
  - EPA says "We believe that applicants will generally be able to rely on existing ***representative*** monitoring data to satisfy the monitoring data requirement."
- Do not rely on the PM2.5 SILs **alone** to demonstrate "not cause or contribute"

Implications for Future Applications

Preconstruction ambient monitoring data

- Could be on critical path, especially PM2.5.
- Need to determine availability of “representative data” early in the site selection process.
- Collecting data adds up to 15 months to the permit schedule.

Using SILs

- Document ample room between background air quality (i.e. monitoring data and NAAQS) to show SIL won’t cause a NAAQS exceedance.
- Address proactively potential accumulation of insignificant (< SIL) sources.
- Permitting record must support the “not cause or contribute” conclusion.
- Include for all pollutants to head-off future challenges.

GHG Issues

- Proposed EGU NSPS
- Impact of GWP Revisions
- Recent BACT Decisions
- Biomass GHG

Supreme Court Grant of Cert

- The issue being reviewed

  "Whether EPA permissibly determined that its regulation of greenhouse gas emissions from new motor vehicles triggered permitting requirements under the Clean Air Act for stationary sources that emit greenhouse gases."

- Potential Impact – If the court rules EPA went beyond its authority, GHG emissions will not be sufficient to trigger PSD applicability

- If PSD is triggered by another pollutant then GHG BACT could still be required

EGU NSPS

Re-proposed 20 September 2013
Effective from date of publication in FR

- New Coal-Fired Units – Requires CCS
  - 1,100 lbs CO2/MWh 12-month rolling average
  - 1000 to 1050 lbs CO2/MWh 84-month rolling average
- Natural Gas-Fired Units
  - 1,000 lbs CO2/MWh (>850 mmBtu/hour)
  - 1,100 lbs CO2/MWh (< 850 mmBtu/hour)

CCS Adequately Demonstrated Basis

None Yet In Operation

1. Kemper County Energy – Mississippi
2. Texas Clean Energy Project
3. Hydrogen Energy California Project (CA)
4. W.A. Parish CCS Project (TX)
5. SaskPower Boundary Dam CCS Project

Recent BACT Decisions as Precedent

Pio Pico Permit Appeal (Environmental Groups Challenged)

- EAB upheld the use of a simple cycle unit backing EPA's discretion to define the source category.
- EAB rejected Sierra Club's attempt to remove safety and compliance margins from permit allowances.

Palmdale (CA) Hybrid Power Plant permit appeal denied by EAB. Petitioners failed to demonstrate that Region 9 erred in:

- Not identifying algae ponds as an available control technology in step 1 of the BACT analysis.
- Setting BACT for GHG based on consideration of the 50 MW solar thermal component proposed by the applicant (an all-solar plant is incompatible with the primary purpose of a baseload plant and additional solar power is infeasible due to space constraints).
- Eliminating CCS as a control technology in step 4 of the BACT analysis (cost twice as high as annual cost of entire project).
- Not conducting an independent analysis of the "need" for the new plant pursuant to CAA section 165(a)(2) (given the existing mechanism within the State for such evaluations).

Global Warming Potential

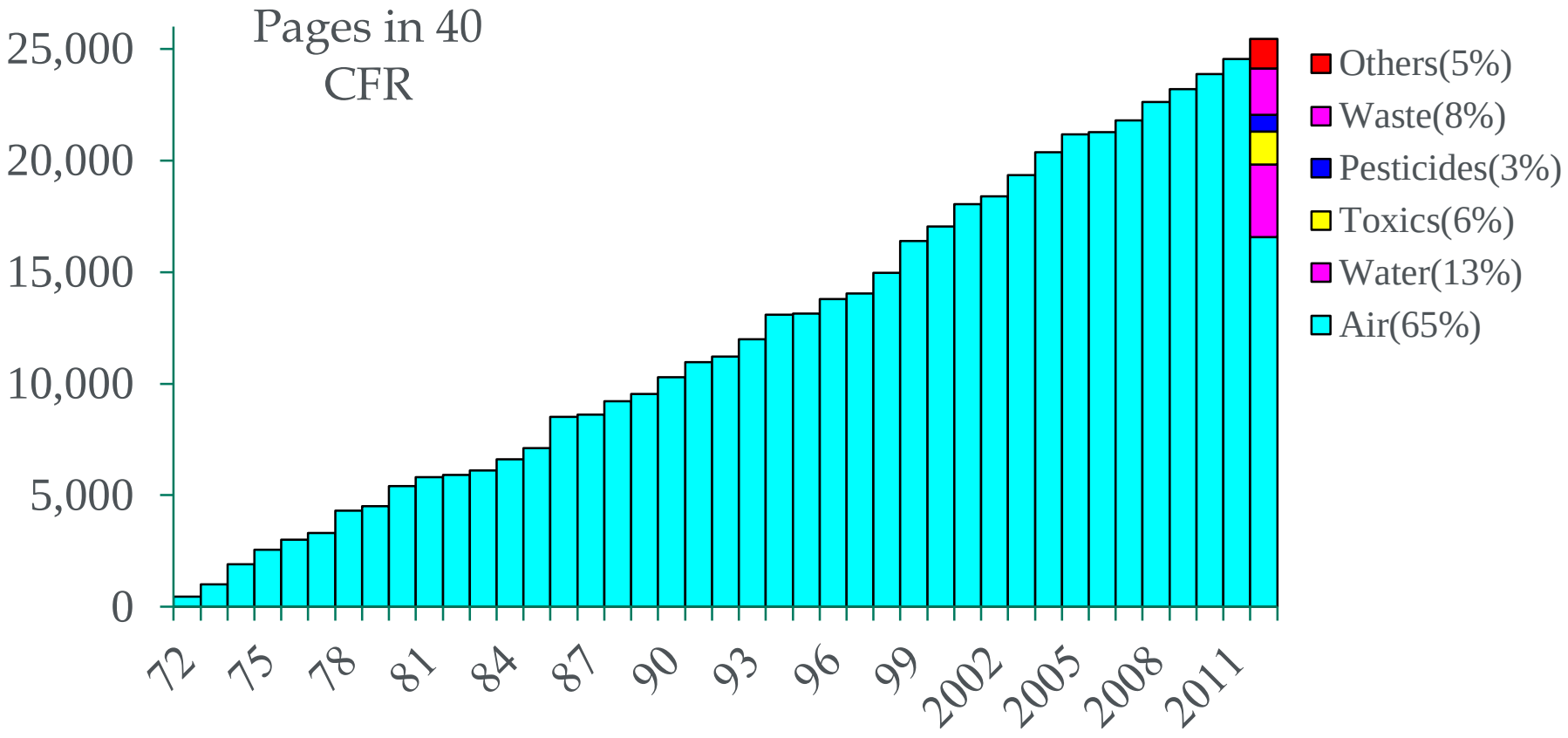
- ***4/2/13*** - EPA proposes to revise the Global Warming Potential for some of the GHG and adding certain F-GHG. [78 FR 19802]
- PSD impacts - Tailoring Rule references 40 CFR 98 for GWP
- Proposed changes include:
  - Methane from 21 to 25
  - Nitrous oxide from 310 to 298
  - Sulfur hexafluoride from 23,900 to 22,800
  - Several HFC and PFC plus 26 additional F-GHG are proposed to be added

Biomass GHG Emissions

- July 12, 2013 – DC Circuit Court of Appeals vacated EPA's Deferral Rule which exempted biogenic GHG emissions from regulation for three years.
- Court ruled that EPA had no authority to grant a deferral.
- Biogenic emissions count towards PSD thresholds.

No Relaxation - U.S. EPA Regulations Continue

Over 25,400 Pages in 2012!!



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