



# NSR Enforcement Initiative: Major Cases, Recent Settlements, and Court Decisions

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Greg Fried, US EPA  
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# New Source Review Initiative

- National NSR Areas
  - Coal-Fired Utilities
  - Acid Manufacturing
  - Glass Manufacturing
  - Cement Manufacturing

# Coal-Fired Utilities







# Coal-Fired Utilities: Updated Results

- 22 Settlements (226 units)
  - > 2.4 million tpy of reductions of SO<sub>2</sub> and NO<sub>x</sub> (upon full implementation)
  - > \$16.6 billion – injunctive relief
  - > \$80 million – civil penalties
  - > \$618 million – mitigation projects
- Most Recent Settlements
  - Tennessee Valley Authority (TVA)
  - Northern Indiana Power Company (NIPSCO)



# Tennessee Valley Authority (TVA)

- Settled April 14, 2011
  - Federal Facilities Compliance Agreement Between EPA and TVA
  - Consent Decree Among TVA, States and Citizen Groups
- Settlement covers TVA's coal-fired system (17,407 MW) - 11 coal-fired facilities (59 boilers) located in AL, KY, and TN
- \$3-5 billion injunctive relief
- \$10 million civil penalty; \$350 million in mitigation
- \$11-27 Billion in Health Benefits



# TVA – Core Injunctive Relief

- Control, retire, or repower 92% of MW between 2012-2018
- 18 Units (2,728.8 MW) retired between 2012-2017
- In addition to existing controls, expect additional
  - 24 boilers controlled by FGDs
  - 11 boilers controlled by SCRs
  - 1 boiler repowered to biomass
- Up to 4,000 MW new combined cycle & simple cycle gas units, constructed with netting credits from retirements



## TVA – NO<sub>x</sub>/SO<sub>2</sub> Emission Reductions

- 225,757 tons of SO<sub>2</sub> and 115,977 tons of NO<sub>x</sub> will be reduced (total 341,734 tons)
- Emissions cut by 67% (SO<sub>2</sub>) and 69% (NO<sub>x</sub>)
- Final tonnage caps exceed proposed Transport Rule by over 51,000 tons (SO<sub>2</sub>) and 18,000 tons (NO<sub>x</sub>)
- Settlement does not relieve TVA of compliance with the MACT or Transport Rule





# TVA – PM Emission Reductions

- 18 units subject to enforceable PM emission rate
- PM CEMS at 17 units (6 stacks)
- Annual system-wide stack testing for filterable and condensable PM
- Extensive studies of existing PM controls to optimize performance and improve maintenance
- 37 boilers studied over staggered schedule
- Excludes retired units and units with new PM controls





# TVA – Mitigation Package

- \$240 million for energy efficiency
  - 26.8 million tons of CO<sub>2</sub> reduced before 2025
  - 24,670,000 MWh of coal generation displaced (estimated by TVA)
- \$50 million for other projects
  - renewable energy, diesel retrofits, and land restoration for national park and forest lands
- \$60 million for state-selected renewable energy projects by 2016



# Northern Indiana Power Company (NIPSCO)

- Settled January 13, 2011
- Covers all four coal-fired power plants (3,300 MW)
- \$600 million in injunctive relief
  - Installation of three new FGDs and one new SNCR
  - Upgrades to four existing FGDs and four existing SCRs
  - Optimization of existing PM controls
  - Permanent retirement of the Dean H. Mitchell Station
- 64,000 tons per year of SO<sub>2</sub>/NO<sub>x</sub> reduced
- \$9.5 million on environmental mitigation projects
- \$3.5 million civil penalty



# NSR Initiative Results - Coal

Total Number of Coal-Fired Units: 1,042

	Number of Units	MW Capacity	% of Capacity	Cumulative MW %
<b>Under Consent Decree (Including TVA and NIPSCO)</b>	226	78,985	24%	24%
<b>Investigations led to no remedial actions</b>	81	24,585	7%	31%
<b>State CD, NGO CD or State Litigation</b>	35	11,156	3%	34%
<b>Fully Controlled *</b>	81	40,144	12%	46%
<b>Active Litigation</b>	55	18,724	6%	52%
<b>Referred or In Active Negotiations</b>	227	64,755	19%	71%





# EPA Litigation

- Alabama Power Company – Judgment March 2011 - under appeal
- Ameren – filed Jan 2011
- Midwest Generation (Homer City) – filed Jan 2011
- Detroit Edison – trial Sept 2011
- Louisiana Generating – Big Cajun 2 (filed February 2009)
- Midwest Generation/Commonwealth Edison – filed August 2009
- Duke Energy Corporation – pending in district court



# Alabama Power

- On March 14, 2011, US Dist Court for the Northern District of Alabama entered final judgment in favor of Alabama Power on claims related to the CAA's NSR/PSD program.
- The three claims in this case arose from major capital improvement projects undertaken at APC's Barry Unit 2, Greene County Unit 2, and Gorgas Unit 10 plants.
- Judge relied on the recent 7th Circuit decision in Cinergy and determined that our expert methodology is only valid for baseload units (Daubert challenge)
- Defined "baseload" as "running virtually continuously" at "full capacity."
- Under Appeal



# Midwest Generation/ Commonwealth Edison

- October, 2009 - Filed complaint against Midwest Generation, the current owner/operator of seven coal-fired power plants in the Chicago area, for violations of PSD/NSR, opacity limits under Illinois law, and Title V.
- March, 2010 - Case dismissed; current owner, Midwest Generation, could not be held liable for violations of a program that is only a preconstruction program prior to its ownership of the plants.
- March 16, 2011 - Case dismissed; Commonwealth Edison cannot effectuate a remedy at plants it no longer owns.
- The only surviving claims in this case are opacity and one PSD claim that allegedly occurred after Midwest Generation purchased the plants.





# Xcel Energy

- In 2009, Xcel refused to respond to an CAA Section 114 request seeking information regarding future project to determined compliance with NSR.
- EPA sued in March 2010
- On September 27, 2010, the US District Court for the District of Minnesota granted the United States' motion for a preliminary injunction and denied Xcel Energy's motion to dismiss.
- Court determined that request information for future projects was within EPA's authority under CAA Section 114, specifically with regard to Section 167 – which empowers EPA to seek injunctive relief “to prevent construction or modification of a major emitting source”
- Court determined that two years of future project information was reasonable.

# Acid Manufacturing Sector





# Acid NSR Results

- 124 Acid Plants
- Percent Addressed: 51%
  - Referrals: 41
  - Settlements: 34
  - No further action required at this time: 30
- Percent of Facilities “Touched”: 93%
  - Facilities investigated: 101
  - Notices of Violations: 14
  - Not yet initiated: 23





# Acid Sector - Results to Date

## Eight Settlements Covering 34 Acid Plants

- Agrium/Royster Clark
  - single facility nitric acid settlement (Feb '07)
- Rhodia Inc.
  - eight plant global sulfuric acid settlement (Apr '07)
- DuPont
  - four plant global sulfuric acid settlement (July '07)
- Chemtrade/Marsulex
  - eight plant global sulfuric acid settlement (Jan '09)
- DuPont/Lucite
  - single facility sulfuric acid settlement (April '09)
- Mosaic
  - single facility sulfuric acid settlement (Oct '09)
- Doe Run
  - Lead smelter (Oct '10)
- Terra Industries
  - nine nitric acid plants (April 2011)



## Acid Sector - Results to Date (con't)

- Nationwide in 12 States
  - California, Indiana, Iowa, Kentucky, Louisiana, Mississippi, Missouri, Ohio, Oklahoma, Texas, Virginia, and Wyoming
- Emission Reduction
  - SO<sub>2</sub> > 86,340 tpy
  - NO<sub>x</sub>, acid mist, VOC, CO and PM > 2,000 tpy
- Injunctive Relief
  - Sulfuric acid: 1.0-2.5 lb/ton (from 3.5 lb/ton)
  - Nitric acid: 0.6 lb/ton (down from 3.0 lb/ton)
  - \$367 million in control technologies
- \$19.6 Million Civil Penalties
- \$48,000 in Supplemental Environmental Projects

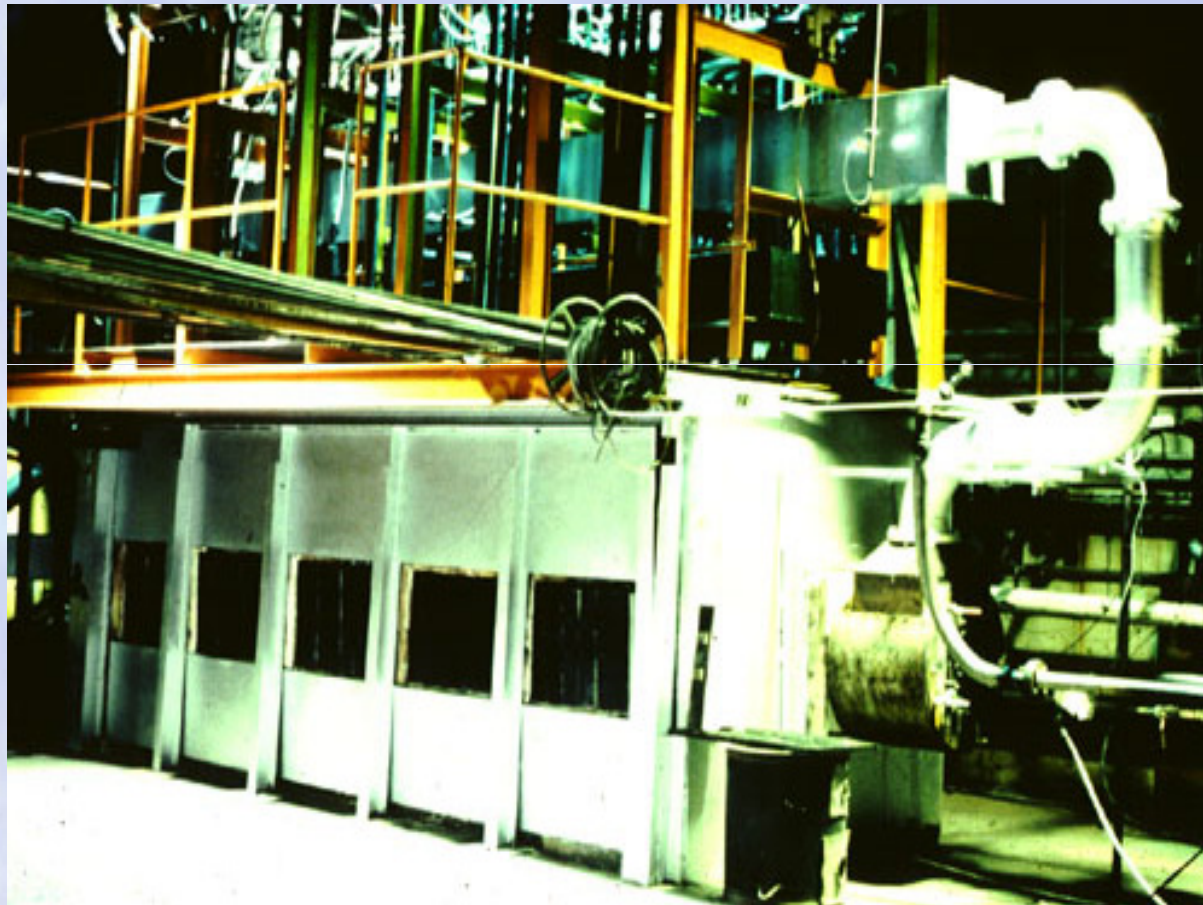


# Terra Industries Inc.

- Settled April 19, 2011
- One of the nation's largest producers of nitric acid and nitrogen fertilizers
- Nine plants located in Iowa, Mississippi, and Oklahoma
- Estimated \$17 million to install new SCRs or upgrade existing SCRs
- Approximately 1,200 tons per year of NO<sub>x</sub> reduced
- \$625,000 in civil penalties



# Glass Manufacturing Sector





## Glass NSR Results

- 135 Glass Plants
- Percent Addressed: 46%
  - Referrals: 22
  - Settlements: 16
  - No further action required at this time: 40
- Percent of Facilities “Touched”: 74%
  - Facilities investigated: 98
  - Notices of Violations: 22
  - Not yet initiated: 37



# Glass Sector - Results to Date

## Case Results

- Saint Gobain; single facility, Madera, CA (Apr 2005)
- Saint Gobain Containers, Inc., global, (January 2010)





# Saint-Gobain Containers, Inc.

- Global Settlement Covers
  - 15 glass-manufacturing facilities in 13 states
  - 31 total furnaces
- The first SCR at a glass furnace in the U.S.
- All furnaces will install controls for NO<sub>x</sub>, SO<sub>2</sub> and PM emissions
  - NO<sub>x</sub> controls are oxyfuel, SCRs and oxygen-enriched air staging
  - SO<sub>2</sub> controls are scrubbers (dry and wet and also cloud chamber scrubbers)
  - PM controls are electrostatic precipitators and cloud chamber scrubbers
- Injunctive Relief -- \$112 million

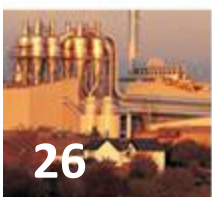




## Saint-Gobain Containers, Contd.

All furnaces will accept enforceable emissions limits:

- **NO<sub>x</sub>**: 1.3 pounds per ton of glass produced for furnaces getting top-tier controls, and 3.8 pounds per ton for units getting second-tier controls
- **SO<sub>2</sub>**: approximately 0.8 pounds per ton for top-tier controls; second-tier units will be controlled to approximately 2.25 pounds per ton.
- **PM**: the CD includes limits for both filterable particulates and total particulates



## Saint-Gobain Containers, Contd.

- The settlement will result in the following emissions reductions, once all injunctive relief is fully implemented:
  - NO<sub>x</sub>: 4,162 tons per year (tpy)
  - SO<sub>2</sub>: 1,386 tpy
  - Particulate Matter: 364 tpy
- Saint-Gobain is paying a \$2.25 million civil penalty, with \$1.15 million to the United States and \$1.1 million to the 10 states and two local regulatory agencies that are co-plaintiffs in the case

# Cement Manufacturing Sector





# Cement NSR Results

- 108 Cement Plants
- Percent Addressed: 46%
  - Referrals: 54
  - Settlements: 17
  - No further action required at this time: 10
- Percent of Facilities “Touched”: 84%
  - Facilities investigated: 72
  - Notices of Violations: 16
  - Not yet initiated: 26





# Cement Sector - Results to Date

- Four Settlements
  - St Mary's Cement (Sept '08)
  - CEMEX Victorville California (Jan '09)
  - Lafarge Global (Jan '10)
  - Cemex Fairborn Ohio (Feb '11)
- Fourteen States
  - CA, AL, MI, GA, IA, IL, KS, SC, OH, NY, WA, MO, OK, PA
- Emissions Reduction
  - NO<sub>x</sub> - 16,790 tons/yr
  - SO<sub>2</sub> - 26,288 tons/yr
- Civil Penalties - \$9.3 million



## Cemex Fairborn, Ohio

- Settled February 10, 2011
- One of the largest producers of Portland cement in the United States
- Estimated \$2 million on injunctive relief
  - installation and continuous operation of a selective non-catalytic reduction (SNCR)
  - installation and continuous operation of a lime spray absorber on the alkali bypass stack
- 2,588 tons per year of NO<sub>x</sub> and SO<sub>2</sub> reduced
- \$1.4 million penalty for Clean Air Act



# Cement Litigation

- Cemex - Lyons, CO
  - January 2009 Filing
- Holcim - Hagerstown, MD
  - May 2011 Filing



Questions?

[fried.gregory@epa.gov](mailto:fried.gregory@epa.gov)