Update on: Clean Air Act Startup, Shutdown, and Malfunction Issues; & Residual Risk and Technology Review

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SSM Broad-brush Overview

- Historical evolution of EPA treatment of SSM events
- EPA current position and recent actions on emission standards
- EPA Flip-Flops on SSM Provisions in CAA § 110 State Implementation Plans
- Current litigation and expected actions

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History - Standard-Setting

Since early 1970s, CAA New Source Performance Standards stated that, unless individual standard differed, "emissions in excess of the level of the applicable emission limits during periods of startup, shutdown, and malfunction [shall not] be considered a violation of the applicable emission limit."

EPA and courts said technology-based standards should be achievable during anticipated range of operating conditions.

History - Standard-Setting (cont'd)

For NSPS, and later for National Emission Standards for Hazardous Air Pollutants (MACT standards), "General Provisions" stated:

- Excess emissions during SSM aren't a violation.
- Can't stack test or use continuous monitoring data from SSM.
- General duty to minimize emissions, including during SSM. Need SSM plan & report SSM events.

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History Takes a Left Turn

In late 2008, Ct. of Appeals for D.C. Circuit struck down SSM exemption in the NESHAPs General Provisions, in *Sierra Club v. EPA, 551 F.3d 1019.*

- "Emission standard" must be "continuous."
- Some standard that meets MACT criteria must apply at all times.

(Court did not say the same standard must apply at all times, and it recognized EPA authority to use work practices where numerical limitations are impracticable.)

Default EPA Approach to SSM in NSPS & NESHAP Standard-Setting (2010 to mid-2014)

- Can’t include a blanket SSM exemption.
- Alternative standards for startup and shutdown permissible, but only if demonstrated need.
- No alternative standards for malfunctions; standards based on normal operations “apply at all times.” If source meets all requirements for “affirmative defense” of malfunction (and reports according to rule), then not liable for civil penalties.

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History Takes Another Left Turn

On April 18, 2014, Ct. of Appeals for D.C. Circuit struck down the affirmative defense in the NESHAP for Portland Cement, in another *NRDC v. EPA* case, 749 F.3d 1055.

- District courts, not EPA, have authority to determine an appropriate civil penalty. (EPA, however, can determine an appropriate administrative penalty.)
- EPA can give court its views on appropriate penalty in a citizen suit, through policy statement, intervention or *amicus brief*.

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Standard-setting, Today

- Alternative limits for startup or shutdown possible, if justified. No "affirmative defense" in any future NESHAPs or NSPS. Same standard applies during normal operations and malfunctions; even vent from pressure relief device is a violation.
- EPA might change existing NSPS and NESHAPs not otherwise up for review. (EPA committed in litigation to remove affirmative defense provisions.)
- D.C. Circuit basically approved EPA approach (and EPA's claim that using work practice standards for malfunctions is generally not feasible) in the 2016 *U.S. Sugar* Boiler MACT litigation.

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State Implementation Plans – History

Since late 1970s, EPA policy not to approve SIPs with "automatic exemption" from emission limitations for SSM periods. Justification was that SIP limits are designed to meet health protection ambient standards.

EPA, would, however, approve "narrowly drawn" provisions allowing exceedance during SSM to be excused if sudden and unavoidable.

In practice, some SIPs had liberal SSM exemptions; others lacked even an affirmative defense.

State Implementation Plans – History (cont'd)

- In response to ENGO petition, in Feb. 2013 EPA proposed to find SIPs of 36 states "substantially inadequate" to achieve NAAQS or otherwise meet reqmts. of the CAA and require submittal of new plans ("SSM SIP Call"). States could include narrowly drawn affirmative defense. Failure of state to comply would result in Federal Implementation Plan.
- Sept. 2014 EPA reversed position and added 2 more states, saying SIPs can't include an affirmative defense for malfunctions (based on Portland Cement NESHAP decision).

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Final SSM SIP Call Rule published June 12, 2015, 80 Fed. Reg. 33,840

- EPA issued SIP calls to 36 states, based on its objections to provisions in SIPs that excused excess emissions during SSM events or made determination of violation up to state director, or that provided an affirmative defense to penalties.
- About ¾ of the states receiving SSM SIP calls submitted revised SIPs to EPA for approval over several years thereafter (some of which EPA had already said were not approvable). Almost all still await EPA action.

Litigation over Final SSM SIP Call Rule

- About a dozen industry groups (including SSM Litigation Group) and 19 states petitioned for review in the D.C. Circuit. But after briefing completed in late 2016, in early 2017 Trump EPA asked for stay of argument to reconsider.
- Case remained stayed until late last year, although NC and TX dropped out, and Delaware seems to no longer support states' challenge.

EPA Reconsideration…and Re-reconsideration

- In 2020, EPA withdrew SIP calls for IA, NC, and TX, adopting much of reasoning in SSM Litigation Group's briefs on 2015 rule.
- October 9, 2020, EPA Administrator Wheeler memo: new policy on SSM provisions in SIPs, basically adopting industry and state positions that SSM provisions precluded by 2015 policy may be acceptable when SIP is viewed as a whole.
- But on Sept. 30, 2021, Asst. Admin. McCabe memo revoked Wheeler memo and re-adopted 2015 policy. Reconsidering IA, NC, & TX too.

Litigation over Final SSM SIP Call Today

- Oral argument now scheduled for March 25, 2022. Industry and state petitioners will split 45 minutes. EPA and Sierra Club et al. split 45 mins.
- Parties filed short supplemental briefs early this year, discussing developments since case was briefed in 2016. States say EPA actions in 2020 show EPA's interpretations in 2015 were wrong. Industry says EPA 2020 actions show we are correct as a factual matter that, even with SSM provisions, other provisions of SIPs function to make the SIP adequate to meet NAAQS and other CAA requirements.

Litigation over Final SSM SIP Call (cont'd)

- Opinion from D.C. Circuit probably Sept. – Jan.
- Key arguments:
  - States have discretion to decide means of meeting CAA goals. SIP call authority limited to SIPs that in fact are not sufficient to meet NAAQS, not failure to comply with EPA policy preferences. Penalizing unavoidable malfunctions doesn't increase protection.
  - Defining "emission limitation" as a continuous requirement does not mean it must be the same limit at all times. Work practices and other SIP provisions means SIP as whole satisfies definition.
  - SIPs can include an affirmative defense, even if NESHAPs can't. Fifth Circuit approved (TX) affirmative defense in *Luminant* case.
- Case may have broader implications for EPA forcing SIP revisions to conform to EPA policy.

Ongoing/Future SSM Actions

- Sept. 30, 2021 McCabe memo directed EPA regions to process SIP revisions required by 2015 rule (could mean FIPs in some cases). May look for additional "objectionable" SSM provisions in SIPs.
- Proposed actions to revoke withdrawal of IA, NC, and TX SIP calls to be sent for OMB review soon.
- ENGOs filed mandatory-duty case in September in Northern District of California, seeking order requiring EPA to implement 2015 SIP calls promptly; but it's been stayed until at least March 8, 2022.

Update on EPA Residual Risk and Technology Review Rulemakings

- RTR process as EPA conducted it in first two decades of 21st century
- *LEAN* decision and expanded review
- EPA ongoing reviews and schedule
- Implications of new HAP listings, environmental justice

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Statutory Directives

- CAA § 112(f) ["residual risk review"] (8 yrs. after initial MACT standards):
  - Additional standards to protect public health with an ample margin of safety.
  - Also to prevent an adverse environmental effect, taking into account cost, energy, safety, and other relevant factors
  - Lifetime excess cancer risk for MEI less than $1x10^{-6}$
- CAA § 112(d)(6) ["technology review"] (every 8 yrs.): Review emission stds., "and revise as necessary (taking into acct. developments in practices, processes, and control technologies"

Implementing the Statutory Directives

- EPA is far behind on meeting 8-year deadlines, as more continue to accrue (including second-round technology review). Industrial boilers years away.
  - Multiple citizen suits establishing new deadlines.
  - EPA also is reviewing/revising numerous RTR rules completed late in Trump Administration.
  - EPA historically often added new requirements (and deleted SSM provisions) during technology review.
- EPA and courts say residual risk review is one-time; however, EPA suggests it may be re-done for new HAPs, new emissions data, new toxicity data, or new demographic impact data

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Filling "HAP Gaps"

- 2020 D.C. Circuit *Louisiana Environmental Action Network v. EPA* (*LEAN*) decision, 955 F.3d 1088: EPA cannot limit technology review to limitations in the existing MACT standard; must address all HAPs the source is known to emit.
- Expanded review proceeding even where modeled risk is already low. More emissions testing required.
- Unresolved issues: When is a pollutant known to be emitted? Can EPA decide it is not "necessary" to impose a new limitation? Can/must EPA look at additional emission units at a source? *De minimis*?

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Emerging Issues

- Dealing with newly listed HAPs. (EPA is working on framework regulation; Q&A guidance for 1/5/22 listing of 1-bromopropane omits standard-setting.)
- Fenceline monitoring to identify emissions, quantify risks, mitigate risks (sword or shield).
- Addressing disproportionate impact (Environmental Justice), e.g. Primary Copper RTR
- Lowering risk level EPA has considered acceptable
- Using "totality of circumstances" to supplement quantitative risk assessment, e.g. MATS proposal