Pulp and Paper Residual Risk and Technology Rule

July 12, 2012

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Key Issues from December proposal

- Risks acceptable under section 112(f)
- Proposed Technology changes under 112(d)(6) – very surprised
  - Increase condensate control efficiency from 92 to 94%
  - Increase pound per ton treatment requirement by 25% – would require additional collection of condensates
- Asked for comment on elimination of excess emission allowances
- Proposed to drop start-up, shutdown and malfunction provisions

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AF&PA actions since Proposal

- Filed extensive comments on February 27th
- Several meetings and calls with OAQPS staff
  - Cluster very complicated rule with interrelated parts and innovative alternatives carefully developed with stakeholders
  - Current EPA staff were not part of rulemaking 15+ years ago so education on history and rationale for provisions
  - Presented analysis and data including costs
- Filed supplemental comments on June 27 on venting allowances per AA McCarthy 2/22 comment extension

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Residual Risk – 112(f)

- Cluster MACT has resulted in reduced risks
- Support EPA's conclusion that risks acceptable
  - Industry worked with EPA for five years to improve data
  - Cancer, chronic and acute risks have Ample Margin of Safety
  - Eighty further refinements by mills further lower exposures
- Conclusion – no cost effective emission reductions

Suggested Improvements – Don't Change Basic Requirements

- No Control Efficiency Change
  - Systems that are "over-performing" are just meeting requirements given variability and need for compliance margin
  - No changes in controls, process or practices under 112(d)(6)
  - 92 to 94 percent is a major change – stripper & WWTS upgrades
- No Need To Over-Collect Condensates
  - Very complicated Cluster compliance options – Clean Condensate Alternative (CCA), strippers, & wastewater treatment systems
  - Mill by mill data shows no "over-collection" – just continuous compliance with current standard
  - Cost half a billion ($500 M) in capital to comply – lose CCA

Cost to Treat to 94% : EPA – AF&PA Comparison

	EPA Estimate	AF&PA Estimate
Number of Facilities Affected	15	84
Capital Cost ($M)	$36	$223
Annualized Capital Cost ($M)	$4.1	$21
Annual O&M Costs ($M)	$0.15	$47
Annualized Cost ($M)	$4.25	$68
Cost /Ton (Using 4092 tons/yr)	$1,000	$16,700

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Venting Issues – Emission Allowances

- Current 1%, 4%, and 10% are critical to safe operation of mills – explosive gases, worker protection and equipment integrity
- Not malfunctions but part of normal process variability – insurance and fire requirements; systems designed to vent
- NCASI survey of 81 mills shows wide variety of common events that are unavoidable
- At minimum, defer action in final RTR – significant information to evaluate, not essential to (d)(6) or (f), huge costs, and cannot be eliminated
- Part of floor determination for best performers so no basis for change
- Emissions reflected in risk analysis so no health issues

NCASI Venting Survey Results

- Intermittent venting occurs during normal operations as well as during startup and shutdown
  - Distinguished by threshold parameters or predetermined actions
- Momentary problems with transport system equipment as common as issues with process and control equipment
- Steam stripper downtimes are not zero control periods
  - Condensates routed to WWTS – control continues
- Venting due to “fail-safe” systems, interlocks, and system permissives are integral to NCG system and either self correct or addressed through system isolation

Venting Elimination Impacts - $750 M ++?

Cost Elements	Number of Units Affected	Capital Cost
Route HVLC Systems to a Backup Control Device	28	$ 100 M
Upgrade existing HVLC/LVHC Collection Systems	73	$ 150 M
Replace existing HVLC/LVHC Collection Systems	24	$ 200 M
Install Back-up Strippers	44	$ 300 M
TOTAL (minimum)		**$ 750 M**

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Start-up, Shutdown, & Malfunction

- Emissions are different during startup & shutdown compared to normal operation
  - Nothing in EPA record to support equivalency
  - Legally do not have to change – part of original Cluster, 2008 DC Court decision does not compel
- IF EPA drops S&S language (parenthetical saying S&S is in addition to venting allowances):
  - At least include within the venting allowance periods
- Malfunction – affirmative defense
  - Change not required by RTR or court order; related to venting allowance issue
  - If malfunction is violation, then standards ≠ MACT floor
  - Affirmative defense criteria could exclude anticipated safety venting; unreasonable reporting depth and timing