



Overview of Air Quality Issues and Regulations Affecting the Forest Products Industry

October 1, 2013

NCASI Western Regional Meeting

Vancouver, WA

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Overview

- The “Train Wreck” Part IV
- Old issues – Boiler MACT
- New emerging issues - NAAQS
- Wrap up – highlight a few other air issues

Potential Air Regulations Affecting Forest Products (2013-2020)



Boiler and NHSM Update

- Goal: Protect improvements; get technical fixes
- August 6 – Reconsideration issues identified by EPA
 - Success on S&S, operating capacity, NHSM recordkeeping
 - Reconsideration rule - fall
- September 7 - NHSM listing at OMB
 - Paper recycling residuals, C&D and creosote rail ties – details important
- Litigation schedule – complex issues and many parties
 - Complete by summer 2014, hope oral argument is fall 2014
 - Decision first half of 2015 – less than year before compliance date
- Largely defense focused expect energy audit challenge
- Tracking any delays by states in granting one year extensions

Other Air Toxic Issues

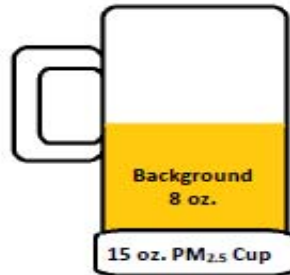
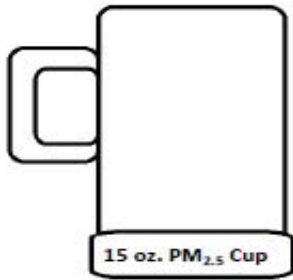
- Start-up, Shutdown & Malfunction State SIP Call
 - EPA pushing states to drop many SSM provisions
 - May proposal but final delayed until later this fall
 - Unlawful – working with coalition
- Wood MACT – early planning stage
 - EPA has no schedule yet, but ...
 - Unregulated sources need MACT – lumber kilns plus miscellaneous
 - MACT sources get risks assessed - risk drives? what sources?
 - MACT gets second guessed – technology better than 90%?

NAAQS Implementation

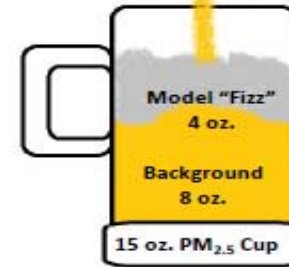
- Issue: Permitting Gridlock possible with tougher NAAQSs
 - Background Levels + Mill Emissions < NAAQS
 - IF “Emissions cup” overflows – no permit!
- EPA “matrix” of improvements here? (coming soon)
 - Compare with AF&PA/AWC suggestions and priorities
 - Modeling and emission improvements – receptors, monitoring citing, variable emission inputs, and better methods
 - Policy fixes – PM surrogacy policy and guidance with new NAAQS
 - Create sense of urgency at EPA and Hill – slower than we want
 - Coalition of manufacturers getting engaged

Modeling "Fizz" and Stringent NAAQS:

Not Enough Room Left in the Cup
For Economic Development

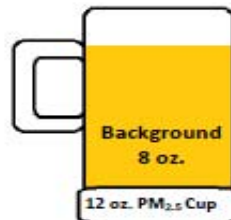
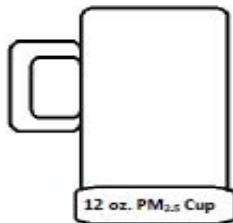


Actual Emissions
1 oz.

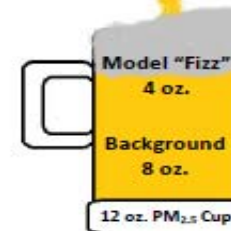


Total Actual and Modeled Emissions
13 oz.

Room Left in 15 oz. Cup for Permit



Actual Emissions
1 oz.



Total Actual and Modeled Emissions
13 oz.

12 oz. Cup Overflows, No Room Left for Permit

Ozone NAAQS

- Proposal late 2014 – will get tougher (75 ppb → 60-70 ppb)
 - Twice to almost ten times more mills affected
- Lead to tougher NOx and VOC controls
 - Hundreds of millions dollars, perhaps billions
- Scientific concerns:
 - AWC/AF&PA leading coalition to review uncertainties
 - EPA needs to look at “weight of evidence”
 - Mortality studies – many negative studies and confounding variables

Mill Impacts of Ozone NAAQS

2009-2011 Design Values	Current 75 ug/m ³ standard	70 ug/m ³ standard	65 ug/m ³ standard	60 ug/m ³ standard	55 ug/m ³ standard	Total # evaluated
Paper Mills in NA County	13	28	61	61	66	186
Paper Mills w/in 15 km of NA	26	63	128	128	135	186
Wood Product Mills in NA	2	5	10	32	38	206
WP Mills within 15 km of NA County	11	34	47	89	96	206

EPA's Causal Classifications

Health Outcome	Short-term Exposure		Long-term Exposure	
	2006 AQCD	2013 ISA	2006 AQCD	2013 ISA
Total mortality	Suggestive	Likely causal	Inadequate	Suggestive
Respiratory effects	Causal	Causal	Suggestive	Likely causal
Cardiovascular effects	Suggestive	Likely causal	No conclusions	Suggestive
Central Nervous System effects	Suggestive	Suggestive	N/A	Suggestive
Reproductive and developmental effects	N/A	N/A	Inadequate	Suggestive

Long-term Mortality – Suggestive?

Cohort	2006 AQCD	2012 ISA	Post-ISA Studies
Harvard Six Cities	Dockery <i>et al.</i> , 1993		
ACS Cancer Prevention Study II	Pope <i>et al.</i> , 2002	Jerrett <i>et al.</i> , 2009 Smith <i>et al.</i> , 2009	
AHSMOG	Abbey <i>et al.</i> , 1999		
105 US Cities		Zanobetti and Schwartz, 2011	
Brisbane, Australia		Wang <i>et al.</i> , 2009	
Other			Lipsett <i>et al.</i> , 2011 Spencer-Hwang <i>et al.</i> , 2011

No associations

No consistent associations

lung cancer
60-150 ppb
only

congestive
heart failure
only

PM NAAQS and Research

- PM NAAQS
 - New rule went from 15 to 12 ug/m³
 - Filed court challenge March 15 as well as petition for reconsideration to EPA – tie to implementation concerns
 - Brief filed mid-August – courts defer to EPA?
- Starting to look ahead to 2018 5-year review
 - Workshop of experts to identify key data gaps – coalition effort
 - Recommendations will inform 2014-15 research plan

Air Rules	<u>Activities</u>
NAAQS Implementation	<ul style="list-style-type: none"> - Improved modeling parameters and algorithms - Improve policies, such as surrogacy, receptor, and Monte Carlo tools for emissions - Improve emissions inputs, such as better emission factors and recognize uncertainties with fugitives
Paper RTR Subpart S	<ul style="list-style-type: none"> - Litigation on SSM issues held in abeyance pending EPA revisiting of current venting allowance
RTR Subpart MM: Recovery furnaces, lime kilns, SDT	<ul style="list-style-type: none"> - EPA risk analysis and development of regulatory options - Deadline passed so schedule may change in future
Kraft NSPS	<ul style="list-style-type: none"> - Track final rulemaking and advocate on keeping S&S - Litigation always possibility - GHG
SSM Elimination	<ul style="list-style-type: none"> - Litigation is on hold pending venting allowance actions - SSM SIP call finalization as well – litigation?

Air Rules	<u>Activities</u>
Venting Allowances under Subpart S	- Rulemaking to eliminate may move forward
H ₂ S HAP Listing	- Rulemaking possible with eNGOs petition
CSAPR II Regional Transport	<ul style="list-style-type: none"> - Rulemaking possible although focus on EGUs - Watch state initiatives - Reasonable further progress (RFP) actions by EPA in context of regional haze/transport
GHG BACT	<ul style="list-style-type: none"> -Permitting rule (PSD/BACT) to incorporate Biogenic Framework (possibly part of revised Tailoring rule) - Litigation likely given passed events
Biogenic Deferral	<ul style="list-style-type: none"> - Finalization of Biogenic Framework - Further litigation on Deferral decisions such as rehearing
EGU GHG NSPS	<ul style="list-style-type: none"> - Treatment of biogenics - Impacts on energy costs/electricity - Precedent for future NSPS including existing sources and section 111(d) authorities

Air Rules	<u>Activities</u>
Boiler MACT	<ul style="list-style-type: none"> - Litigation – briefing and oral arguments - Reconsideration rule proposed and finalized
NHSM	<ul style="list-style-type: none"> - Petitions to EPA and finalization of supplemental rule (railway ties, C&D, PRR)
Boiler GACT	<ul style="list-style-type: none"> - Litigation on energy audits likely - Intervention in support
CISWI	<ul style="list-style-type: none"> - Lead to others in litigation
PM NAAQS	<ul style="list-style-type: none"> - Planning for 2018 review – start research based on advice of 2013 PM Expert Panel Workshop - Litigation proceeding , leverage for resolution of implementation issues
Ozone NAAQS	<ul style="list-style-type: none"> - Complete science assessment – spring 2014 - Proposal late 2014 and final 2015 - Deadline suit pending – asking for final by 9/14

Questions

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