

EPA Community Conference Call

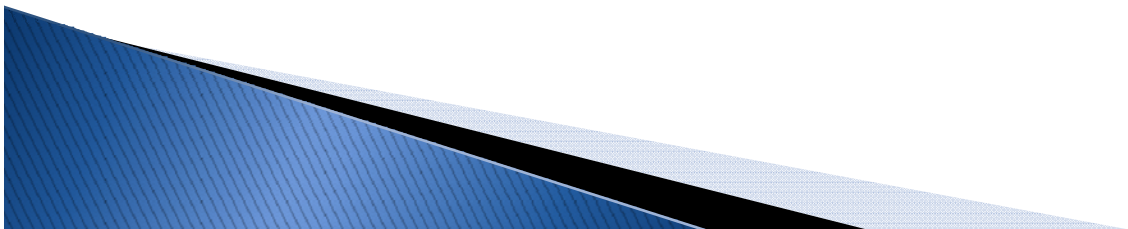
Pulp & Paper Update



June 30, 2011

Pulp & Paper Sector Discussion Agenda

- ▶ Industry Overview
- ▶ EPA Air Toxic Program
- ▶ What is an RTR?
- ▶ The Pulping/Papermaking RTR Plan
- ▶ Opportunity for Public Input
- ▶ Other P&P Rules on the Horizon



Pulp & Paper Sector in Perspective

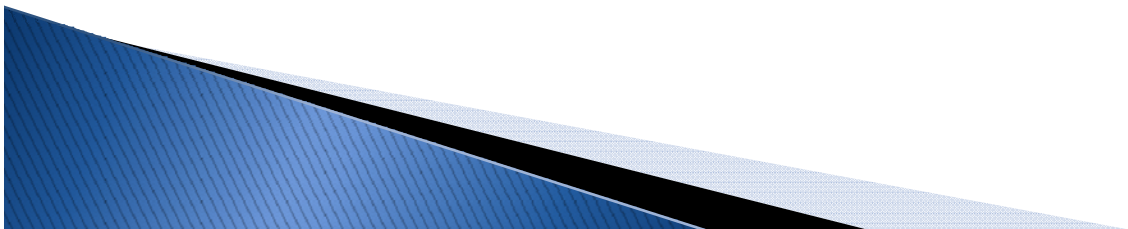
Pollutant	2005 Emissions (tons/year)
HAP	57,000
VOCs	82,000
NO _x	69,000
PM _{2.5}	50,000
SO ₂	332,000*
CO	135,000

- ▶ About 350 U.S. Pulp & Paper Mills
 - Includes 200 major sources subject to MACT/RTR rules
- ▶ \$115 billion in sales; 400K direct jobs
- ▶ 79 million tons paper produced 2008, 18% decrease from 1999 peak
- ▶ China eclipsed U.S. as largest paper producer in 2008; U.S. still largest in pulp production
- ▶ Energy subsidies for biomass energy (burning 'black liquor') now an important factor in net income/profit

* Boiler MACT Rule (co-benefit) projected to reduce SO₂ by over 100,000 TPY with scrubber controls.

EPA Air Toxics Program

- ▶ 1990 Clean Air Act required Maximum Achievable Control Technology (MACT) rules for HAP emissions
- ▶ CAA requires review every 8 years after finalized
- ▶ MACT rules must be reviewed for:
 - Risk remaining from residual HAP emissions after MACT controls are in place
 - Technological advances in pollution control

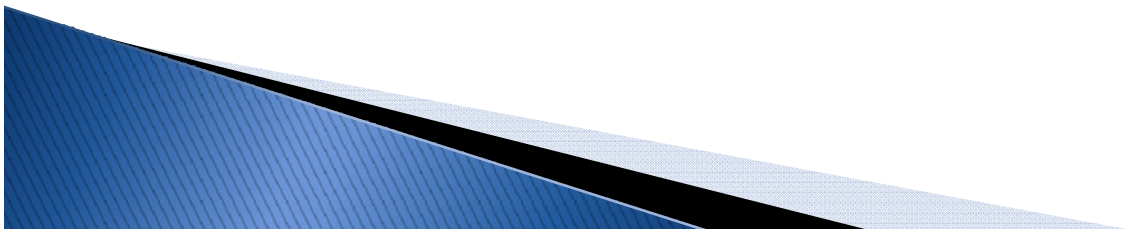


What is an RTR?

- ▶ The Risk and Technology Review (RTR) includes:
 - Source Review – all residual HAP risk from the specific source
 - Other Reviews - Planned here, elsewhere resource dependent
 - Facility,
 - Demographic Impact
 - Technology Assessment of HAP emissions reduction approaches, including technology

Schedule for Pulp/Papermaking RTR

- ▶ Survey P&P industry Spring, 2011
- ▶ Evaluate technology improvements,
conduct risk assessment Summer, 2011
- ▶ Drafting RTR Proposal Summer/Fall, 2011
- ▶ Publish Proposal (court deadline) December 15, 2011
- ▶ Final Rule (court deadline) July 31, 2012



Which Risks do we Evaluate?

▶ Cancer Risks

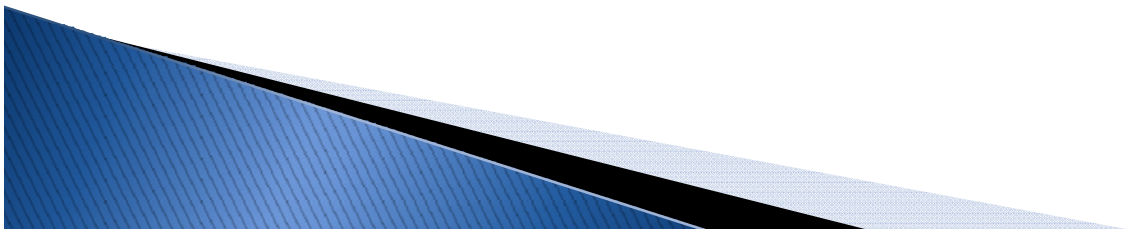
- From long-term exposures to carcinogenic HAP
- Considers cumulative cancer risks from all carcinogenic HAP emitted by the source category

▶ Chronic Non-Cancer Risks

- From long-term exposures
- Considers potential severe adverse chronic effects such as asthma, emphysema, and cardiac disease

▶ Acute Non-Cancer Risks

- From short-term exposures
- Considers potential short-term health effects such as irritation, coughing, runny nose, as well as more serious health outcomes



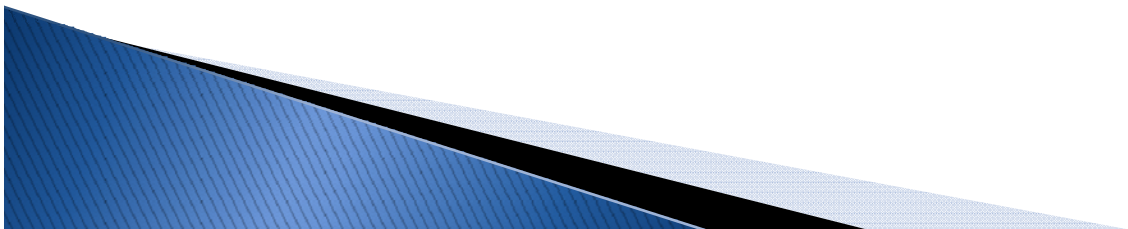
Evaluating Risk and Community Impact

▶ Risk Review

- Evaluate the cancer risk from residual HAP exposure to the most exposed individual in the communities near Pulp & Paper facilities; this risk is known as Maximum Individual Risk (MIR)
- The MIR is one factor in determining whether the risk level is acceptable
 - Considered along with other factors, such as incidence (number of persons potentially impacted), potential for serious non-cancer health effects and the uncertainties of the risk estimates
- EPA will generally presume that if the cancer MIR is less than 100 in a million, risks are acceptable; then will strive to reduce risks further toward an MIR of 1 in a million, considering costs and feasibility of controls

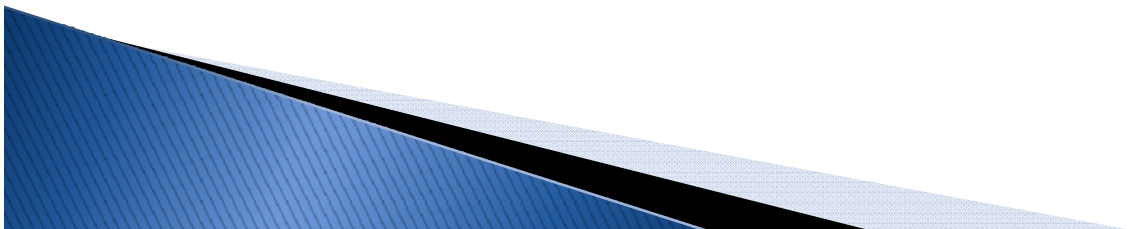
▶ Community Impacts

- Beyond the CAA requirements, EPA will evaluate potential HAP emission impacts on disadvantaged groups in the population



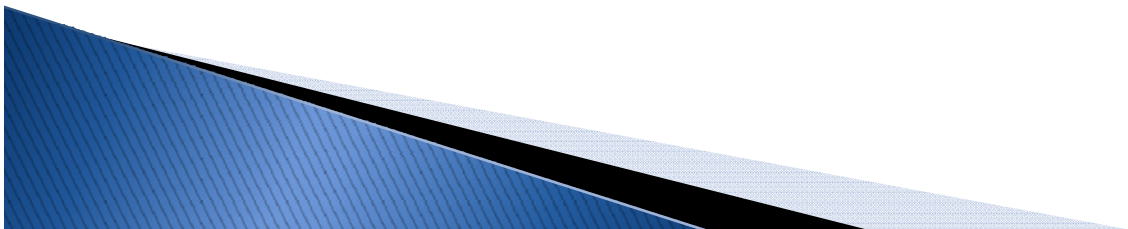
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Future P&P Rulemaking

- ▶ Chemical Recovery RTR (Subpart MM)
 - MACT rule finalized in 2001, compliance 2004
- ▶ Review Kraft Pulping New Source Performance Standards (NSPS)
 - Last reviewed 1986
 - Regulates sulfur compounds and particulates
 - Overlap with MACT on particulates
 - Has Greenhouse Gas (GHG) component; connected to future policy decisions on sustainability of biomass fuels



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