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Risk and Technology Review Update for Chromium Electroplating MACT Standard

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Risk and Technology Review (RTR) Background



- **Section 112(f)(2) Residual Risk**
 - Assess remaining risk within 8 years after promulgation of MACT standard
 - Set standards to provide an ample margin of safety based on the Benzene NESHAP Decision Framework if MACT standards do not reduce cancer risks to less than 1-in-1 million
 - Set standards to prevent an adverse environmental effect considering cost
- **Section 112(d)(6) Technology Review**
 - Review and revise MACT standard, as necessary, at least every 8 years
 - Evaluate developments in practices, processes, and control technologies

Residual Risk Decision Framework



- **Goals**
 - Step 1: Limit cancer MIR to no higher than about 100 in a million (MIR = cancer risk for person exposed to maximum HAP concentration(s) near a facility for 70 years)
 - Step 2: Protect the greatest number of persons possible to approximately 1 in a million lifetime cancer risk or lower
- **Step 1: determine “acceptable risk” considering all health info, including uncertainty (maximum MIR ordinarily about 100 in a million)**
 - Max MIR may be more or less, depending on cancer incidence, persons within various risk ranges, magnitude of noncancer hazard, uncertainties, etc.
 - Cancer incidence should not be limited to, e.g., 1 case/year, but rather weighed along with other risk info
- **Step 2: set standard to provide “ample margin of safety”, considering health info and other relevant factors (costs, feasibility of control, etc.)**

Schedule for Chromium Electroplating MACT Standard RTR



- Preliminary risk characterization - December 2006
- Analyze regulatory alternative impacts – April 2010
- EPA management selects alternative proposal - May 2010
- Propose residual risk and technology review standard (NPRM) – August 2010
- NPRM comment period - Aug 2010-Oct 2010
- Review comments on rule – January 2011 to April 2011
- Final Regulation – May 2011

Other Issues



- PFOS
 - Office of Water has set a health advisory for PFOS and PFOA (0.2 ppb for PFOS and 0.4 ppb for PFOA)
- California Air Toxics Control Measure
 - Amended October 24, 2007
 - Requires much more stringent emission limits for chromium electroplating and anodizing tanks

RTR for Chromium Electroplating MACT Contact Information



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