



## The Mercury and Air Toxics Rule

### *Health and Economic Benefits for Tennessee*

After decades of delay, the Mercury and Air Toxics Rule will place the first national-level limits on hazardous air pollutants (HAPs) from power plants. Power plants emit 84 different HAPs<sup>1</sup> and are responsible for nearly half of all manmade mercury emissions, 75% of acid gases, and 20–60% of many toxic metal emissions.<sup>2</sup> Mercury exposure can cause brain damage in infants and the unborn, and it is estimated that hundreds of thousands of babies are born each year in the U.S. to mothers with potentially unsafe levels of mercury in their blood.<sup>3</sup> Acid gases are corrosive gases that can irritate the nose, throat, and respiratory tract and can even lead to suffocation.<sup>4</sup> Many of the other toxic pollutants controlled by these rules—such as chromium, arsenic, and dioxin—are known or probable carcinogens and can attack the brain, lung, liver, and kidney.<sup>5</sup>

**The Mercury and Air Toxics Rule will: prevent 90% of the mercury in coal burned from being emitted, lower acid gas emissions by 88%, and reduce sulfur dioxide emissions by 41%.** Nationally, this rule is expected to save up to 11,000 lives, prevent 130,000 cases of childhood asthma, and avoid 3.2 million restricted activity days each year once in place. The economic value of these health and societal benefits is estimated to be up to \$90 billion each year, which includes billions in pollution-related Medicare and out-of-pocket medical spending.<sup>6</sup>

***Tennesseans will reap vital health benefits from this rule.***

Tennessee had 46 waterbody-specific fish advisories for mercury contamination as of March 2011, so Tennesseans are acutely aware of the human health threat presented by mercury.<sup>7</sup> The pollution reductions from the Mercury and Air Toxics Rule are expected to save up to 370 lives in Tennessee and provide about \$3 billion in benefits to Tennessee each year.<sup>8</sup> These benefits are primarily just those related to premature loss of life, but there are other important health and environmental benefits not quantified here.



More information available at: <http://www.edf.org/health/air/mercury-standards>

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<sup>1</sup> Environmental Protection Agency, *National Emission Inventory (NEI) 2002: Inventory Data: Point Sector Data – ALLNEI HAP Annual 01232008*,  
[ftp://ftp.epa.gov/EmisInventory/2002finalnei/2002\\_final\\_v3\\_2007\\_summaries/point/allnei\\_hap\\_annual\\_01232008.zip](ftp://ftp.epa.gov/EmisInventory/2002finalnei/2002_final_v3_2007_summaries/point/allnei_hap_annual_01232008.zip)

<sup>2</sup> Environmental Protection Agency Web Site, “Mercury and Air Toxics Standards – Cleaner Power Plants,”  
<http://www.epa.gov/airquality/powerplanttoxics/powerplants.html> (Accessed December 21, 2011).

<sup>3</sup> Kathryn R. Mahaffey, Robert P. Clickner, and Rebecca A. Jeffries Adult Women’s Blood Mercury Concentrations Vary Regionally in the United States: Association with Patterns of Fish Consumption (NHANES 1999–2004) *Environment Health Perspect.* 2009 January; 117(1): 47–53.

<sup>4</sup> Regulatory Impact Analysis of the Proposed Toxics Rule: Final Report, March 2011.

<sup>5</sup> Agency for Toxic Substances and Disease Registry, Toxic Substances Release Portal,  
<http://www.atsdr.cdc.gov/substances/index.asp> (last visited July 2011).

<sup>6</sup> “Saving Lives and Reducing Health Care Costs: How Clean Air Act Rules Benefit the Nation,” available at  
<http://www.edf.org/sites/default/files/saving-lives-and-reducing-health-care-nov2011.pdf>

<sup>7</sup> EPA National Listing of Fish Advisories Database accessed March 6, 2011.  
<http://134.67.99.49/scripts/esrimap.dll?name=Listing&Cmd=Map>.

<sup>8</sup> Regulatory Impact Analysis for the Final Mercury and Air Toxics Standards. Available at:  
<http://www.epa.gov/airquality/powerplanttoxics/pdfs/20111221MATSFfinalRIA.pdf>