FACT SHEET: U.S. SENATE HEARING ON MERCURY POLLUTION RULE

Uncontrolled emission of mercury from coal-fired power plants are a serious threat to public health and the environment. Coal-fired power plants are the largest unregulated U.S. source of mercury pollution, emitting 41% of known U.S. industrial emissions. In addition, neurotoxants such as lead polychlrorated buytl (PCB) and certain pesticides also pose high risk of permanent and irreversible dysfunction in humans. Because human brain development is complex in nature and is sensitive to the environment, these neurotoxins can have serious consequences on child development that can lead to disability. However, through systematic efforts, reduction in mercury emissions have been accompanied by approximately 80% mercury reductions in wild life associated with the food chain that can damage the nervous system of children. A discussion of the risks of mercury from coal fired power plants to subsequent damage of a child's nervous system, risks to pregnant women and technologies to prevent toxins that may cause disability follow.

Risks to Development of Children

Children and infants are sensitive to mercury effects because their nervous systems continue to develop until about age 20. The number of children at risk of disability has increased over the years as information becomes available on actual blood levels of mercury in U.S women and children. Many children with high levels of mercury in their blood might require remedial classes or special education. There are 4.7 million women of child bearing age, in the U.S., who have mercury blood levels that exceed safe levels for unborn children.. Estimates range from 322,000 to 630,000 newborns at risk each year from mercury exposure in utero

Nervous System Damage

Methylmercury can cause irreversible damage to developing brains of children even at low levels of exposure. Nuerotoxant exposure can include loss of intelligence, disruption of behavior, increased risk of attention deficit disorder and heighten the risk of autism.

Risk to Pregnant Women

Mercury and other environmental toxins from coal fired-power plants contaminate lakes and streams and enter the human food chain through fish and other forms of wild life. All of Wisconsin's 15,000 lakes and 44,000 streams have been posted with mercury health advisories directing that women of child bearing age and children under age of 15 not to eat large sport fish. When pregnant women eat mercury contaminated, fish the methyl mercury from the fish enter the mothers bloodstream and move directly across the placenta to enter her child's body. In one study, eighty-nine percent of women who consumed moderate to high consumption of fish exceeded EPA's safe level of mercury. and posed a risk to new borns.

Available Technologies

Arguments have been made that available technology is inadequate to control toxins from coal fired power plants Available data suggests otherwise. Some data that may provide information of available technology to capture toxic materials such as mercury appear below.

- Technology is now available to effectively capture 70% to 90% of mercury in flue gas.
- .More mercury is removed if the activated carbon technology is issued in conjunction with a fabric filter
- More than a dozen new pollution control technologies are currently under development with six to be available in 2005.

Utility Toxic Emissions Fall Within the U.S.

There is a debate as to where toxins from coal-fired power plants fall. In general, most of the sources of toxic pollution come from and fall on the United States. There are geographical disparities as to where toxic materials fall. A considerable amount of toxic material falls from the coal fired power plants with the remainder subject to wind patterns. Data that describes fall of toxic pollutants from coal fired power plants are listed below

- Sixty Percent of the total mercury deposited the U.S. come from U.S. based sources
- Thirty to Fifty percent of U.S. utility emissions will fall within the U. S.
- There is 11% to 80% of the mercury falling on the U.S. with about 10% in the west and 60% to 80% estimated for the Northeast and South
- The Environmental Protection Agency estimates that up to 14% of the mercury emitted by coal burning power plants deposits within 30 miles of the plants

*Excerpts from a Senate Oversight Hearing on the Administration's Mercury Pollution Rule, 430 Dirksen Senate Office Building, April, 19, 2005