



# Facts About...

## The Maryland Clean Power Rule

*Governor Robert Ehrlich – November 17, 2005 - “The Maryland Clean Power Rule, combined with our historic Chesapeake Bay Restoration Act, makes Maryland a national leader in air and water quality. Our plan dramatically improves year round controls on power plant emissions and will take bold action to reduce harmful mercury levels. In addition to cleaning the air we breathe, the rule will reduce nitrogen pollution entering the Chesapeake Bay, 30 percent of which comes from the air. Simply put, my Administration’s air and water quality strategy is making Maryland a cleaner and safer place to live.”*

### What Is The Primary Purpose Of This Regulation?

- To ensure that emission reductions occur at Maryland power plants and that the reductions are sufficient to bring the State into compliance with the health-based national ambient air quality standards for ozone and fine particulate by 2010.
- To achieve significant reductions in mercury emissions and nitrogen deposition to the Chesapeake Bay.

### How Will This Rule Benefit Maryland?

- Will allow Maryland to comply with the new ozone and fine particulate standards by the 2010 Clean Air Act deadlines.
- Will be the largest emission reducing regulation ever adopted in Maryland.
  - Power plant nitrogen oxide (NOx) emissions cut by an additional 69 % or 45,000 tons per year (tpy), resulting in an overall NOx reduction of about 80 % since 1990
  - Power plant sulfur dioxide (SO2) emissions cut by 85 % or 205,000 tpy and
  - Power plant mercury emissions cut by 80% in 2010 and 90 % in 2015
- Will significantly reduce nitrogen and mercury pollution entering the Chesapeake Bay watershed.



## Who Is Covered By The Proposed Regulation?

- Coal-fired power plant units in Maryland with a capacity of greater than 100 megawatts (MW). The table below lists all of the units covered by the proposed rule.

Power Plant Units Covered by the Proposed Rule	
Units in the Constellation Energy Group System	Units in the Mirant Corporation System
Brandon Shores, Units 1 & 2	Chalk Point, Units 1 & 2
C.P. Crane 1 & 2	Dickerson, Units 1, 2 & 3
Wagner, Units 2 & 3	Morgantown, Units 1 & 2

## What Does The Proposed Rule Require?

- The proposed rule requires the Constellation Energy Group and the Mirant Corporation to dramatically reduce emissions of NO<sub>x</sub>, SO<sub>2</sub> and mercury. NO<sub>x</sub> is a significant contributor to Maryland's ozone and fine particulate problems and also pollutes the Chesapeake Bay. SO<sub>2</sub> is the most significant contributor to Maryland's fine particulate problem and also degrades visibility.
- Nitrogen Oxide Requirements
  - A company's "system" (covered units owned by the same company) must meet a system-wide emission rate of 0.125 pounds of NO<sub>x</sub> per million Btu of energy produced (lbs/MMBtu) by 2009 on an ozone-season and year-round basis.
  - This rate is reduced to 0.100 lbs/MMBtu in 2012 if Maryland's monitors do not show attainment of the ozone standard by 2010.
  - This requirement is expected to drive the installation of Selective Catalytic Reduction (SCR) technology at most covered units.
- Sulfur Dioxide Requirements
  - A company's "system" must meet a system-wide SO<sub>2</sub> emission rate of 0.225 lbs/MMBtu by 2010 year-round.
  - This requirement is expected to drive the installation of scrubbers at all larger units.
- Mercury
  - A company's system must reduce emissions by 80% by 2010 and 90% by 2015.



- The scrubbers and SCRs required for NO<sub>x</sub> and SO<sub>2</sub> will also dramatically reduce mercury emissions. In addition to these “co-benefits,” this requirement is also expected to drive the installation of other mercury reduction systems like activated carbon controls at selected units. To comply with this requirement, it is expected that all covered units will reduce mercury emissions significantly.

### **What Is The Economic Impact On Affected Sources?**

- Affected sources are expected to spend over 1 billion dollars to comply with the proposed rule.
- A large part of this projected cost is already being planned for by the affected sources to comply with the federal Clean Air Interstate Rule.
- A very significant portion of the new costs will be offset by savings linked to fewer allowance purchases and lower coal costs. Because the Maryland Clean Power Rule drives the installation of controls on local plants, local sources will not need to buy as many out-of-state SO<sub>2</sub> and NO<sub>x</sub> allowances to comply with existing NO<sub>x</sub> and SO<sub>2</sub> control programs. There will also be significant savings associated with being able to purchase less expensive coal because of the effectiveness of the SO<sub>2</sub> scrubbing systems. Such savings could offset 30 to 60 percent of the projected new costs.

### **How Does The Maryland Clean Power Rule Relate To The Federal Clean Air Interstate Rule (CAIR)?**

- The Maryland Clean Power Rule complements the federal CAIR program by ensuring that the local reductions needed for Maryland to meet the ozone and fine particulate standards actually occur under the federal “cap-and-trade” framework. In other words, the Maryland Clean Power Rule guarantees appropriate local reductions where CAIR does not.
- The Maryland Clean Power Rule will provide larger reductions in NO<sub>x</sub>, SO<sub>2</sub> and mercury in a faster timeframe than CAIR and the Clean Air Mercury Rule (CAMR).

### **How Will The Maryland Clean Power Rule Help Maryland Meet The New Health-Based Ozone And Fine Particulate Standards?**

- The Maryland Clean Power Rule is the key to bringing Maryland into compliance with the new standards. It will provide over 90 percent of the new local reductions needed to attain.
- Without the reductions from the Maryland Clean Power Rule, the State will remain in nonattainment for both ozone and fine particulate and the health of Maryland’s citizens will continue to be at risk.
- Significant reductions in air pollution transport from upwind sources, like power plants and cars, will also be needed to bring Maryland into compliance.

