MARYLAND
Department of the Environment

Facts About...

Maryland Clean Power Rule

Why does Maryland need the Clean Power Rule?
Maryland's Clean Power Rule is the most sweeping air pollution control measure ever considered in Maryland. The rule will protect public health and assure Maryland will attain the new, more stringent ozone and fine particle federal air quality standards. It also protects the Chesapeake Bay by reducing nitrogen and mercury pollution from the air. Additionally, the rule helps to improve visibility throughout scenic areas in Maryland and other states.

Which sources are affected by the rule?
The rule impacts the six largest coal-burning power plants in Maryland, which account for approximately 95 percent of the state's power plant emissions. Facilities covered include: Constellation Energy Group's Brandon Shores, Crane, and Wagner plants; and Mirant Corporation's Chalk Point, Morgantown and Dickerson plants.

Which pollutants are covered by this rule and how much pollution will be reduced?
This rule requires year-round emission controls that will significantly reduce nitrogen oxides (NOx), sulfur dioxide (SO_2) and mercury from power plants located in Maryland. NOx emissions in Maryland will be reduced by 45,000 tons per year (69%). SO_2 emissions will be reduced by 205,000 tons per year (85%). Mercury emissions will be reduced by 1,400 pounds per year (70%) by 2010. A second phase of controls will reduce mercury by 90% by 2018.

How does the Maryland Clean Power Rule compare to the federal Clean Air Rule?
The Maryland Clean Power Rule will provide larger reductions in NOx, SO_2 and mercury in a faster timeframe than the federal Clean Air Interstate Rule (CAIR) and Clean Air Mercury Rule (CAMR). The Maryland Clean Power Rule also prohibits Maryland power plants from acquiring out-of-state emissions allowances (trading credits) in lieu of adding pollution controls locally.

Does the rule bring us to attainment of the federal air quality standards?
The Maryland Clean Power Rule is the cornerstone of Maryland's plan to meet the new federal ozone and fine particle standards. Local emission reductions from the Clean Power Rule will provide more than 90 percent of the reductions needed in Maryland to comply with the 2010 ozone and fine particle standards.

How does this rule compare to similar regional efforts?
This rule builds on Maryland's existing efforts with the Ozone Transport Commission (OTC). The OTC's Multi-Pollutant Workgroup, chaired by Maryland, has been working over the past several years to develop a regional power plant control program that is more aggressive than the federal approach because EPA's analysis of CAIR shows that Maryland, as well as several other states, will not comply with the new ozone standard with CAIR alone.

How does the Clean Power Rule benefit the Chesapeake Bay?
More than one-third of the pollution entering the Chesapeake Bay comes from the air. Pollutants released into the air (primarily from power plants and vehicle emissions) eventually make their way back down to the earth's surface and are dispersed onto the land and transported into waterways. The emission controls on power plants will reduce nitrogen entering the Bay by up to 900,000 pounds each year and will reduce mercury significantly.

Why do we need to reduce NOx and SO_2?
SO_2 and NOx contribute to the formation of fine particles and NOx contributes to the formation of ground-level ozone. Fine particles and ozone are associated with thousands of premature deaths and illnesses each year. In Maryland alone, as many as 390 premature deaths are anticipated each year. Additionally, these pollutants reduce visibility and damage sensitive ecosystems.

What are the adverse health effects of long-term exposure to fine particulates and ozone?
Adverse health effects that relate to both fine particles and ozone include hospital admissions, emergency room visits for asthma, and restricted activity days. Adverse health effects associated specifically with ozone include decreased worker productivity, respiratory hospital admissions for children under two years of age, and school absences. Excess fine particles can cause premature mortality, nonfatal heart attacks, chronic bronchitis, acute bronchitis, upper and lower respiratory symptoms, asthma exacerbations, and days of work lost.

How can the public comment on this regulation?
Maryland will hold regional public hearings to take comment on the rule in spring of 2006. Once scheduled, the public hearing meeting dates will be posted on MDE's online calendar at: www.mde.state.md.us/calendar.

When will we adopt this rule?
We expect to adopt this rule by summer of 2006.

When will the rule go into effect?
The rule will be effective immediately but controls may take a couple years to implement due to their complexity. Power plants are required to have the NOx controls operational by 2009 and the SO_2 controls and mercury operational by 2010.