Draft BART Recommendations
to MANE-VU Air Directors
September 27, 2005

Under the U.S. Environmental Protection Agency's (USEPA) 1999 "regional haze rule" [64 Fed. Reg. 35714 (July 1, 1999)], certain emission sources that "may reasonably be anticipated to cause or contribute" to visibility impairment in downwind Class I areas are required to install Best Available Retrofit Technology (BART).[1] These requirements are intended to reduce emissions specifically from large sources that, due to age, were exempted from other control requirements of the Clean Air Act (CAA).

BART requirements pertain to 26 specified major point source categories, including power plants, industrial boilers, paper and pulp plants, cement kilns and other large stationary sources. To be considered BART-eligible, sources from these specified categories must have the potential to emit at least 250 tons per year of any haze forming pollutant and must have commenced operation in the fifteen year period prior to August 7, 1977 (the date of passage of the 1977 Clean Air Act Amendments (CAAA), which first required new source performance standards).

MANE-VU formed the BART workgroup as part of an effort to assist states and tribes as they prepare to comply with the Best Available Retrofit Technology Requirements (BART) of the Regional Haze Rule. To date states have made substantial progress in identifying sources that are BART-eligible, however that is only the first step in the process. Once a source is identified as "BART eligible", an analysis must be conducted to determine what will constitute BART control levels. The Haze Rule requires states to determine the most stringent technologically feasible system of controls that can reasonably be installed at each facility eligible for BART. The BART workgroup has developed a list of draft recommendations for the BART control process that will be submitted to the MANE-VU Directors. Feedback on these recommendations will be useful to assist the Air Directors in their review. The recommendations include overall BART policies and specific "presumptive" levels and types of control. These recommendations will serve as a regional foundation for conducting BART engineering reviews on a state-by-state basis. The workgroup recommendations are presented below:

1. ***Any BART-eligible facility may "cap-out" of BART via a permit emission limit, however all permit modifications must be finalized prior to December 16, 2006* in order to eliminate BART-eligibility.*** Caps must limit emissions from BART eligible units below 250 tons per year of any visibility impairing pollutant

   * It is not clear from the final rule when a federally enforceable permit limitation would need to be in place in order to avoid BART-eligibility. We are recommending to EPA that they allow permit limits which go into place prior to December 16, 2006. This will enable states to take action to get permit limitations in place and achieve emission limits (though probably not reductions)

[1] There are seven designated Class I areas in the Northeast and Mid-Atlantic States. They include Acadia National Park and Moosehorn Wilderness Area in Maine; Roosevelt-Campobello International Park in New Brunswick and Maine; the Lye Brook Wilderness Area in Vermont; the Great Gulf and Presidential Range-Dry River Wilderness Areas in New Hampshire; and the Brigantine Wilderness Area in New Jersey.

prior to SIP submission avoiding the need for formal BART determinations. The 2006 date will give states one full year prior to the submission deadline for public notice and hearing processes on a final SIP package.

2. MANE-VU staff continues to support the policy decision made by the MANE-VU Board in June 2004, that ***if a source is eligible for BART, it is subject to BART***. (i.e. no exemptions will be given).

3. ***Regional performance standards or cost thresholds are appropriate*** for many individual categories of BART eligible sources. The attachment contains an initial round of recommended presumptive levels of control for EGUs, industrial boilers and cement kilns. The workgroup may develop additional presumptive levels in the future.

4. Remaining useful life of a source will be considered in the following way: Facilities have the option to ***either control a BART-eligible facility prior to 2013 or accept federally enforceable permit limitation or retirement date prior to December 16, 2006.***

5. ***Control technology in place*** (other than for source categories covered by the attached list of presumptive control levels) ***will likely have to be dealt with on a source by source basis***. (i.e. no regional recommendation)

6. ***Energy and non-air quality environmental impacts will likely have to be dealt with on a source by source basis***. (i.e. no regional recommendation) however the workgroup is still considering regional recommendations for non-air quality environmental impacts.

7. ***If data does not exist*** to accurately determine the installation date for emission unit(s)within a facility ***then the unit will be treated as though it IS within the BART date range unless the facility can provide proof otherwise (i.e., proof that the unit was in operation prior to 1962)***. Many states are having difficulty identifying installation dates for pre-1977 units. All states felt they could easily identify post-1977 units. Therefore, the workgroup supported a policy position that when the state could not accurately determine the "in existence" date, the burden of proof lay with the facility in proving that the unit was installed prior to 1962.

MANE-VU BART Workgroup Recommendations
DRAFT Presumptive Control Levels
Updated September 7, 2005

Non-CAIR EGUs:

- SO_2 – Coal - 95% control or 0.15 lb/MMBtu*
  Oil - 95% control or 0.33 lb/MMBtu (0.3% sulfur content)*
- NO_X
  - in NO_X SIP call area, extend use of controls to year-round
  - 0.1 – 0.25 lb/MMBtu, depending on boiler and fuel type
- PM – 0.02 – 0.04 lb/MMBtu**

CAIR EGUs:

- SO_2 – CAIR requirements
- NO_X – CAIR requirements
- PM – 0.02- 0.04 lb/MMBtu**

If an EGU is only enrolled in CAIR for one or two pollutants, it still must complete an analysis for the remaining visibility impairing pollutants such as particulate matter.

Industrial Boilers

- SO_2 – 90% control, MACT acid gas control level, ICI-RACT, or 0.55 lb/MMBtu (0.5% fuel sulfur limit)
- NO_X
  - 0.1 – 0.4 lb/MMBtu, depending on boiler and fuel type***
- PM – 0.02 - 0.07 lb/MMBtu

Cement Kilns

No common emission threshold has been identified. The following lists, however, recommend control technologies to evaluate.

- SO_2
  - in process removal
  - wet or dry scrubbers
  - conversion from wet kiln to dry kiln
- NO_X
  - Combustion optimization
  - Low NO_X burners
  - Secondary combustion control (SNCR/SCR)
  - Mid-Kiln firing
  - Flame shape adjustment
- PM
  - baghouse
  - electrostatic precipitator
  - baghouse/ESP upgrades of existing controls

*Consistent with EPA presumptive BART for EGUs and OTC Control Strategy
** PM measures are based on front-half (Method 5) particulate matter measures
*** Consistent with OTC Control Strategies and NO_X SIP call emission limits