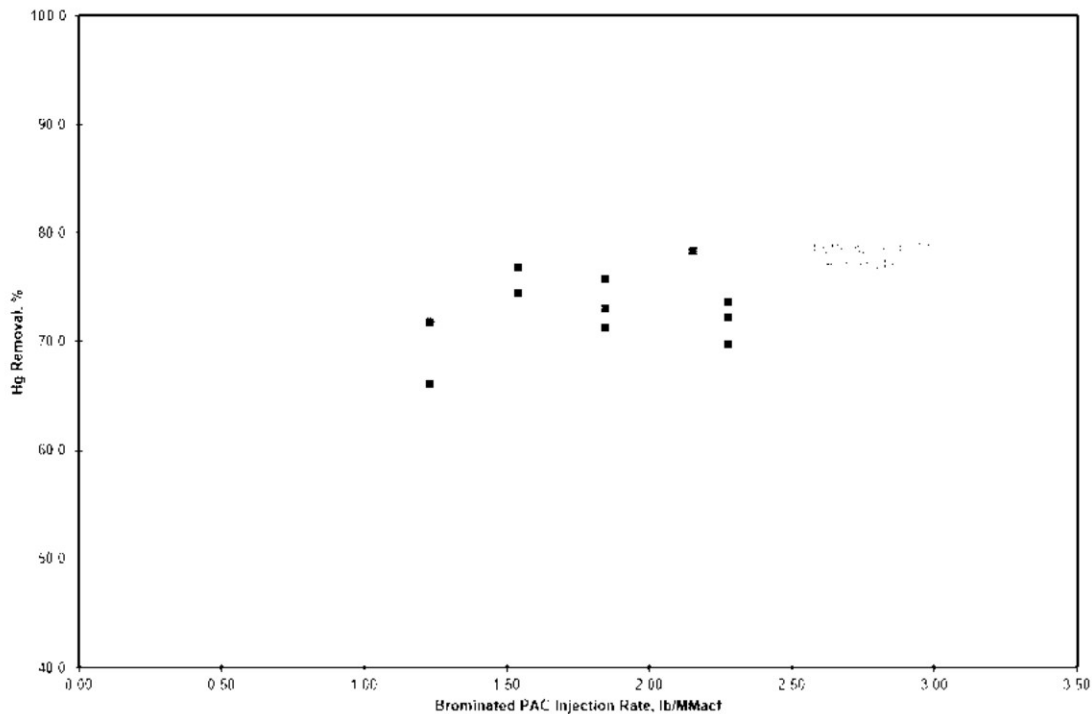


Figure 2-1 — MRY Unit 1 Existing System Mercury Removal Performance Capabilities using Brominated PAC



This result is contrary to EPA's assumption that BPAC at a rate of 3.0 lb/MMacf can be used to result in a 90% removal efficiency. The plotted curve shown in the figure shows a leveling off such that increasing the amount of sorbent results in diminishing improvement in Hg control. The projected curve based on the test campaign results shows this leveling off taking place somewhere less than 80% capture.

Although the plotted values do not support a conclusion that the new Hg 1.2 lb/TBtu limit can be met, further investigation into other Hg control options in combination with upgrading/optimizing existing Hg control equipment would be required to determine the lowest mercury emission rate in lb/TBtu that can be achieved on a long-term basis, considering the range of fuel Hg variability and other technological challenges inherent in capturing Hg resulting from lignite that have been documented to occur. Some proposed options for additional Hg control include:

- Increased fuel additive rate
- Improved reliability of fuel additive concentration in relation to real-time coal firing rates
- Implementation of inlet Hg monitor for improved feedback control of Hg control systems
- Improved lance design to achieve ideal distribution of PAC at all typical unit operating conditions
- Application of WFGD re-emission control additive