UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 Broadway
New York, NY 10007-1866

July 11, 2002

Iclal Atay, Ph.D.
Chief, Bureau of Air Quality Engineering
Air Quality Regulation Program
New Jersey Department of Environmental Protection
401 East State Street - CN027
Trenton, New Jersey 08625-0027

Re: Anheuser-Busch, Inc., Newark, New Jersey Brewery Plant

Dear Dr. Atay:

This is in response to the June 5, 2002 letter from Anheuser-Busch, Inc. (ABI) to the U.S. Environmental Protection Agency (EPA) Region 2 Office, written at the request of the New Jersey Department of Environmental Protection (NJDEP), to seek EPA's concurrence on the selection of the most representative two-year average actual emissions in a PSD applicability analysis.

Background

In early 1996, ABI installed two water-injected EGT gas turbines that proved to be unreliable that are part of two combined-cycle cogeneration systems at the Newark, New Jersey brewery plant. According to ABI, since their installation, these two turbines have failed to perform anywhere close to the normal, expected operation of 90% gas turbine availability guarantee. Instead, its uptime has been consistently decreasing from an 85% availability in 1997 to a 67% availability in the year 2000. Examples of problems that the turbines experienced in the years 1999 and 2000 include bearing failure, oil pump failure, excess vibration, oil seal failure, speed control failure, oil burner purge valve failure, voltage limiter failure, turbine coupling failure, engine clutch failure, inner duct failure, generator failure, etc. ABI states that the poor performance of these two turbines has negatively impacted the brewery's operations and has resulted in increased air emissions since the existing on-site boilers have been required to operate more frequently (to make up for the loss of steam production) and utility-generated electricity has had to be purchased.

Based on this situation, ABI plans to replace these two turbines with two state-of-the-art Solar Taurus 70 gas turbines. According to ABI, the potential emissions from the Solar turbines are less than the potential emissions from the existing EGT turbines. However, they exceed the significance thresholds for NOx and PM_{10}, thus triggering the need to look at contemporaneous increases and decreases. ABI states that increases have not occurred at the plant. The issue

arises when looking at a representative two-year period for the existing EGT turbines (which will be shut down). ABI states that the 2000-2001 period cannot be considered representative because of the actual problems/failures that the turbines experienced during those years. Instead, ABI proposed to NJDEP to use 1997 and 1998 as the most representative years for calculating the two-year average actual emissions (baseline).

Discussion

EPA has historically used the 2 years immediately preceding the proposed change to establish the baseline for actual emissions [see 45 FR 52705, 52718]. However, EPA has allowed the use of earlier periods prior to the modification provided they were deemed to be more representative of normal source operations. As stated earlier by ABI, the manufacturers of the EGT turbines provided ABI with a 90% uptime guarantee. In 1997 and 1998, these turbines actually achieved 85% and 79% uptime, respectively, before they progressively deteriorated into 67% uptime in the year 2000. Based on the facts presented, EPA recognizes that the later years may not be representative of normal source operation because the turbines could not meet their availability guarantee so soon after installation without coming offline for extensive repairs. EPA recognizes that a decline in efficiency or uptime is expected over a period of years and therefore we would not necessarily agree that an earlier period was appropriate, even where the manufacturer's guarantee is not met. However, in this case, where there are apparent design defects, evidenced by the immediate and continued sharp drop in uptime following installation of the equipment, we take a different view. Therefore, EPA believes that NJDEP can use the years 1997 and 1998 as the most representative years for calculating the two-year average actual emissions for the EGT turbines.

Conclusion

EPA concurs with NJDEP's selection of 1997 and 1998 as the two years that represent normal source operation for the two EGT turbines. If you have any questions, please contact Frank Jon, of my staff, at (212) 637-4085.

Sincerely,

/s/

Steven C. Riva, Chief
Permitting Section
Air Programs Branch

cc: Dean E. Pusch
Environmental Affairs
Anheuser-Busch, Inc.