


MEMO TO : Oil and Gas Production Companies

FROM : James L. Semerad 
Director
Division of Air Quality

RE : High Efficiency Program
**Specifically Applies to Combustors
For Upstream Production Facilities**

DATE : March 18, 2021

Based on numerous emissions testing submitted to and reviewed by the North Dakota Department of Environmental Quality – Division of Air Quality (Department), it appears that the Questor Model Q5000 (Questor) and American Welltest Incinerator (AWI) Model 100 combustors are able to achieve a destruction and removal efficiency (DRE) greater than or equal to 99.5%. In addition, testing has been conducted to document NO_x and CO emission factors on both combustor models. Therefore, both combustor models have been approved for the use of a NO_x emission factor of 0.30 lb/MMBtu and a CO emission factor of 0.15 lb/MMBtu.

The Department has authorized the use of Questor and AWI combustors within the High Efficiency Program at approved facilities that comply with Conditions 1 through 11 set forth below:

1. Initial testing of AWI and Questor combustors is required by any company entering into the High Efficiency Program. All combustors entering into the High Efficiency Program must be tested within 45 days after initial startup of the combustor(s). Emissions testing shall be conducted in accordance with EPA Reference Methods listed in 40 CFR 60, Appendix A. Notification of the planned emissions testing must be submitted to the Department within CERIS-ND at the facility level at least 30 calendar days in advance of the testing. The Department shall be contacted for approval of the initial testing schedule and methodology. Successful testing and report submittal will be reviewed by the Department prior to acceptance to the High Efficiency Program.
2. Each model requires separate approval. This approval is limited to Questor Model Q5000 and AWI Model 100 combustors. If a combustor with a model number different from the ones currently approved is to be used in the High Efficiency Program, additional testing and subsequent Department approval will be required in accordance with Condition 1.
3. The Department must be contacted within ten days of installation and operation of any combustors, including the installation of approved models, to determine if testing must be conducted once the combustors have been installed and operations have commenced.