

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY RESEARCH TRIANGLE PARK, NC 27711

SEP 25 2015

OFFICE OF AIR QUALITY PLANNING AND STANDARDS

Keith Crabbe Engineering Manager Cemtek Environmental Inc. 3041 S. Orange Avenue Santa Ana, CA 92707

Gervase Mackay, Ph.D.
President
Unisearch Associates Inc.
96 Bradwick Drive
Concord, Ontario L4K 1K8
CANADA

Dear Mr. Crabbe and Dr. Mackay:

This letter is in response to your letter of August 26, 2015, for review and approval of alternative testing procedures to be applied broadly to stationary source categories covered in 40 CFR part 63, Subparts LLL, UUUUU, and DDDDD under which hydrogen chloride (HCl) is measured continuously to demonstrate compliance.

You explained that Performance Specification 18 (PS 18) and Procedure 6 as proposed (79 FR 31901; June 3, 2014) allowed inclusion of the measurement path for integrated path continuous emission monitoring systems (IP-CEMS) during calibration drift tests while the promulgated version of PS 18 and Procedure 6 (80 FR 38628; July 7, 2015) now requires the exclusion of the measurement path for calibration drift determination. You also indicated that the design of your instrument makes it possible to include the measurement path and you provided data that demonstrate you can meet the performance requirements for calibration drift (CD) when the measurement path is included for the zero HCl concentration drift tests.

You are requesting a broadly applicable alternative test method approval to allow inclusion of the measurement path during calibration drift testing specified in PS 18, section 11.8.6.2, and you have requested the use of the appropriate equations from the proposal of PS 18 and Procedure 6 for calculation of calibration drift.

We have reviewed your request and the associated rule language in both the proposed and promulgated versions of PS 18 and Procedure 6. In consideration of the fact that your instrument design passes the performance criteria of PS 18 and Procedure 6 for calibration drift, we are approving your alternative method approach with the following provisos:

- For IP-CEMS, you must include the source measurement optical path while performing the upscale CD measurement; you may include or exclude the source measurement optical path when determining the zero gas concentration.
- You must calculate the CD as a percent of span for IP CEMS that include the measurement path substituting the following equation for Eq. 7 in PS 18:

$$CD_0 = \frac{(|(MC_i - MN_b) - (MC_{i+1} - MN_b)|)}{S}$$
 Alt Eq. 7

- You must meet the method performance requirements in PS 18 for initial evaluation of your HCl CEMS and you must meet the ongoing performance requirements in Procedure 6 to evaluate the effectiveness of the quality control and quality assurance procedures to generate HCl concentrations for each facility that uses this alternative measurement approach.
- You must include a copy of this approval letter with required monitoring plans and monitoring reports for 40 CFR part 63, Subparts LLL, UUUUU, and DDDDD.

We will announce on EPA's website (at <a href="http://www.epa.gov/ttn/emc/approalt.html">http://www.epa.gov/ttn/emc/approalt.html</a>) that our approval of this alternative is broadly applicable to HCl monitoring using Performance Specification 18 and Procedure 6 under 40 CFR part 63, Subparts LLL, UUUUU, and DDDDD.

If you have questions or need any further assistance regarding this matter, please contact Ray Merrill of my staff at (919) 541-5225 or at Merrill.raymond@epa.gov.

Sincerely,

Steffan M. Johnson, Group Leader Measurement Technology Group

cc: Sharon Nizich, OAQPS/SPPD James Eddinger, OAQPS/SPPD Barrett Parker, OAQPS/SPPD Sara Ayres OECA/Office of Compliance Patrick Yellin, OECA/Office of Compliance Ray Merrill, OAQPS/AQAD