AQMD M313 Pilot Test – Phase Two Draft 1

Step One

Order standards to be calibrated Provide shipping address to AQMD Review complete test method

<u>Step Two</u>

Calibrate all standards using the Calibration and Processing Template

- Calibrate triglyme, IPA, DIIBA, Heptane with a 4 point curve with levels at 15, 10, 1 and 0.1 g/L
- Calibrate all other compounds from list at 15 and 0.1 g/L
 - Percent recoveries must fall within 10% or 0.02 g/L absolute for each level
- Each calibration run should be comprised of no more than 10 compounds; beware of co-elution.
 Each calibration run should be preceded and followed with an IOM injection

Store all calibrations in the Calibration and Processing Template

Step Three

Inject each sample in replicate with a reagent blank in between each sample injection. It is recommended that each sample be injected in the order listed on the cans, starting from #1 and ending with #4. Samples may be analyzed one at a time, or up to three at a time. Due to the complexity of Sample #4, it is recommended that it be injected on its own on a separate day. IOMs must bracket the start of the sequence and the end of the sequence. All QC recoveries must pass.

- Sample injections must be bracketed by a CSV comprised of the 4 extraction markers.
- Sample injections must be bracketed by a CCV comprised of the calibrated compounds in the sample which are greater than 3 g/L. A list of the compounds for each sample, along with each sample's density, solids content, exempt compound concentration and percent water will be submitted to each lab with the samples.

Step Four

Record area counts and area counts for each peak in the appropriate **Calibration and Processing Template** tab for each sample. Do not process peaks that are seen in the CSVs or the blanks which immediately precede the sample.

Process the samples according to the written test method, assigning relative response factors for each of the calibrated compounds that are encountered. Assign the triglyme RRF to all other compounds*. Assign each compound determined to exceed 1 g/L (as triglyme) an identification using a mass spectrometer.

* For samples exhibiting a strong hydrocarbon profile, use the following logic: unless you can specifically find peaks which are neither hydrocarbon nor aromatic, assume that all subject peaks are HCs or aromatics-- use "decane" or "undecane" or "mesitylene" for the RRF if it is appropriate for a group of peaks. For alkanes, use the RRF for the next unbranched alkane in the series (e.g., use the C11 RRF for branched alkanes eluting between decane and undecane.)

Step Five

Submit results through the following OnBase link on or after November 1st

https://onbase-pub.aqmd.gov/sAppNet/Login.aspx

Submit the following:

- The completed Calibration and Processing Template
- A PDF package comprised of the integrated Chromatograms from both the MS and the FID for all calibration and sample analysis performed.
- A PDF package comprised of Area Percent reports, or equivalent, which display the area counts entered into the **Calibration and Processing Template** for all calibration and sample analysis performed
- Completed Phase 1 IOM Templates for each day of bracketed calibration or sample analysis
- A PDF package comprised of passing BFB tune evaluations