## RJ Lee Monthly Report Summary for April 2017

In support of the ongoing Chemical Vapor Initiative undertaken by the U.S. Department of Energy (DOE) contractor, Washington River Protection Solutions, LLC (WRPS), RJ Lee Group's Mobile Organic Monitoring Laboratory (hereafter referred to as the Mobile Laboratory or ML) conducted systems testing over several weeks at Columbia Basin Analytical Laboratory (CBAL) covering the four-week period between March 15, 2017, and April 11, 2017.

No field measurements were collected at Hanford by the Mobile Lab during this time period. However, several testing and maintenance activities were performed.

Descriptions of tests that were conducted include:

- Conducted testing of the ammonia analyzer to determine gas flow sufficiency and detection lag time. Calibrated the van's weather station, evaluated the use of different types of tubing with the ammonia analyzer, removed the mass flow controls for recertification, and removed and replaced the Ultra High Purity nitrogen cylinder. (Week 4.1)
- Performed calibration of the carbon dioxide detector and rerouted the ammonia analyzer exhaust. (Week 4.2)
- Performed initial GC/MS library-building activities. Performed ammonia analyzer recalibration and investigated issues with signal stabilization and recovery time. Collected Gas Chromatography/ Mass Spectrometry (GC/MS) data on 36 discreet compounds. (Week 4.3)
- Attempted AP Stack data collection. Additionally, the ammonia analyzer was removed from service. (Week 4.4)

At the completion of this report, WRPS' Data Quality Objective (DQO) Group and a Fugitive Emissions/Source Apportionment Sub-team had not yet developed a process for the Mobile Laboratory to sample and monitor certain sources for analysis or vapor composition. Because of this, vapor source identification and quantitative analysis of vapor composition could not be completed for this report. Source identification processes are under development by WRPS' DQO Team and the Fugitive Emissions/Source Apportionment Sub-team with input from RJ Lee Group and will be documented in the FY2017 Test Plan.

To view the complete report follow this link.