EPA Update 12/10/2018 2100
Trafalgar Road Fire

None of EPA's air samples showed elevated concentrations of chemicals of concern in the community. In support of ADEQ, EPA collected 24-hour air samples from 5 locations in the community around the Brown Tree Service property on October 1 and November 10. EPA tested for hundreds of chemicals associated with landfill fires potentially containing construction debris, household waste or tires.

In addition to the community samples, EPA collected samples from 1 location within the Brown Tree Service property, and on November 10 found a Benzene concentration of 0.03 part-per-million (ppm).

Brief exposure (5-10 minutes) to very high levels of benzene in the air (10,000 – 20,000 ppm) can result in death, according to the Agency for Toxic Substances and Disease Registry. Lower levels (700 to 3,000 ppm) can cause drowsiness, dizziness, rapid heart rat, headaches, tremor, confusion and unconsciousness. In most cases, people will stop feeling these effects when they are no longer exposed and begin to breathe fresh air.

EPA agreed to collect additional air samples, including particulates. This data will help scientists and decision-makers better determine if the stump dump contains dangerous chemicals. EPA began sampling on Monday, December 10th. The sampling will include three days of VOC sampling as well as continuous monitoring for particulate matter. Quality assured sampling data is expected to be received by EPA on December 21, 2018 and will be shared as soon as possible.

EPA has obtained a technical consultant for the site. The technical expert is from the Office of Research and Development (ORD) and has extensive experience in landfill fire remediation. The expert will advise the stakeholders regarding the properties of the current fire and recommendations on preferred options to extinguish the underground fire quickly and with the lowest possible environmental and public health consequences. An EPA, State and ORD conference call and site visit is planned this week.

In addition, EPA agreed to provide scientific information to assist ADEQ in determining which benzene-sensing technology is available should the state decide an early warning detection system is needed. The sensing technology research is on-going and will be provided to ADEQ this week.