



West Lake Update

June 28, 2016

EPA Releases On-Site Air Monitoring Reports

On April 14, 2014, EPA and the Responsible Parties signed the Administrative Settlement and Order on Consent for Removal Action-Preconstruction Work, which in part required that the Potentially Responsible Parties (PRPs) establish an on-site air monitoring network. On December 5, 2014, EPA approved the Air Monitoring, Sampling, and Quality Assurance/Quality Control Plan and instructed the PRPs to begin baseline air monitoring at the West Lake Landfill.



After a technical review, EPA has approved the first three quarterly air monitoring reports, covering May 2015 through January 2016. EPA has also required modifications to the air monitoring program to improve data quality for future reports. EPA has required the use of an alternate gamma radiation monitor that is better designed for outdoor environments and has required changes to the radon testing duration to increase data quality. These first three quarterly air monitoring reports are now available on our West Lake Landfill website: www.epa.gov/mo/west-lake-landfill

Overall, the air monitoring results indicate that levels of radionuclide particulates and Volatile Organic Compounds (VOCs) in the air at the perimeter of Operable Unit 1, Areas 1 and 2, are consistent with urban background levels.

For particulate samples, the isotopic and gamma spectroscopy results for uranium-238, thorium-230, and combined radium are below Nuclear Regulatory Commission limits for public exposure. The results for gross alpha, beta, and VOCs are consistent with EPA data that was collected from May 2014 to May 2015 at five off-site locations, including one monitor placed in Spanish Village.

The PRPs began collecting air data in May 2015 from 13 on-site air monitors, with six surrounding Operable Unit 1, Area 1, and another six surrounding Operable Unit 1, Area 2. The thirteenth monitor is located in the southwest corner of the site. The air monitoring locations were selected to ensure the network provides coverage around Areas 1 and 2 for all wind directions. EPA has required the PRPs to continue collecting data from these 13 air monitors. That data will be reported quarterly and after EPA conducts quality assurance and quality control processes, the data will be made available to the public.

The purpose of the air monitoring is to obtain baseline

data that EPA can compare to data collected during on site response work that will be done in the future. EPA will compare this baseline data to future data to monitor for releases of radionuclides and VOCs. In addition to the air monitoring stations, an on-site meteorological station measures and logs temperature, barometric pressure, relative humidity, wind speed and direction.

The sampling and monitoring equipment in each station operate continuously. The equipment consists of a high volume air sampler for airborne particulates, a continuous radon monitor, and a gamma radiation detector. Collectively, the equipment samples for and measures radiation in the air by collecting dust and monitoring radon and gamma radiation.

VOC samples are being collected continuously at 14-day intervals for a total of 26 VOCs by passive diffusive samplers. With the exception of one 14-day sample, which was a potentially anomalous result for toluene, the levels of VOCs in air on-site are less than or within the range of the levels previously detected by EPA at its five off-site monitoring locations. The anomalous toluene detection occurred for the sampling period of June 24 through July 8, 2015, and has not recurred in the second or third quarters. With this exception, all of the remaining VOC air monitoring data collected by EPA, or the PRPs under EPA oversight, since May 2015 is consistent with the levels of VOCs reported in downtown St. Louis as measured by the Missouri Department of Natural Resources' (MDNR's) National Air Toxic Trend Station (NATTS) monitor.

EPA now has data from May 2014 through January 2016 that demonstrate levels of radionuclide particulates and VOCs in the air at the perimeter of Operable Unit 1, Areas 1 and 2, are consistent with urban background levels. EPA will continue to evaluate future data reports to ensure an effective air monitoring program.

EPA remains committed to protecting human health and the environment from the radiological waste contained at the West Lake Landfill and will continue to release air monitoring results after the reports are reviewed to ensure the PRPs' data is collected and analyzed in a manner consistent with EPA's protocols.

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