

US EPA ARCHIVE DOCUMENT



West Lake Update

October 7, 2015

History of Off-Site Sampling Near West Lake Landfill

Recent documents released by the Missouri Attorney General's Office, in support of ongoing litigation,



have raised some public concerns regarding potential off-site contamination of radioactive waste associated with the West Lake Landfill. This edition of the West Lake Update summarizes historical, scientifically valid data collected by EPA, partner agencies and one study on vegetation conducted by the potentially responsible parties (PRPs).

EPA's overall assessment of conditions at the West Lake Landfill Site have not changed. The available scientific data indicate that people living near and working outside the boundary of the West Lake Landfill are not currently being exposed to contaminants from West Lake Landfill that are above a level of concern. EPA bases its understanding of site conditions on current and historical site work, including both on-site and off-site sampling done by the agency or by federal and state partner agencies such as the U.S. Army Corps of Engineers (USACE) and the Missouri Department of Natural Resources (MDNR).

Beginning in 2014, EPA conducted off-site air monitoring for up to one year at five locations near the landfill to document baseline conditions prior to any on-site construction. The five locations monitored for volatile organic compounds (VOCs) and alpha, beta, and gamma radiation. The results of this off-site air sampling demonstrate that the air quality around West Lake Landfill is consistent with the air quality of the greater St. Louis metropolitan area.

Also in 2014, EPA conducted a comprehensive screening of the Bridgeton Municipal Athletic Complex (BMAC) near the West Lake Landfill which demonstrated that levels of radiation did not exceed health based standards. This effort involved a surface screening for gross gamma radiation detection, which included analysis of data collected from more than 58,000 surface points, and the collection and analysis of more than 100 surface soil samples. Soil samples were collected from infield areas, outfield areas, grassy areas outside of playing fields, and also drainage areas.

To help determine if any detections of radiation at BMAC were consistent with those found naturally in the area's environment, EPA conducted additional off-site soil sampling at nearby Koch and Blanchette parks. Analysis of soils sampled at

BMAC was consistent with soils at the parks.

All of EPA's collected soil samples were sent to a certified laboratory for analysis. The samples were checked for a range of radionuclides, including Thorium-230, Uranium-238, Radium-226, Lead-210, and others. The final report noted no detections at levels of concern to human health at BMAC, Koch Park, or Blanchette Park.

In 2013, EPA conducted an aerial survey of the West Lake Landfill at Bridgeton, Mo., with EPA's Airborne Spectral Photometric Environmental Collection Technology (ASPECT) airplane and determined radiologically-contaminated wastes buried there in the 1970s remain contained within secure, fenced areas of the Superfund site. The ASPECT airplane with a pilot, co-pilot, technician and scientific equipment on board flew multiple low-altitude passes over the site and adjacent residential and industrial properties to identify surface areas that emit gamma radiation.

In 2009, a vegetation sampling study was conducted at the West Lake Landfill to determine if radium, uranium, and thorium were present in vegetative growth in Area 1 and Area 2 of the landfill.

A total of seven samples were taken from Area 1 and 13 samples from Area 2. Nineteen of the 20 samples showed radiation levels significantly below background levels. One sample showed a level of 1.38 average picocuries per gram (pCi/g) for radium, which is only slightly higher than the background level of 1.3 pCi/g. All other results were less than .33 pCi/g.

In addition to off-site air and soil sampling by EPA, MDNR conducted off-site soil sampling along St. Charles Rock Road, Boenker Road, and Taussig Road in Bridgeton, Mo., in 2005.

The soil samples were analyzed for radium, thorium and uranium. The results of this sampling event are consistent with, and supplement, off-site soil sampling conducted by the U.S. Department of Energy and USACE, which is referenced in the USACE's 2005 Record of Decision for the North St. Louis County Sites.

The information in this update can be found at EPA's West Lake Landfill website: www.epa.gov/region7/cleanup/west_lake_landfill

Next CAG Meeting

The next Community Advisory Group meeting is scheduled for 6:30 p.m. on Monday, October 26, at the District 9 Machinists Hall, 12365 St. Charles Rock Road, Bridgeton, Mo.

Community Inquiries

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