West Lake Landfill
ATSDR Health Consultation Findings

The Agency for Toxic Substances and Disease Registry (ATSDR) is a federal public health agency. Our mission is to protect public health by using the best science to provide trusted health information and make recommendations to prevent harmful exposures.

Why did ATSDR write a Health Consultation?

The U.S. Environmental Protection Agency (EPA) Region 7 asked that ATSDR review groundwater, air, and soil data to determine if radiological contamination at the West Lake Landfill might harm human health.

What did ATSDR evaluate?

- On-site and off-site groundwater radiological sampling results.
- On-site and off-site air radiological sampling results.
- Off-site historic radiological soil sampling results.

What did ATSDR find?

* Surface disturbances, such as digging, at the landfill could release dust containing uranium and thorium decay products, which on-site workers might breathe.
  * Particulates released during soil disturbances might harm worker health.
  * Past releases of radon on-site have exceeded regulatory limits by up to 25 times at some surface test areas.
  * Radon gas might impact the health of past, current, and future on-site workers.
* Outdoor radon near the landfill seems to be greater than typical regional and national background levels.
  * These levels are not high enough to harm people's health.
* Off-site air sampling results show no migration of contaminants in the surrounding residential areas.
* Groundwater from the site will not harm people's health.
  * Groundwater flows away from residential areas and is not being used as a public water supply.
* Soil samples show no evidence of contamination along roads leading to the landfill.

What does ATSDR recommend?

To ensure that public health is protected on and near the West Lake Landfill, ATSDR makes the following recommendations:

- Continue groundwater monitoring, including wells previously sampled on-site and off-site.
- Prevent off-site migration of contaminants.
- Continue air monitoring for radon at the landfill and within 1-mile of the landfill.
- Ensure adequate dust control measures are in place if on-site soils are disturbed.
- Residents test the interior of their homes for naturally occurring radon.

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Division of Community Health Investigations

ATSDR

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What will ATSDR do?

- Continue to meet with federal, state, and local partners and respond to questions or concerns.
- Attend public meetings as needed or requested.
- Meet with public interest groups or individuals to learn more about community concerns and respond as needed.
- Evaluate additional data as it becomes available and upon request.

Off-Site Air Monitoring Stations

Off-Site Radon Levels*

Range	Station				
	1	2	3	4	5
Average	0.31	0.32	0.25	0.27	0.26
Minimum	0.20	0.15	0.17	0.09	0.13
Maximum	0.87	0.75	0.37	0.83	0.72

* Levels measured in picocuries per liter (pCi/L) of air. Average U.S. background levels are 0.2–0.75 pCi/L. **The U.S. Environmental Protection Agency advises homeowners to reduce levels below 4.0 pCi/L.**

† Locations include

Station 1 – Robertson Fire Protection District Station 2, 3820 Taussig Rd., Bridgeton;
Station 2 – Pattonville Fire Department District, 13900 St Charles Rock Rd., Bridgeton;
Station 3 – Pattonville Fire Department District Station 2, 3365 McKelvey Rd., Bridgeton;
Station 4 – Spanish Village Park, 12827 Spanish Village Dr., Bridgeton; and
Station 5 – St. Charles Fire Department Station #2, 1550 S. Main St., St. Charles, MO.

Average Soil Sampling Results

Isotope	St. Charles Rock Road	Boenker Road	Taussig Road	Missouri average
Radium (Ra-226)	1.19	1.32	1.45	0.31–1.04
Thorium (Th-232)	0.83	0.93	1.05	0.32–1.3
Uranium (U-238)	0.86	0.96	0.95	0.33–1.7

The values are the average of the sampling points along the specified road and are given in picocuries per gram (pCi/g)

If I have questions for ATSDR, who can I speak with?

For questions related to ATSDR's work at the West Lake Landfill site, you may contact ATSDR's Region 7 Representative:

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