

Monitoring of the Maxey Flats Disposal Site

Cabinet for Health and Family Services (CHFS)
Department for Public Health
Division of Public Health Protection and Safety
Radiation Health Branch (RHB)

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Responsibilities of the CHFS at the Maxey Flats Disposal Site

211.846 Monitoring radioactive waste material sites

The Cabinet for Health and Family Services shall monitor radioactive waste material sites in Kentucky for the protection of the public health, safety, and welfare. The Finance and Administration Cabinet and the Cabinet for Health and Family Services shall cooperate and coordinate their activities in the leasing, regulation, monitoring, and control of radioactive waste material burial sites.



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Monitoring Activities of the RHB for the CHFS

The Radiation/Environmental Monitoring Section (REMS) of the RHB is responsible for collection and analysis of samples from the Maxey Flats Disposal Site

- Three continuous water samplers operate 24/7/365 in streams around the Site
- Surface water and ground water samples are collected monthly around the Site
- Special samples are collected as needed

If a sample analyzed by the Energy and Environment Cabinet's on-site laboratory exceeds a limit, the sample will be sent to the REMS for further analysis



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Laboratory Capabilities of the REMS

- **Gas Flow Proportional Counting**
 - Gross alpha/beta analysis
 - Strontium-90 and carbon-14
- **Liquid Scintillation Counting**
 - H-3
- **Gamma Spectroscopy**
 - Cobalt-60, cesium-137, lead-210, bismuth-214, lead-214, actinium-228, thorium-228, thorium-230, protactinium-234m, thorium-234, uranium-235, neptunium-237 and americium-241
- **Alpha Spectroscopy**
 - Uranium-238, uranium-235, uranium-234/233, plutonium-238 and plutonium-239



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Reporting Activities of the RHB for the CHFS

The Radiation/Environmental Monitoring Section (REMS) of the RHB is responsible for reporting results of samples collected from the Maxey Flats Disposal Site

- An annual report is completed during the first quarter of every year for the previous calendar year
- These reports can be found at <http://chfs.ky.gov/dph/MFDS.htm>



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