

April 1, 2009 Update

## Denver Radium Superfund Site

Denver, Colorado  
(Review Date: 9/30/08)

### *H*ighlights Since the 2008 Five-Year Review

- **The site is in the process of being deleted from the National Priorities List (NPL) and is expected to be complete by June 2009.**

**Brief Site History:** The site consists of more than 65 properties combined into 11 Operable Units (OUs) in Denver. Radium was used for commercial purposes in the early 1900s. Ore processing facilities in Denver provided a domestic source of radium. The radium industry collapsed in the 1920s, leaving numerous locations with radioactive residues. The residues were often used as fill, as paving materials or left in place. The Denver Radium Site was added to the NPL in 1983. The Colorado Department of Public Health & Environment (CDPHE), the Environmental Protection Agency (EPA) and responsible parties worked together on the cleanup.

**Cleanup Activities Completed:** Cleanup is complete at all of the properties. Cleanup approaches included:

- Removal of contaminated soil to a permanent disposal site
- Installation of ventilation systems to vent radon gas
- Stabilization and capping in place.

Some wastes under structures and streets were left in place, where they do not pose an unacceptable threat to human health or the environment.

**Current Status:** Business operations have continued on many of the formerly contaminated properties. Several properties have also been redeveloped.

The third five-year review for the Denver Radium Site was completed September 30, 2008. The public review process included contact with each property owner and with each affected neighborhood organization. Mailings were sent to interested stakeholders with a description of the Denver Radium Site and ongoing actions. Comment cards were included in this mailing.

The deletion of the Denver Radium Site from the NPL is underway and is expected to be complete by June 2009.

**Summary of Protectiveness:** Because the remedial actions at all OUs are protective, the site is protective of human health and the environment

**Issues Impacting Protectiveness:** A few issues were identified as the 2008 Five-Year Review was conducted. None of the issues affect current or future protectiveness.

**Denver Radium Superfund Site  
Five-Year Review Update Table  
(9/30/08)**

Issues	Recommendations/ Follow-up	Follow-up Actions (Status/Due Date)	Status of Follow-up Actions 4/09	Responsible Party
<b>1) Tracking of Institutional Controls</b>	CDPHE and the City and County of Denver are developing a tracking system through the city's building permit system for all materials left in place under Supplemental Standards or Area Averaging. This will further strengthen the existing Institutional Controls.	1/2010		CDPHE and City and County of Denver
<b>2) Deletion</b>	Construction is complete, Institutional Controls have been implemented and performance standards have been met. The site should be deleted from the NPL.	6/2009		EPA

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<b>3) OU3 Ground Water</b>	Allow for natural attenuation of site related contaminants.	9/2013		CDPHE
<b>4) OU8 Ground Water</b>	Ground water monitoring at OU8 is ongoing. Monitoring frequency should be reduced to an annual basis and allow for natural attenuation of site related contaminants. Monitoring frequency should be changed to twice per year based on low and high water table regimes.	9/2013		CDPHE
<b>5) OU9B Ground Water</b>	Ground water monitoring at OU9B is ongoing. Further monitoring should be postponed until the Colorado Department of Transportation has completed the improvements along Interstate 25 adjacent to the site.	9/2013		CDPHE