



Colorado Department
of Public Health
and Environment

LOWRY VISTA FACT SHEET ENVIRONMENTAL AND ENGINEERING UPDATE

LOWRY
VISTA

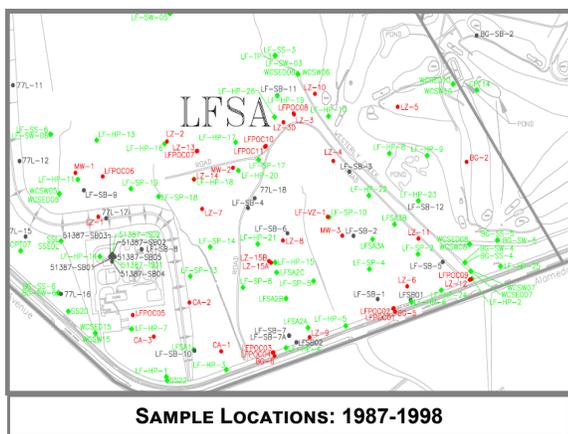
April 2014

The area known as Lowry Vista was used as a landfill from about 1948 to 1986 during operations at the former Lowry Air Force Base. Following extensive environmental investigation of the site beginning in 1983 with oversight by the Colorado Department of Public Health and Environment, the landfill was closed in accordance with Colorado Solid Waste regulations with the installation of a low-permeability soil cap. To protect the integrity of the cap, legal covenants were put in place to prevent active use of the property and to restrict access. IRG Redevelopment I (IRGI), the owner, submitted three work plans to the Colorado Department of Public Health and Environment for review and approval in accordance with the requirements of those covenants and solid waste regulations. The plans, if approved, by both the state health department and the U.S. Air Force will modify the covenant to allow additional investigation of the subsurface. The plans establish procedures to perform further investigation of the former landfill and to stockpile soil on the cap, while maintaining the integrity of the cap and protecting human health and the environment.

BACKGROUND— The environmental condition of the former landfill (Operable Unit 2/OU2) was characterized through extensive investigation beginning in 1983. Garbage from the base and construction debris were disposed in trenches at the site and then covered with soil. Nature and extent of contamination at the landfill was determined by collecting samples of soil, sediment, soil gas vapor, surface water and ground water during seven investigation programs prior to closure of the landfill. Closure of the landfill with a soil cap was designed in accordance with State and EPA requirements to isolate any waste from the environment. The landfill cap was constructed in 2004-2005.

COVENANTS— Two covenants are in place on OU2 that prohibit activities that adversely affect the existing cap unless the covenants are modified. A restrictive covenant is included in the deed and would need to be modified by the Air Force, and the Environmental Covenant would require modification by the state.

ENGINEERING UPDATE—IRGI submitted three plans to the state health department for review and approval. The plans contain procedures for future investigations in the landfill area and were developed, specifically, to preserve and restore the integrity of the soil cap.



SAMPLE LOCATIONS: 1987-1998

POST CLOSURE SAMPLING RESULTS—Approximately 750 samples of ground water, surface water and vapor have been collected during 19 rounds of post-closure monitoring at the site beginning in 2006. The data evaluation process follows the State-approved Lowry Closure plan and standard landfill monitoring requirements designed to identify any statistically significant increases in concentration between upgradient and downgradient groundwater wells. Throughout more than seven years of post-closure monitoring, there have been no statistically significant increases in any of the 75 parameters which are analyzed during each semiannual event. Also, based on the results of the soil vapor monitoring there is little or no methane generation occurring at OU2.

Cap Penetration Plan

- Establishes procedures for predesign and design investigations at the site;
- Documents necessary procedures to protect the existing soil cap and repair it should it be damaged during an investigation; and
- Requests modification of Environmental Covenant

Subsurface Investigation Work Plan

- Identifies IRGI's sampling plan to evaluate geotechnical conditions at the site (data would be used for infrastructure and foundation design);
- Provides details of proposed soil gas sampling program. (Although historic and post-closure monitoring data indicate that soil gas is not a major consideration additional data will be collected); and
- Describes subsurface sampling of northern portions of OU2 to determine soil environmental condition and whether it can be beneficially reused as fill.

Soil Stockpile Plan

- Establishes procedures for stockpiling soil on the site while maintaining the integrity of the existing soil cap;
- Identifies proposed location of the stockpiling; and
- Outlines parameters for regrading and vegetating the stockpile in the event that the project is delayed for any reason.



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FOR MORE INFORMATION:

April 2014

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Selected OU2 Environmental Documents

(Full project bibliography is available in the Five Year Reviews and upon request.)

For questions regarding land use issues please contact the City and County of Denver

General Development Plan (Approved 1/13/2010) -
<http://www.denvergov.org/PlansInProgress/LowryVistaGDP/tabid/432651/Default.aspx>

General Lowry Environmental Program Information:

www.lowryafbcleanup.com provides information on the environmental program, updates and document links.

Administrative Record - a compilation of significant environmental documents, correspondence and decision documents for Lowry's cleanup, available to the public at <http://afcec.publicadmin-Record.us.af.mil>

Colorado Department of Public Health and Environment maintains a website with information on the Lowry Environmental program at <http://www.colorado.gov/cs/Satellite/CDPHE-HM/CBON/1251616142313>

Information Repositories:

Environmental documents are available for public viewing at the following information repositories:

Lowry Assumption, LLC

7290 East 1st Avenue
Denver, CO 80230
(303) 972-6633

Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division Records Center

4300 Cherry Creek Drive South
Denver CO 80246
(303) 692-3331

Lowry AFB Landfill Environmental Investigations/Chronology	
IRP Phase 1 records search	1983
IRP Phase II Confirmation/ Quantification	1987
Remedial Investigation (RI)	1990
Supplemental RI for the Landfill Zone	1995
Focused Feasibility Study	1998
Proposed Plan	1998
Preliminary Closure Plan for OU2	2003
Phase 2 Corrective Action Plan	2003
Long-Term Monitoring for Radiologi- cal Parameters	2004- 2005
Landfill Closure	2004- 2005
Post-Closure Monitoring - (19 sampling events through Janu- ary 2014)	2006- 2014
Additional Radiological monitoring	2007
Closeout of Radiological study with No Further Action determination	2008
Five Year Review	2008
Second Five Year Review	2013