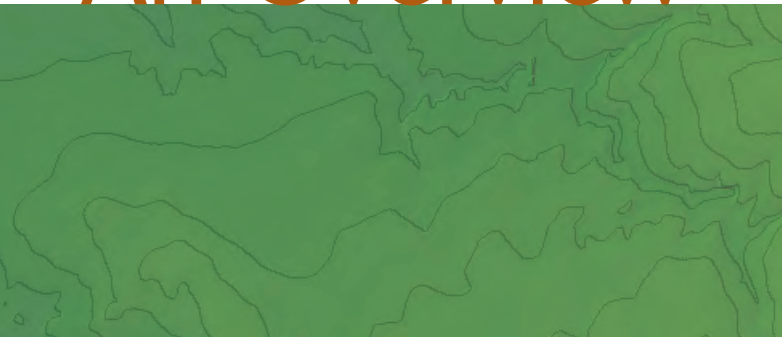




Lowry Landfill: An Overview



Lowry 

LANDFILL



Aerial view of the Lowry Landfill.

Five-Year Reviews

Superfund law requires that the EPA review Superfund site remedies, including the Lowry Landfill site, every five years to ensure the prescribed remedy remains protective of human health and the environment. With cooperation from the State of Colorado, other regulatory agencies, municipal officials and the general public, EPA completed its second Five-Year Review in 2007 and determined that the Lowry remedy “is functioning as intended” and “is protective of human health and the environment.”

Future Uses

Though not required by the terms of the remedy, the owners and operators of the Lowry Landfill purchased properties a half-mile around the site as an added precaution. This is intended to prohibit future groundwater use and to control future land use around the site. Any future use of these lands will be compatible with the remedy, conform to certain restrictive covenants and comply with all regulations to ensure public safety.

DADS

Though it previously accepted other forms of waste, the Lowry Landfill accepted only municipal solid waste (MSW) beginning in 1980 and stopped receiving waste altogether in 1990, except for asbestos. Today, MSW and other materials from the metro area are disposed of at the Denver Arapahoe Disposal Site (DADS). Adjacent to but not part of the Superfund property, DADS is a fully permitted, state-of-the-art, non-hazardous waste facility.

Site History

The 508-acre Lowry Landfill site is located near the intersection of Quincy Avenue and Gun Club Road in Arapahoe County, 15 miles southeast of downtown Denver. Once a depository for municipal and liquid industrial waste from businesses and residences in the metropolitan area, the landfill was placed on the Environmental Protection Agency's (EPA) National Priorities List in 1984. The listing made the site eligible for remediation under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), commonly known as "Superfund."

Following the Superfund listing, EPA and the other entities responsible for addressing contamination at Lowry spent more than two decades investigating the site, evaluating possible solutions and designing, implementing and fine-tuning the chosen remedy. That remedy is designed to protect human health and the surrounding environment by preventing contaminated materials from moving off the site and by preventing human exposure to landfill gas, waste-pit liquids or contaminated groundwater.



The containment remedy at Lowry Landfill consists of multiple components and state-of-the-art technologies.

This "containment" approach is the presumptive remedy at CERCLA municipal landfill sites nationwide because: 1) the potential risks involved in removing and transferring the large volumes of materials elsewhere are greater than the potential risks of managing the wastes onsite; 2) a relatively low long-term threat is posed by leaving the material in place; and 3) treatment is impractical because of the size and heterogeneity of the landfill contents.

Every five years, EPA reviews the effectiveness and protectiveness of a Superfund site remedy at sites where waste remains in place. The most recent EPA review, completed in 2007, concluded that it "is functioning as

intended" and "is protective of human health and the environment." (For more information, go to <http://www.epa.gov/superfund/sites/fiveyear/f2007080001515.pdf>.)

Remedy Overview

The containment remedy at Lowry Landfill consists of multiple components. A brief description of the primary components follows:

Underground Barrier Walls

The remedy includes a system of subsurface walls and pumping wells designed to keep contaminated groundwater (water that flows underground, as opposed to surface water) from leaving the site.

Onsite Water Treatment Plant

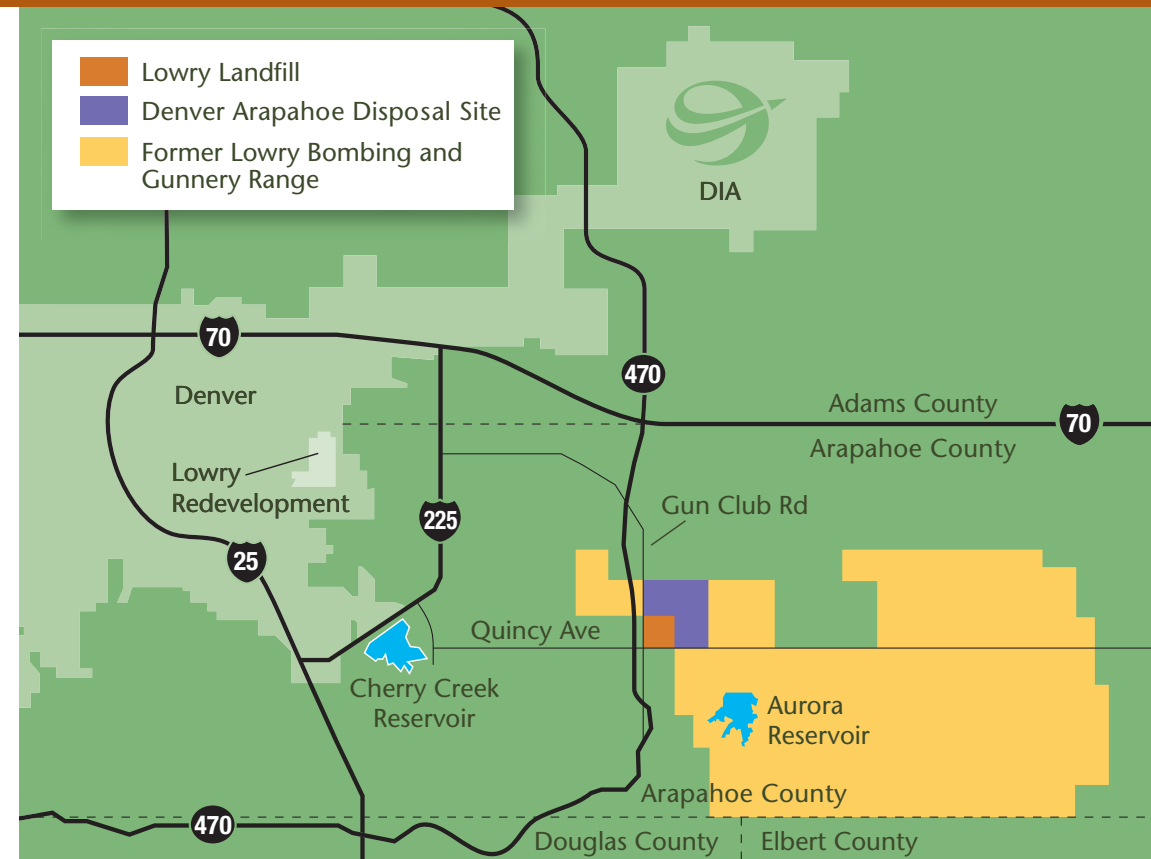
A plant to treat contaminated groundwater was constructed in 1984 and replaced by a more modern facility in 2000. The new plant, further upgraded in 2004, now treats approximately 900,000 gallons of water each month.

North Toe Extraction System

The North Toe System, located at the northern edge of the former landfill area, extracts and pumps contaminated groundwater flowing from under the landfill mass and pipes it to the water treatment plant.

Landfill Gas Collection and Treatment System

A gas extraction and treatment system to collect landfill gasses — which are produced from decomposing materials within a landfill and which consist predominately of methane and carbon dioxide — and combust them in a plant to generate electricity was completed in 2008. The power plant replaces the site's original landfill gas treatment system, which destroyed the gas in an enclosed burner.



The 480-acre Lowry Landfill site is located in Arapahoe County, 15 miles southeast of downtown Denver.

Landfill Cover

A four-foot thick "cap" of compacted clay and soil covers the landfill mass. The cover is designed to reduce infiltration of rain and snow into the landfill mass.

Groundwater Monitoring Wells and Compliance Program

An ongoing groundwater monitoring program, consisting of dozens of monitoring and compliance wells, has been implemented to verify that the site remedy remains effective and protective of public health and the environment.

Learn more at www.lowrylandfillinfo.com

Contact Information

Remediation efforts at the Lowry Landfill have been a cooperative effort among regulatory agencies, local governments and private entities. Experts are available at the following organizations to answer questions from the public:

Waste Management of Colorado

Closed Sites Management Group
2400 West Union Avenue
Englewood, CO 80110
303-914-1434

City & County of Denver

Dept. of Environmental Health
200 West 14th Avenue, Dept. 310
Denver, CO 80204
720-865-5438

InterMountain Corporate Affairs

1675 Broadway, Suite 1850
Denver, CO 80202
303-534-5409 x113

Environmental Protection Agency

Community Involvement Coordinator
U.S. EPA Region 8
Mail Code 8EPR-SR
1595 Wynkoop Street
Denver, CO 80202-1129
303-312-6633

Colorado Department of Public Health and Environment

State Community Involvement Specialist
4300 Cherry Creek Drive South
Denver, CO 80246
303-692-3304

Tri-County Health Department

Environmental Health Division
7000 East Belleview Avenue, Suite 301
Greenwood Village, CO 80111-1628
303-220-9200

Further information can be found online at www.lowrylandfillinfo.com and on file at these locations:

EPA Superfund Records Center
1595 Wynkoop Street
Denver, CO 80202
303-312-6473

Aurora Central Public Library
14949 East Alameda
Aurora, CO 80012
303-340-2290

