



COMMUNITY OUTREACH PROGRAM MATERIALS FOR LOWRY LANDFILL

SITE TIMELINE

- 1964 The federal government deeds 5,000 acres east of Denver to the City and County of Denver (Denver) for public health purposes.
- 1965 to 1980 Denver owns and operates the Lowry Landfill on 480 acres of the former federal site, accepting solid industrial and municipal waste and liquid industrial waste into some 78 unlined pits over approximately 200 of the 480 acres. Though the site was in compliance with the regulatory standards of the day, the unlined pits allow the liquid waste to seep into the ground immediately underneath the site.
- 1980-1990 Waste Management of Colorado, Inc. (Waste Management) contracts with Denver to operate the site. The Lowry Landfill Site stops accepting liquid industrial waste and begins accepting only municipal refuse. The site stops accepting waste altogether in 1990, other than asbestos. During the 1980s, Denver, the Environmental Protection Agency (EPA) and the Colorado Department of Public Health and Environment (CDPHE) investigate the nature and extent of contamination on the site.
- Also during this period, some six to 10 million tires that had accumulated at the site are shredded and placed in an onsite lined pit awaiting possible future reuse.
- September 1984 The EPA places Lowry Landfill on the National Priorities List of contaminated sites to be addressed under the Superfund Program.
- 1984-1994 To address immediate concerns of ground and surface water contamination, Denver and Waste Management implement initial containment measures. These include the construction of an underground barrier wall at the north end of the site, construction of a water treatment plant and installation of a surface water removal action to prevent contaminated surface water from flowing off site.
- 1989 – 1994 Denver, Waste Management and other entities that sent waste to the site conduct investigations of the nature and extent of contamination and evaluate alternative remedies.

1992-Present	Denver and Waste Management acquire title and groundwater rights to properties within one-half mile of the west, south and east sides of the site.
March 10, 1994	EPA and CDPHE sign the Lowry Landfill Record of Decision (ROD), which formalizes the plan to contain contamination at the site. The selected remedy involves multiple components that together will stop contaminants from migrating off the site and prevent human exposure to landfill gas, solids or waste-pit liquids.
1995-1997	An extraction and treatment system is constructed to collect and destroy methane and organic compounds in landfill gases and to ensure that emissions remain protective of human health and the environment.
1997	Underground barrier walls are constructed on portions of the east, south and west sides of the site to complement the north wall constructed in 1984. A groundwater extraction trench at the north toe of the landfill is also constructed to intercept water at the edge of the landfill and deliver it to the onsite water treatment plant.
1998	Excavation of waste pits in the former tire pile area (FTPA) and construction of a treatment cell for contaminated material removed from the three pits begins. Excavation of the middle pit is completed in April 1999.
1998	The installation of performance and compliance monitoring wells begins. The wells are installed to ensure that strategic, comprehensive and consistent monitoring of the site will continue.
1999	An additional two feet of compacted clay cover is placed over the north face of the landfill. The cover involves placement of approximately 100,000 cubic yards of clay over 29 acres.
1999-2000	Construction of a new water treatment plant is completed. Treated water leaves the site and is directed to the Metro Wastewater Reclamation District and Aurora's wastewater treatment facilities, where it is treated again before being discharged.

- September 2001 EPA completes the first Five-Year Review of the Lowry Landfill Superfund site in cooperation with CDPHE, other regulatory agencies and the general public. The review finds that a majority of the remedy elements are protective of human health and the environment but that an overall protectiveness statement cannot be made until all remedy components are complete.
- 2004 Upgrades to the onsite water treatment plant are completed and approved by EPA. North Toe Extraction System begins continuous operation.
- February 2005 EPA approves an updated comprehensive groundwater monitoring program for the Lowry Landfill Superfund Site.
- August 12, 2005 Following a period of public and official review, EPA selects a proposal for addressing contamination in the north and south FTPA pits. This plan is formalized through an additional amendment to the ROD.
- August 16, 2005 CDPHE approves an Engineering Design and Operations Plan for placing construction and demolition debris and other inert waste into Section 6 of the Lowry Landfill. These waste materials will be used to promote improved drainage off of the resulting final cover and reduce future maintenance activities.
- February 2007 EPA completes the second Five-Year Review of the Lowry site, concluding that the Lowry remedy “is functioning as intended” and “is protective of human health and the environment.”
- July 2007 Denver and Waste Management break ground on a new landfill gas to energy plant in which landfill gas will be burned in four combustion engines that will generate electricity for a local utility. The gas will serve as a source of “green” energy akin to wind, solar and other renewable energy sources.