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ROCKY FLATS INTERAGENCY

FACT SHEET FOR AIR MONITORING AND WILDLAND FIRES

CDPHE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

U.S. DEPARTMENT of ENERGY
Legacy Management

U.S. FISH & WILDLIFE SERVICE

INTRODUCTION

This fact sheet presents information about wildland fires and historical air monitoring associated with the U.S. Department of Energy Office of Legacy Management's (LM) Rocky Flats Site and the U.S. Fish and Wildlife Service's (USFWS) Rocky Flats National Wildlife Refuge in Colorado. The information is provided by the Colorado Department of Public Health and Environment (CDPHE), the U.S. Environmental Protection Agency (EPA), USFWS, and LM.

GENERAL SITE OVERVIEW

First constructed in 1951, the Rocky Flats Plant, located 16 miles northwest of Denver, produced plutonium triggers, commonly referred to as "pits," for use in atomic weapons. For about 40 years, the plant manufactured nuclear and nonnuclear weapons components.

In 1989, the plant paused production activities after the plant was raided by the FBI and EPA due to concerns about potential environmental and safety issues. Subsequent world events, particularly the collapse of the Soviet Union, led to the closure and cleanup of the site several years later.

In October 2005, DOE and its contractor completed the 10-year, $7 billion cleanup of the site. In total, cleanup workers decontaminated, decommissioned, demolished, and removed more than 800 structures in the industrialized area and removed more than 650,000 cubic yards of radioactive waste and about 575,000 tons of other waste.

Today, the Rocky Flats Site is mostly grassland. The historic acreage is now divided between the Rocky Flats National Wildlife Refuge, which contains the former security buffer and is owned and managed by USFWS, and the Central Operable Unit (COU), which contains the former industrial area and is owned and managed by LM.

Rocky Flats National Wildlife Refuge and COU. ▶

Aerial view of the COU, 1995.

Aerial view of the COU, 2011.

AIR QUALITY

Soil picked up by the wind is the primary source of airborne particles at Rocky Flats. The average plutonium concentration in the soil on the COU and the Rocky Flats National Wildlife Refuge is significantly lower than cleanup goals agreed upon by CDPHE and EPA.

During cleanup of Rocky Flats, multiple working groups and citizen organizations provided input for developing soil action levels for plutonium. Soils at Rocky Flats were extensively sampled during investigation and remediation between 1991 and 2005. More than 14,000 surface and subsurface soil samples were taken across the site. Based on the data collected, EPA and CDPHE agreed that the cleanup is protective of human health and the environment.

AIR MONITORING AT ROCKY FLATS — BACKGROUND & OVERVIEW

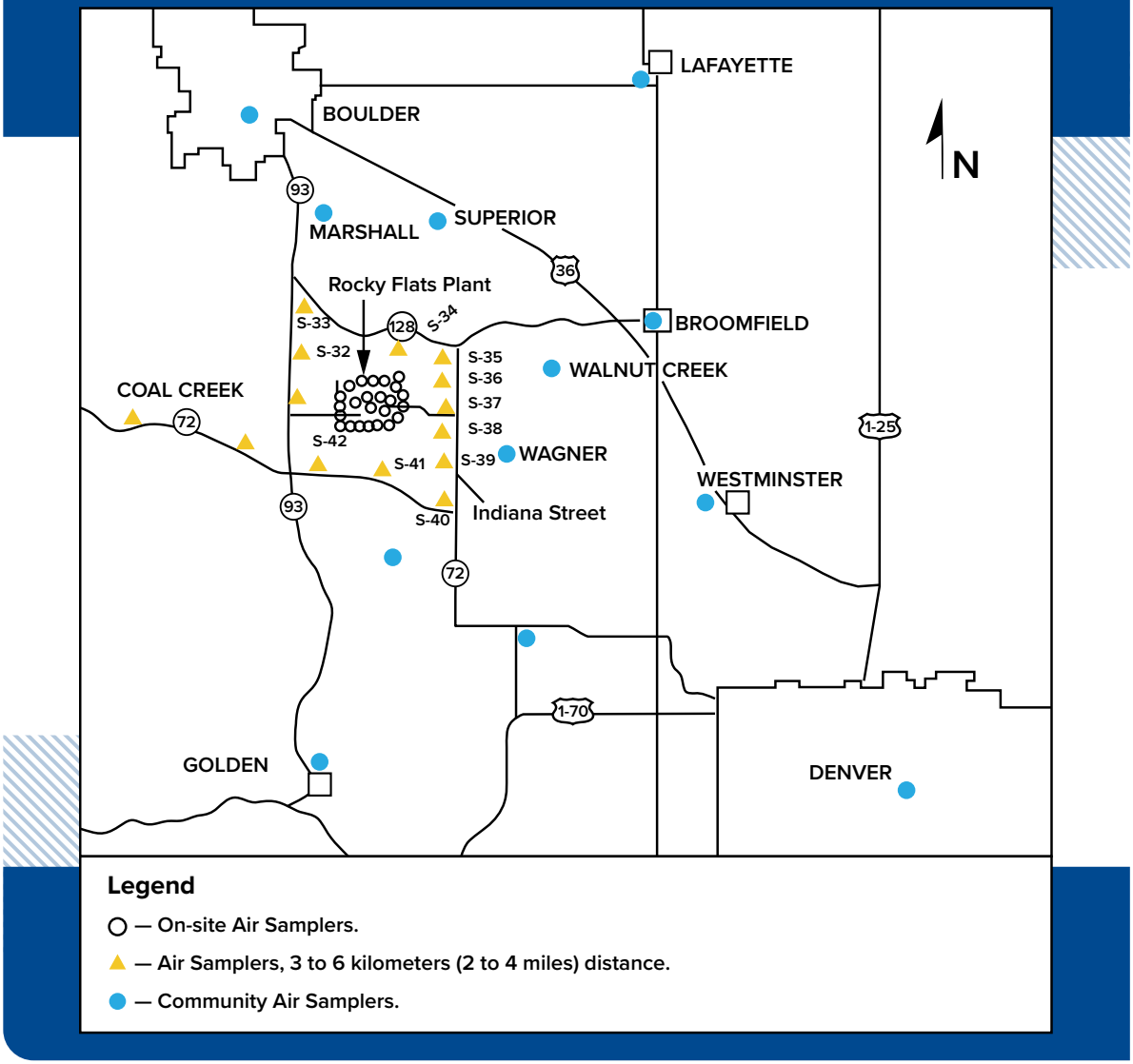
An environmental air monitoring program began at the Rocky Flats Plant in the early 1950s and a large-scale, continuous program was underway by 1971. The program was designed to protect plant workers; quantify potential public exposure to radionuclides and other contaminants of concern, such as beryllium, that might result from Rocky Flats activities; and track compliance with applicable regulatory limits. Through the years, the air monitoring program at Rocky Flats evolved in response to new regulatory requirements and closure activities.

Air quality was monitored at various locations, including the perimeter of the plant and in surrounding communities, for radionuclides and other contaminants of concern. At its peak, the radioactive ambient air-monitoring network included approximately 60 samplers operating continuously both on- and off-site, producing about 10,000 samples per year.

The stations were primarily monitored by DOE. CDPHE also monitored for a variety of pollutants at or adjacent to Rocky Flats at various times in the site's history. CDPHE stopped sampling in July 2001, citing contaminant levels consistently below regulatory standards. DOE's air monitoring program continued for a year after cleanup was completed to confirm continued low levels of airborne contaminants.

Beginning in 1991, the Community Radiation (COMRAD) program monitored radiation and meteorological data in several communities surrounding the Rocky Flats site. The purpose of the COMRAD program was to allow people living in the surrounding area to actively participate in the Rocky Flats environmental surveillance program, increase public awareness of the program, and improve communication with local communities. Five of the COMRAD stations were located in the cities of Arvada, Broomfield, Westminster, and Northglenn/Thornton. The program ended after the site closure.

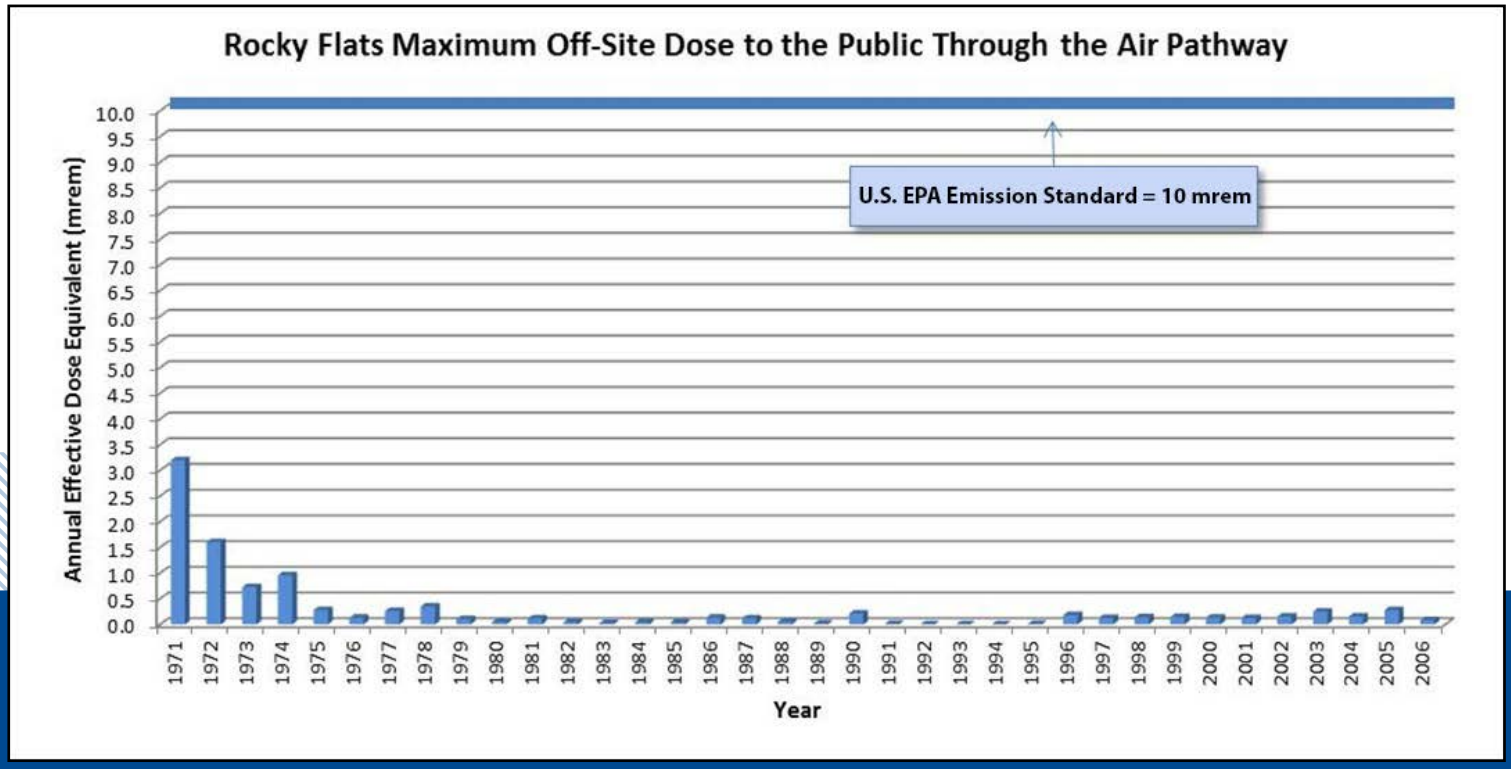
Historical Air Sampler Locations



AIR MONITORING AT ROCKY FLATS — CONCLUSIONS

Data from air monitoring during production, cleanup, closure, and post-closure confirmed that radionuclides were at levels considerably lower than the federal standards for unacceptable exposure, including during several wildland fires that occurred on-site. Levels monitored at Rocky Flats were reported at such low levels for an extended period of time that CDPHE and DOE, with input from EPA, agreed to end air-monitoring programs and not require air monitoring as part of the long-term monitoring of the site.

For more information, please visit: www.energy.gov/lm/rocky-flats-wildland-fire-information.



PRESERVING THE REFUGE: LAND MANAGEMENT

Since 2007, The U.S. Fish and Wildlife Service has been managing the refuge to restore and preserve the native prairie ecosystems, provide habitat for migratory and resident wildlife, and provide research and education opportunities. The Rocky Flats National Wildlife Refuge has more than 630 species of plants, as well as the globally rare xeric tallgrass prairie. It is home to 239 migratory and resident wildlife species, including prairie falcons, deer, elk, coyotes, songbirds, and the federally threatened Preble's meadow jumping mouse.

WILDLAND FIRES

The USFWS partners with local communities, land managers, and emergency response agencies as requested to identify and mitigate the risk of catastrophic wildfire. USFWS hosted a wildfire simulation in which federal and state agencies, homeowner associations, community representatives, and interested organizations could discuss and walk through response efforts during a potential wildfire. This helped attendees understand general information and response coordination and identify gaps in preparedness.

RESPONSE

- In the event of an active wildland fire at or near the Rocky Flats Site, multiple local county governments will respond.
- LM Emergency Management will work with local emergency services to provide support and information regarding the Rocky Flats Site.
- LM will work, in consultation with CDPHE and EPA, to perform emergency repairs of the existing remedy infrastructure.

RISKS

- Fire is not uncommon on Colorado's Front Range, and the Rocky Flats region, with its unusually high wind gusts, is no exception.
- Between 1993 and 2011, Rocky Flats has been subject to 11 wildfires, and in December of 2021, there were concerns that the Marshall fire could be diverted by incoming winds and engulf parts of the Rocky Flats National Wildlife Refuge.

PRESCRIBED FIRE BENEFITS

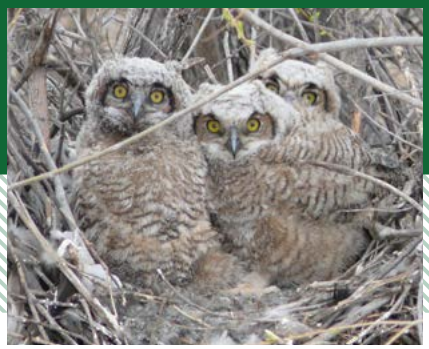
- When managed properly, prescribed fire can help the native vegetation regenerate, remove layers of dense dead vegetation that is choking out new vegetation, help with nutrient cycling, remove invasive vegetation, and create a better soil base for native species to thrive.
- Prescribed fire to reduce wildfire risk to neighboring communities has been proposed at Rocky Flats National Wildlife Refuge but is yet to be implemented.

MANAGEMENT

- USFWS has established fuel breaks along perimeters of USFWS-managed lands. The Service will continue to maintain those fuel breaks, especially along the Rocky Flats National Wildlife Refuge border shared with communities and subdivisions.
- LM and USFWS will continue to keep local communities updated on activities on the COU and Rocky Flats National Wildlife Refuge.
- The Rocky Flats National Wildlife Refuge maintains a small fire engine on-site, which reduces staff response time in a wildfire scenario.

For more on fire management, please visit: www.fws.gov/program/fire-management.

For more on fuels management, please visit: www.doi.gov/wildlandfire/fuels.



ADDITIONAL RESOURCES

For more information about Rocky Flats, see:
www.energy.gov/lm/rocky-flats-site-colorado
cdphe.colorado.gov/hm/rocky-flats
cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0800360
www.fws.gov/refuge/rocky-flats

County Emergency Management Offices:

Jefferson County Office of Emergency Management
Boulder County Office of Emergency Management
Broomfield County Office of Emergency Management

LookoutAlert Regional Emergency Notification System:

LookoutAlert is the official emergency notification system of Jefferson County and all cities within it, the city and county of Broomfield, and the city of Westminster.
www.jeffco.us/473/Emergency-Notifications