Dangers persist of nuclear contamination in Los Alamos wildfire

Kate Randall
19 May 2000

As of Thursday, authorities in Los Alamos, New Mexico said that the wildfire that began as a controlled burn on May 4 was 60 percent contained. About 1,200 firefighters continued to battle the blaze, known as the Cerro Grande fire, extinguishing hot spots and working against the still-active northwest flank of the fire.

The blaze was set as a controlled burn at the Bandelier National Monument on May 4. The intention was to clear 968 acres as part of a plan to remove brush and thereby prevent future fires. However, high winds quickly whipped it into an uncontrolled wildfire that swept over the town of Los Alamos, burning over 47,000 acres. The blaze shut down the nation's leading nuclear weapons research facility, the 60-year-old Los Alamos National Laboratory, where the first atomic bomb was built in 1945. The lab remains closed, along with schools and most area businesses.

More than 200 homes and other structures have been destroyed in the Cerro Grande fire, leaving more than 400 people homeless. More than 25,000 people were forced to evacuate the area at the height of the fire.

While the majority of Los Alamos residents have been allowed to return home, about 20 percent of the town still remains off-limits. More than 1,500 archaeological sites, some dating back thousands of years, are believed to have been damaged in the wildfire that burned across federal and Indian land. These include ancient Indian ruins, some dating back to 5500 BC.

Before igniting the blaze on May 4, National Park Service officials called the risk that the fire would burn out of control "moderate." They predicted that any damage from an uncontrolled wildfire would not threaten residences or businesses, but would be confined to "timber and private land values."

According to the Park Service's own plan, in order for the fire to be set, temperatures had to be between 40 and 90 degrees Fahrenheit, relative humidity between 15 and 20 percent, and winds no more than 8 miles per hour. A National Weather Service report for May 4 forecast 68 to 72 degree temperatures, 14 to 18 percent humidity and 5 to 10 mph winds. Winds were predicted to increase the following day to up to 15 mph, with gusts reaching 20 mph at ridge tops. Humidity was also projected to fall overnight, making conditions for a wildfire a definite possibility. Pending further investigation, the government has imposed a 30-day ban in the western US on the setting of controlled fires.

US Interior Secretary Bruce Babbitt was to speak Thursday in Los Alamos in an effort to explain to residents how the fire set by the National Park Service burned so dangerously out of control. A report by a team of government fire management experts was due to be released at that time. National Park Superintendent Roy Weaver, who has taken responsibility for setting the blaze, remains on paid leave.

Of particular concern is the possibility of radioactive contamination from damage to the Los Alamos National Laboratory. While government officials have assured the public that no radioactive materials were burned, many questions remain unanswered. The blaze apparently did not penetrate the reinforced concrete bunkers where radioactive materials are stored, but these structures are not the only source of possible radioactive contamination. The security of other radioactive materials in various dumps and waste sites is unclear.

Over the six decades of the lab's operation, radioactivity has leaked in unknown quantities into the water and vegetation surrounding the facility. In the vicinity of the lab there are thought to be millions of

cubic feet of waste containing remnants of uranium, plutonium and tritium. It is quite possible that high winds from the wildfire sweeping across radioactively contaminated brush and soil could send bursts of radiation into the air. The smoke cloud rising from the fire blew across New Mexico and several adjacent states, home to millions of people.

The government has been forced to admit that the ferocity of the fire has hindered them from determining which waste sites were actually burned in the blaze. An independent monitoring system at the lab fell silent during two days of the fire, transmitting no data. Finally, on Monday, May 15, federal and state officials expanded air sampling, allowing for measurements of radioactivity within two hours. Tests were also under way to determine the presence of 100 different chemical substances in the air, with results to be made available within three days, instead of the usual week.

The Los Alamos fire raises serious questions about governmental regulation and safeguards. At present, there are no permanent monitoring systems at US nuclear storage sites to measure the emission of radioactivity, toxic chemicals and hydrocarbons in the event of an accident.

Victims of the Los Alamos fire are eligible for disaster relief from the Federal Emergency Management Agency of up to 18 months temporary housing and $10,000 for home repairs. However, victims seeking additional funds from the federal government might be prevented from doing so by the Federal Tort Claims Act, which protects the government from liability for a wide range of actions. While a White House spokesman commented Thursday, "The administration will work to ensure that all of the sustained losses in this fire are fully compensated," the government has not admitted responsibility for the disaster.