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Radiation Plume Reaches U.S., but Is Said to Pose No Risk

By **WILLIAM J. BROAD**

Faint traces of very low levels of radiation from the stricken nuclear complex in [Japan](#) have been detected in Sacramento, European officials reported Friday, bringing the distant atomic crisis to American shores for the first time.

The readings, picked up by highly sensitive detectors set up to monitor clandestine nuclear blasts, were the first solid evidence of the leading edge of a long radioactive plume that has drifted slowly across the Pacific with the prevailing winds over the past week and has now reached the continental United States.

Health experts said the plume's radiation had been diluted enormously in its journey across thousands of miles and — at least for now, with concentrations very low — would have no health consequences in the United States. In a similar way, radiation from the Chernobyl disaster spread around the globe and reached the West Coast of the United States in 10 days, its levels detectable but minuscule.

Late Friday, the Department of Energy confirmed the European statements about the arrival of the radioactive plume in Sacramento, saying the federal station there detected “minuscule quantities” of radiation that posed no health hazard.

But the Obama administration's initial reluctance to release its own radiation information and the haphazard way that the readings came dribbling out of Europe first — not the United States — raised questions about whether American officials were being as forthcoming as they had pressed the Japanese to be.

Throughout the nuclear crisis, Japanese officials have been accused of withholding information and understating the severity of the risks. But on Friday, pressure mounted on the Obama administration to release information it has gathered on the radiation coming from Japan, with six environmental and watchdog groups sending the White House a letter calling for “transparency on the part of the government.”

In many respects, the plume underscores the lack of a global system for monitoring nuclear emergencies and making the results public. European officials said the system was designed to be hugely sensitive to detect cheaters trying to develop clandestine nuclear arms — but not radioactive plumes from commercial reactor failures, which are easier to detect.

“What we can measure is almost a single atom, which has absolutely no danger” for human health, said Lars-Erik De Geer, research director of the Swedish Defense Research Agency, a part of the monitoring system. “It has to be very sensitive because we are looking for people who are trying to hide the testing of weapons.”

The Sacramento readings were made on Air Force equipment shared with the Comprehensive Test Ban Treaty Organization, an arm of the [United Nations](#) in Vienna. Its mandate is to monitor the global ban on the testing of nuclear arms.

The United Nations agency has more than 60 stations that sniff for radiation spikes and uses weather forecasts and powerful computers to model the transport of radiation on the winds.

Earlier this week, its scientists forecast the plume’s arrival in the continental United States around the end of this week.

European officials said that — outside of Japan — its global network of detectors first picked up the presence of the Japanese plume at a station on the Kamchatka Peninsula, in Russia. Then, on Friday, they said, the station in Sacramento began to register the faint radiation. The government declined to release further details.

In both cases, officials said, the detectors found minuscule levels of iodine-131 and cesium-137 — highly dangerous byproducts of reactor operation that in large amounts can cause [cancer](#). The measured levels are judged to be many millions of times lower than concentrations that would pose a danger to human health.

Experts tracking the plume said it would continue to drift east and might arrive in the New York region early next week.

By definition, the current measurements are tracking relatively old radiation that was released into the atmosphere at the start of the Japanese crisis. It began on March 11 when an offshore earthquake with a magnitude now estimated at 9.0 shook the reactor complex. A tsunami rolled into northeast Japan minutes later, swamping six reactors lined up along the coastline.

As the crisis has worsened, the releases of radiation into the atmosphere have increased. So it seems inevitable that the concentrations of radiation in the plume will grow — though still, health experts say, posing no health risk in the United States.

“We’re monitoring the situation,” said Mike Sicilia, a spokesperson in Sacramento for the California Department of Public Health. But he emphasized that no danger was anticipated.

“All data from state and federal sources,” he said, “show that harmful levels of radiation won’t reach California.”

In brief remarks at the White House on Thursday, [President Obama](#) said he knew Americans were worrying about radiation drifting across the Pacific. “So I want to be very clear,” he said. “We do not expect harmful levels of radiation to reach the United States, whether it’s the West Coast, Hawaii, Alaska or U.S. territories.”

But environmental and watchdog groups cited a growing anxiety in the United States and complained of a lack of adequate information from American officials.

“The U.S. government clearly has information that the public has a right and need to know,” Damon Moglen, climate and energy director at Friends of the Earth, said in a statement.

He called federal insights into the nature of the Japanese radiation “critically important” for the Japanese people, Americans in Japan and “those here at home who are anxious that dangerous radiation may creep towards our shores.”

The California readings were made by an arm of the Air Force Technical Applications Center, an institution of the cold war that monitors for signs of clandestine nuclear tests. Its unit in suburban Sacramento, northeast of the city, has radiation detectors set up at Camp Kohler, near the former McClellan Air Force Base.

In addition to serving the United States government, the unit feeds new readings into the international data system of the Comprehensive Test Ban Treaty Organization, which has 120 member states that share the monitoring insights.

Although the legal mandate of the organization is to scan the globe for clandestine bomb blasts — not reactor accidents — its officials recently decided to start sharing its data more widely in an effort to help international authorities struggling with the Japanese crisis.

In a statement on Friday, the Vienna group said it began sharing the monitoring information Friday with the [International Atomic Energy Agency](#) and the [World Health Organization](#).

The organization said it was “responding to respective requests” from the two groups that it received Thursday for help in “assessing the situation.”