40% of workers had no dosimeter at nuke plant soon after disaster

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A construction company employee in Fukushima Prefecture found that his white blood cell count had spiked a year after he worked at the Fukushima No. 1 nuclear power plant without a dosimeter, following the disaster that crippled the plant.

The man, in his 30s, is concerned whether his exposure to radiation on the day he worked will be recognized as the cause if he develops cancer. Dose records are necessary for applying for workers' compensation benefits, and he believes the reading he was told to record was lower than the actual level.

His exposure occurred on March 16, 2011, less than a week after Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant was devastated by the Great East Japan Earthquake and tsunami.

TEPCO records show 7,766 people worked at the Fukushima No. 1 plant between March 15 and March 31, 2011, and 3,077, or about 40 percent, did not have a dosimeter.

The actual number of workers is estimated to be in the hundreds because the same individuals were counted more than once if they worked on different occasions.

During the 17-day period, only the representative of a working group wore a dosimeter, and all members of the working group entered the reading of the representative’s dosimeter into their records as their own.

It was an emergency measure because most of the 5,000 dosimeters at the plant were washed away by the tsunami.

Some workers told The Asahi Shimbun that their representatives stayed at least 10 meters from their nearest approach.

In the case of the man with the elevated white blood cell count, he and two other workers carried diesel oil and filled power generators beside a reactor building. They were all from subcontractors, and none had a dosimeter.

Their supervisor from TEPCO’s primary contractor, who was wearing a dosimeter, stayed inside a vehicle during what appeared to be a 10-minute assignment.

Back in a building, the supervisor said, “The dose was 1 millisievert per 30 minutes. It was the same for all four of us.”

The man, although uncertain of the exact dosage he was exposed to, entered “2 millisieverts per hour” into his record. He thought he would lose his job if he protested to someone from the primary contractor.

DIFFICULTY IN GETTING WORKERS’ COMP
Two weeks later, TEPCO had all workers wear a dosimeter from April 1, 2011, at the direction of the health ministry. Workers receive dosimeters, called an APD, at the beginning of the day and return them at the conclusion of the day’s work.

Workers at nuclear power plants enter daily radiation exposure data into dose record books, which are critical evidence when they apply for workers’ compensation or file lawsuits seeking damages.

Without the correct dosage data, workers may not be able to receive sufficient compensation or relief measures.

Dose record books were issued to 430,000 workers by the end of March 2011. Radiation exposure data for all workers is kept at the central registration center of the Radiation Effects Association.

According to health ministry standards, people who developed leukemia are eligible for workers’ compensation if they worked at a nuclear power plant for more than a year and their annual radiation exposure was 5 millisieverts or more.

The ministry plans to establish guidelines for colon, stomach and esophagus cancer.

Eligible patients can receive free medical treatment and get compensation for absences from work.

In lawsuits, plaintiffs have to present records of their radiation exposure data at a nuclear power plant.

A health ministry official said dosage data will be “appropriately estimated” based on records for nearby workers and air dose readings if people who worked at the Fukushima No. 1 plant during the 17-day period apply for workers’ compensation.

Still, accurate estimates will become harder to come by, with the passing years.

TEPCO informed the health ministry of the emergency measure to deal with a shortage of dosimeters on March 31, 2011. The health ministry called for immediate improvements, fearing individual workers’ dose data may not be correctly recorded.

Electric utilities and subcontractors are required to monitor workers’ dose data to keep it under legal limits of 50 millisieverts per year and 100 millisieverts for five years.

TEPCO justified the emergency response.

“We were able to fully monitor workers’ radiation exposure from the representatives’ dosimeters,” an official said.

TEPCO also said the practice does not violate the Industrial Safety and Health Law. Under rules based on the law, the official said, it is allowed to “calculate” dose data when monitoring with a measuring instrument is extremely difficult.

But the health ministry disagreed and recommended corrective action be taken on May 30, 2011. It said TEPCO could have had all workers wear dosimeters much earlier.

By the end of July, 23,000 people had worked at the Fukushima No. 1 nuclear plant since the Great East Japan Earthquake.

In one instance, a director of a TEPCO subcontractor ordered workers to shield their dosimeters with lead plates to keep dose readings low. In another troubling revelation, some workers left their dosimeters in vehicles.
The latest case could further erode the reliability of dosage data recorded for nuclear plant workers.

(This article was compiled from reports by Miki Aoki and Jun Sato.)

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