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SEARCH UNDER WAY FOR RADIOACTIVE SOURCES MISSING FROM N.J. SITE

Two sealed sources of radioactive material from a damaged moisture density gauge have been reported missing from an East Orange, N.J., construction site. The Nuclear Regulatory Commission has sent inspectors to the site in response to the loss of the sources, which was reported to the NRC on February 9.

While the amount of radioactive material involved is not significant, any individuals having direct contact with one or both of the radioactive sources for a prolonged period of time could potentially receive harmful amounts of radiation exposure. The sources -- one holding 11 millicuries of cesium-137 and the other holding 40 millicuries of americium-241 -- are less than an inch in diameter. One is attached to the end of a shaft that is inserted into the soil; the other source is short and cylindrical. The Humboldt 5001 Series portable moisture density gauge is used for various purposes, including measuring the amount of moisture in soil. Measurements are made using the device by projecting the radiation from the two sources into the ground and then displaying the reflected radiation on a dial on top of the gauge.

A photo showing what the gauge and its parts look like can be found at the bottom of this press release.

Anyone with information regarding the whereabouts of the sources is asked to contact the NRC's Headquarters Operations Center at (301) 816-5100 at any time. It accepts collect calls. The NRC also understands the company that owns the gauge, PMK Group, Inc., is offering a reward for the sources. The company can be reached at (908) 497-8900.

The construction site is at the former Arcadian Gardens housing project in East Orange. The site is bounded by Sussex Avenue to the north, 9th Avenue to the south, 15th Street to the east and Steuben Street to the west. At about noon on February 9, the gauge's operator left the area where the device was located. When the operator returned at about 12:35 p.m., the crushed remains of the gauge were found. However, most of the device could not be found, most importantly the two radioactive sources.

On February 10, NRC inspectors performed surveys at the site using radiation detectors. Meanwhile, workers at the site removed soil in the area where the gauge was believed to have been crushed. None of the searches yielded the sources. Also, because two shipments of scrap metal were removed from the site after the gauge was found to be damaged, the scrap yard where the material was sent was contacted. The radiation monitors used to check all incoming shipments did not detect any radioactive material in recent shipments.

The NRC will continue to review the event and assist with the search for the missing sources.

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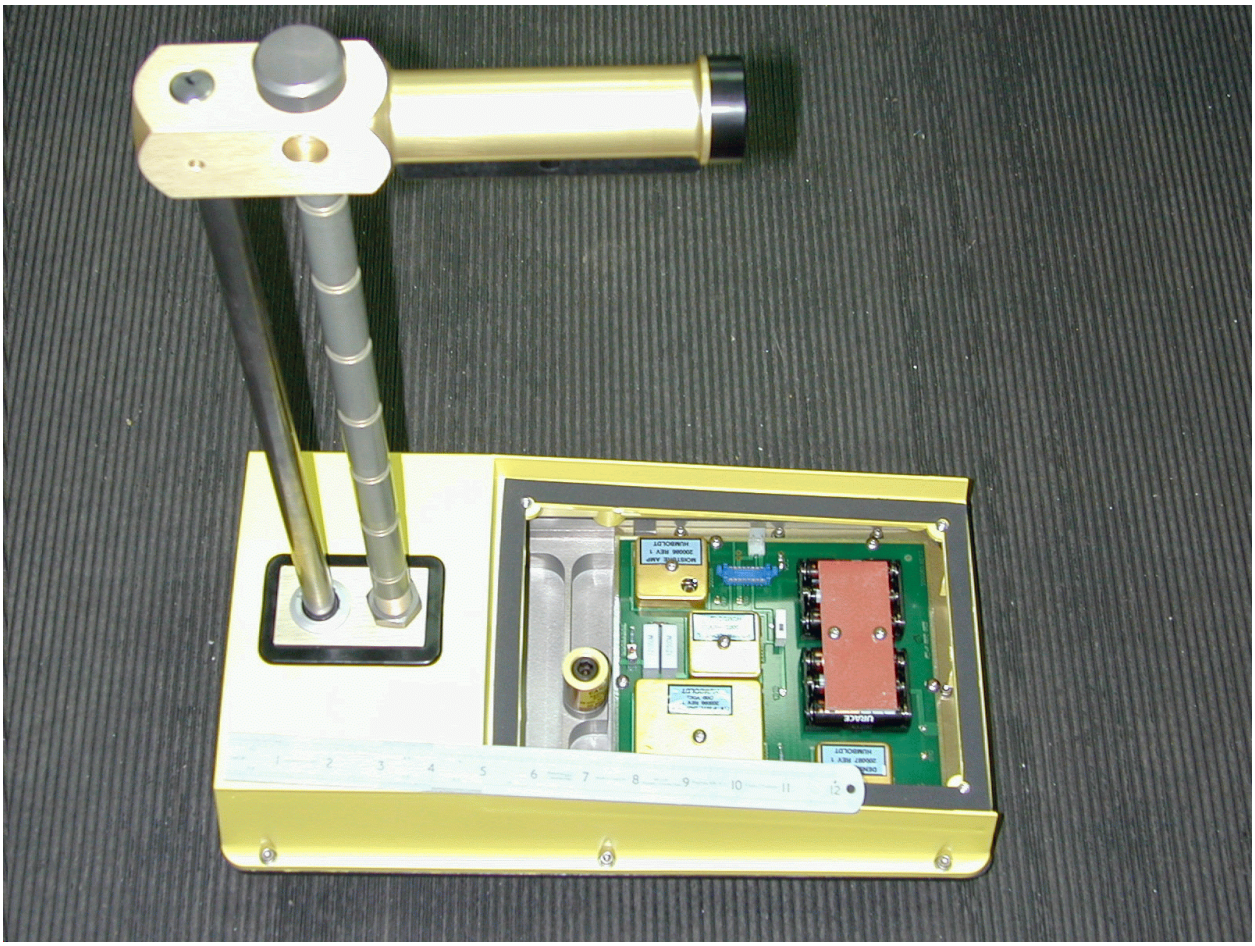

Shown above is the type of moisture density gauge involved, with its lid removed. One of the sources would be at the bottom of the long handle at far left, while the other source would look like the small cylindrical component found in the center of the device.