

IOWA DEPARTMENT OF PUBLIC HEALTH
BUREAU OF RADIOLOGICAL HEALTH
LUCAS STATE OFFICE BUILDING
DES MOINES, IOWA 50319

January 2014

IDPH INFORMATION NOTICE 2014-01:

2013 Portable Gauge Reportable Events

ADDRESSEES

All portable gauge licensees

PURPOSE

The IDPH is issuing this information notice (IN) to alert addressees to recent nationwide events regarding the use of Portable Nuclear Moisture/Density Gauges. These events were reported to the Nuclear Regulatory Commission (NRC) and entered into their Nuclear Material Events Database (NMED).

DESCRIPTION OF CIRCUMSTANCES

From January 1, 2013 to November 20, 2013, the NRC has received thirty-six reportable events that were entered into NMED for portable nuclear moisture/density gauges. IDPH has classified these events into four categories (Damaged, Lost, Stolen, Other).

Since January 2013, eighteen events occurred that resulted in damage to the portable nuclear moisture/density gauges. Of these events, sixteen occurred at construction/job sites where vehicles/heavy equipment came into contact with the portable gauge. Two events occurred that resulted in fire damage to the portable gauges.

Ten events occurred in which portable gauges were lost. Seven of the events occurred when the Authorized User (AU) did not properly secure the portable gauge in the back of their truck and the portable gauge fell out during transportation. In one event, two portable gauges were found at a remote building at an airport. In another event a licensee found a portable gauge missing during their inventory of radioactive material. The last event occurred when a licensee thought they lost a portable gauge when in fact they sent it to another one of their locations.

Seven events occurred when portable gauges were stolen. Four of the events occurred due to the portable gauge not properly secured in the licensee's vehicle. In one event the portable gauge was secured in the truck but the truck was stolen. In another event the portable gauge was secured at a jobsite and was stolen from that location. In the last event, a portable gauge was stolen from a licensee's storage area at their facility.

The last category of events that occurred was classified as other due it not falling in any of the other categories. This last event was a radiation level that exceeded 2mR/hr outside of the licensee's storage area.

DISCUSSION

IDPH is sending out this Information Notice to Iowa portable gauge licensees and reciprocity licensees to emphasize the requirements listed in Iowa Administrative Code (IAC), 641-40.55(136C) "Security and Control of Licensed or Registered Sources of Radiation". Specifically in 641-40.55(5) it states in part that "each portable gauge licensee shall use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal, whenever the portable gauges are not under the control of and constant surveillance of the licensee".

IDPH has analyzed the events reported to the NRC and determined that seventy-five percent of the events occurred due to two causal factors.

1. The portable gauges were not properly secured from unauthorized removal. Eleven events occurred when the AU did not properly secure the portable gauge in their vehicle. The result was the portable gauge fell out of their vehicle during transportation or it was stolen from their vehicle.
2. When the portable gauges were in use at the construction/job sites, they were not under the control of and constant surveillance of the licensee. Sixteen events occurred where the portable gauges were damaged at a construction/job site due to being contacted by construction/heavy equipment vehicles. The contact resulted in various degrees of damage incurred to the portable gauge.

IDPH is expressing to portable gauge licensees the need for attention to detail in regards to securing or maintaining direct control/constant surveillance of the portable gauge, especially at construction/job sites. The licensee must be aware at all times of the activities that may affect the use and security of the portable gauge when at a construction/job site. During times when the licensee is not actively taking measurements with the portable gauge, the licensee should secure the portable gauge or maintain direct control/constant surveillance of the portable gauge to ensure that it will not be damaged by construction vehicles. The licensee should not place the portable gauge near or around other vehicles that could unknowingly come in contact with the portable gauge. The licensee shall also make sure the portable gauge is secured in their vehicle prior to moving/transporting the portable gauge.

IDPH is also letting portable gauge licensees know that certain events that are described above, if they occurred to a licensee in Iowa, could be subject to letter of notice of violation and a civil penalty depending on the circumstances of the violation. Specifically a loss of control of radioactive material in the state of Iowa, depending on the circumstances, could be subject to a civil penalty issued to the licensee. IDPH has issued civil penalties to two Iowa portable gauge licensees for loss of control of radioactive material and security violations for not properly securing radioactive material. The maximum civil penalty issued, to date, for an Iowa portable gauge licensee was five thousand dollars.

CONTACT

This IN requires no specific action or written response. If you have any questions about the information in this notice, please contact this office.

A handwritten signature in black ink, appearing to read 'Angela E. Leek', with a long, sweeping horizontal stroke extending to the right.

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