

IAEA DEVELOPS NEW STRATEGIES FOR RECOVERING "ORPHAN" RADIOACTIVE SOURCES AROUND THE WORLD

July 10, 2007--The International Atomic Energy Agency (IAEA) has established a new process for developing country-specific search and secure strategies for the recovery of orphan radioactive sources, according to Carolyn Jean MacKenzie of the IAEA's Division of Radiation, Transport and Waste Safety. MacKenzie will present a paper detailing the newly established procedure at the 2007 annual meeting of the Health Physics Society, to be held July 8-12 in Portland, Oregon.

Inadequate accounting for radioactive sources is a problem that spans the globe. "Orphaned" sources include radioactive sources that were once useful but have since been forgotten, lost or discarded mistakenly. These sources are commonly found in medical, industrial and research settings. Apart from the risk to human health, there is concern that some radioactive sources could fall into terrorist hands and be used for radiological dispersal devices (RDDs), colloquially known as "dirty bombs." In 2005 alone, the IAEA tracked 103 confirmed incidents of illicit trafficking of nuclear and radioactive materials, the majority of which involved orphan radioactive sources.

IAEA's strategy for locating orphan sources in a country is based on lessons learned from more than 20 country orphan source search and secure missions. It incorporates such measures as using administrative paper searches and examining bankruptcy records, equipping and funding search efforts, and launching public information campaigns to elicit the public's help in identifying possible orphan sources.

Georgia is one of the countries where the IAEA has worked extensively to locate orphan sources. As many as 300 radioactive sources have been recovered in Georgia since the mid-1990s, a legacy of the region's sharp economic decline after the break-up of the Soviet Union. In 2006, MacKenzie was part of a team that located a powerful source of cesium-137 in a pile of dirt in an abandoned factory. They also found a second smaller source in a box of nuts and bolts in a private home, just one thin wooden wall away from the family bedroom. Cesium-137 is a common radioactive isotope used by industries to check materials for flaws, and for making industrial measurements.

The IAEA is the world's center of cooperation in the nuclear field. It was set up as the world's "Atoms for Peace" organization in 1957 within the United Nations family. The Agency works with its Member States and multiple partners worldwide to promote safe, secure and peaceful nuclear technologies.

HPS Meeting Presentation: Wednesday, July 11, 2007, 8:45 AM PDT, Paper WAM-D.2, "Global Orphan Source Recovery Strategy and Implementation."

ABOUT THE HEALTH PHYSICS SOCIETY

The Health Physics Society consists of over 5,500 radiation safety professionals whose activities include ensuring safe and beneficial uses of radiation and radioactive materials,

assisting in the development of standards and regulations, and communicating radiation safety information.

The Society is a nonprofit organization formed in 1956. Its primary mission is excellence in the science and practice of radiation safety. The Society has members in 44 countries, and has established 45 chapters and 14 student branches. Visit www.hps.org for more information.

CONTACT:

Carolyn Jean MacKenzie
Division of Radiation, Transport and Waste Safety
International Atomic Energy Agency
Wagramer Strasse, 5 PO Box 100
A-1400 Vienna, Austria
(+43) 1 2600 22601
c.mackenzie@iaea.org

Kelly Classic, HPS Media Liaison, media@hps.org
507-254-8444; (cellphone July 6-July 15; also, text messages to this number will receive written replies)
507-284-4407 (office after July 15)

Ben Stein
American Institute of Physics, bstein@aip.org,
301-209-3091

###