IAEA removes dangerous radioactive sources from Lebanon

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An IAEA mission to get powerful radioactive sources out of Lebanon was completed 30 August 2009, after a plane carrying the high-activity cargo safely touched down in Russia, where the sources are now securely and safely stored.

They comprised 36 Cobalt-60 sources, with a combined activity of 3.500 curies. A single source is powerful enough to kill a person within minutes, if directly exposed.

Mr. Robin Heard, an IAEA radioactive source specialist, oversaw the mission.

"Given the political situation in the Middle East and particularly in Lebanon we saw this source as vulnerable to malicious acts. If it was stolen it could cause a lot of damage to people," Mr. Heard said.

The Cobalt-60 sources were from an irradiator that was once used for an agricultural project. But that was 10 years ago. The project ceased, and the staff that had the knowledge to properly look after the irradiation had left the organization.

In support of the IAEA activities in nuclear security, in 2005, the Council of the European Union decided to provide funds of € 3.914 million to the IAEA´s Nuclear Security Fund. This paves the way to securing high radioactive sources like those in Lebanon.

"The challenges to this project were all security related," Mr. Heard said. "Just after we went on our first fact finding mission to Lebanon in 2006, the Israelis bombed the airport, so there was no way we could fly the sources out at that time. So there was a long delay while we waited for things to normalise in Lebanon," he said.

But their perseverance paid off, working closely with the Lebanese Atomic Energy Commission. "Having some Cobalt-60 sources for the research irradiator in the agriculture centre not secure and not used, posed some threat, actually a lot of threat on the public, on Lebanon. So the IAEA experts, with the acceptance of the Lebanese authorities agreed that they be removed... It was a very good thing for Lebanon and for nuclear security in the world," Ms. Muzna Assi, Section Head, Radioactive Waste Management and Safe Transport of Radioactive Sources at the Commission said.

The job involved extracting the sources from the irradiator and moving them to special transport containers. They were then flown to Russia on an aeroplane hired specifically for the job.

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