FOREIGN TRAVEL TRIP REPORT

Subject

International Conference on Control and Management of Inadvertent Radioactive Material in Scrap Metal

Dates of Travel and Countries/Organizations Visited

February 21-March 1, 2009
Tarragona, Spain
Organized by the Spanish Nuclear Safety Council (CSN) in cooperation with the International Atomic Energy Agency (IAEA)

Author, Title, and Agency Affiliation

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Sensitivity

Non-Sensitive, Publicly Available

Background/Purpose

The objectives of the conference were: to foster the exchange of international experiences gained in recent years in the control and management of radioactive materials that have been inadvertently diverted into scrap metal streams; to promote good practices to prevent inadvertent diversion of radioactive materials; to elaborate on existing international recommendations, and to develop new recommendations and guidance as needed.

Abstract: Summary of Pertinent Points/Issues

The meeting was organized by CSN in cooperation with IAEA and held in Tarragona, Spain on February 23-27, 2009. See attachment 1 for the meeting agenda. The US Nuclear Regulatory Commission (NRC) was represented by Chairman Dale Klein on February 27, 2009, and by Mr. Christian Einberg on February 23-27, 2009. Over 200 representatives from regulatory authorities and the steel and scrap recycling industries from around the world were in attendance. See attachment 2 for a listing of meeting participants.

The following are some key highlights from the conference:

Monday, February 23:

Richard Meehan from the US Department of Energy (DOE) discussed the challenges associated with dismantling DOE nuclear facilities and the process for clearing the metals. He indicated that the path forward is to have independent verification of clearance activities; establish consistent agency-wide benchmarks; and to improve reporting and record keeping associated with the release of the material.

David Harvey, representing EUROFER - a European Confederation of Iron and Steel Industries, presented the view of the steel makers. EUROFER represents 100% of the steel producers in the European Union (EU). Scrap consumption in the EU exceeds 118 million tons per year. The steel plants monitor for radiation, however, not all scrap processors are currently equipped. The "European Steel Scrap Specification" requires that all grades of scrap shall exclude radioactivity in excess of ambient background levels.

Didier Louvat, representing IAEA, stated that there is a need to harmonize clearance levels for radioactive materials. Additionally, he discussed the need for a safety standard to deal with orphan sources found at scrap facilities.

Tuesday, February 24:

Deborah Kopsick, representing the US Environmental Protection Agency (EPA), discussed the various initiatives that that EPA has undertaken to prevent radioactive material entering the public domain. These included: training provided to industries where radioactive material may be encountered; RFID technology demonstration projects for tracking shipments of radioactive material; and programs dealing with orphan sources.

Wednesday, February 25:

Stephanie Clark, representing the US National Nuclear Security Administration (NNSA), discussed the Second Line of Defense program for installing radiation monitors at border crossings worldwide. Over 950 radiation portal monitors have been installed at 213 sites. She also discussed the Megaports project where over 100 seaports around the world have been equipped with radiation monitors provided by NNSA.

An unknown member of the audience representing Russia's radiation detector industry indicated that facilities in Russia do not have the incentive to locate detectors in the best configuration, such as above the conveyor belts. This is because if a source is found, there is the question of who will pay for disposal.

Abel Gonzalez, representing Argentina, stated that the World Trade Organization may be an important player to help regulate trade of contaminated scrap metal. Stephanie Stephenson, representing the United Nations Economic Commission for Europe, also echoed that this is a big world trade issue.

Thursday, February 26:

Dr. Renate Sefzig, representing Germany's Ministry for the Environment, discussed their recent experience with stainless steel contaminated with Co-60 from India. She advocated harmonization of clearance levels internationally.

Friday, February 27:

NRC Chairman Dale Klein co-chaired the session, "Improving the Confidence and Protecting the Interest of the Stakeholders," with Juan Carlos Lentijo, Technical Director for Radiation Protection for CSN. Chairman Klein opened the session by thanking the organizers and discussing that the US does not have a *diminimus* standard for allowing importation of radioactive scrap metals. He noted that the US has twice considered revising the regulations and both times it failed to receive a majority vote. Mr. Einberg presented the "View of the Nuclear Authorities" for increasing public and stakeholder confidence. Due to time constraints, a question and answer session was not held at the conclusion of the presentations.

Closing session:

At the closing session, CSN President, Martinez-Ten, summarized the key points from the conference. These included the following:

1. There are no international trans-boundary regulations in place to deal with the shipment of radioactive scrap metal.
2. The problems of small countries differ from those of large countries when dealing with shipments crossing their borders. For example, small countries may return radioactive material at the border since they may not have the resources available to deal with the material. There is no international protocol for requiring the regulatory authority of the country receiving the return shipment to be notified.
3. The steel industry has expressed their reluctance to use steel that has been previously used in the nuclear industry.
4. The attitudes of the public and the media are important when dealing with slightly radioactivity materials and that there is a need for more effective communication.
5. The nuclear and steel industries have many issues that need to be resolved regarding the issue of clearance levels. A path forward could be to create a forum for the industries to communicate and build trust.
6. The conference had met its goals to exchange information.
7. An international agreement on clearance levels for radioactive materials is needed.

Additionally, Eliana Amaral from IAEA stated the she will present a paper on the outcomes of this conference at the IAEA General Conference so that a harmonized approach could be developed. She also believed that this is an international trade issue and that the World Trade Organization should be involved.

Technical Visit:

Following the close of the conference a technical visit to the CELSA steel mill in Barcelona, Spain was conducted. The purpose was to see how recycled scrap metal is monitored for radiation and converted into steel. A tour of the facility was conducted; however, the radiation monitors were not observed due to logistical or administrative reasons (i.e. the bus could not

access the part of the facility were monitors were located.)

Pending Actions/Planned Next Steps for NRC

The staff will continue to monitor any forthcoming proposals for clearance levels or orphan sources by the IAEA.

Points for Commission Consideration/Items of Interest

Since the NRC's approach for release of slightly contaminated radioactive solid material is handled on a case-by-case basis through existing guidance, any proposed international protocol for clearance levels may require re-examination of the current approach.

Attachments

Attachment 1: Meeting Agenda
Attachment 2: Meeting Participants

"On the Margins"

Not applicable.