

Denial of Shipments of Radioactive Materials in Paraguay

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Summary. The Denials, Delays and Abandonment of the Radioactive Materials is a problem at world level that has been increased in the last times with more emphasis starting from the attack of September 11 the 2001 in the USA. From then radioactive materials have been denied or delayed and until abandoned. The materials of short periods used mainly in nuclear medicine as the Tc-99m or the I-131, when they are rejected, delayed it usually causes the loss of the material because it has surpassed their useful life and in many cases they are abandoned.

1. Introduction

The UN has carried out a classification of all the Dangerous Goods and to establish the requirements for the safe transport of the same ones which are published in the Orange book[1] as commonly known to him. The Dangerous Goods N° 7 corresponded to the radioactive material, to facilitate the preparation and safe transport of the same ones, that which requires a régime of additional security to the normal merchandise to be transported.

This Special Régime of Transport to which should be adjusted is the Modal Regulation of Dangerous Goods of the UN, incorporate of the Regulation for the Safe Transport of Radioactive Materials No. TS-R-1 of the Collection of the IAEA Safety Standards Series. This whole situation has taken to many companies especially the airlines to take extreme cautions of denial the transport of these merchandises directly.

Paraguay takes the commitment of fulfilling of the Code of Conduct on the Safety and Security of Radioactive Sources[3] and the Guidance on the Import and Export of Radioactive Sources[4] which it has allowed to improve the control substantially about the transport of the radioactive materials.

2. Background

Paraguay is a Mediterranean country that have 406.752 km² of surface, divided by Paraguay river into the eastern region called Region Oriental and the Western Region, called Chaco, well differentiated natural regions. The territory limits with Argentina, Brazil and Bolivia. It has an approximate population of 6.068.000 people. However all the companies dedicated to the import of open sources of medical uses is in Departamento Central. These should fulfill the Agreement of Reach partially for the Safe Transport of Radioactive Materials of the Common Market called(MERCOSUR).

3. Case Study

Many importers receive the radioactive material and the same ones cannot immediately be retired by the administrative bureaucracy of the CUSTOMS or other local authorities. As the material is opened source of short period of use in nuclear medicine exceeds their life utility by which such leave left in the airport, Photo 1. This uncontrol was surpassed thanks to the putting in practice of the Code of Conduct for the Security of the Radioactive Sources.

A second case is the retention of 2 sources of Industrial Use specifically of a Tabacalera Company that was changed to Chile. This company obtained the Authorization of Paraguay to export and Chile to matter with its corresponding License of operation in the destiny country. The 2 Sources of Sr-90 of 740 MBq were placed in their packing of Type A. In its pass by Argentina the airship of exclusive use I land to resupply itself of fuel and in an inspection of the airport security one was with these sources no authorized for Argentina. The load and the airship were delayed 1 month until obtaining all documents and authorizing the continuation of the trip



Photo 1: Materials delayed and left in the airport.

The third case happened with a delay in the Import of Sources of EE.UU., for use in Oil Prospection it happened when the company I ask for the Authorization of Import. Taking care of item 24 of the Code of Conduct was delayed the import until as much fulfills all the requirements for the License of Operation and single later the License of import was granted him. The company did not count either on a License of Export of EE.UU., Authorities Photo 2.



Photo 1: Materials delayed by lack of export authorization from the EE.UU. in the Airport.

The fourth case of delay happened with the Import of Tablets of Cobalt for Teleterapia from Canada. The transport that would have to be make by boat due to sociopolitical situations did not give the permission to berth the wharf which produced a refusal of the carrier to take the load reason why it takes place a delay and increase of the cost of the transport because such only they could be transported by aerial route.

4. Conclusion.

The rejections, delays and later abandonment of the materials in special of Medical use have originated serious damages for the nuclear medicine patients as much of diagnoses as of treatments, in Teleterapia for many patients of cancer who could not be treated. In the petroliferous prospecting and Industry has originated numerous economic damages due to the delays since most of the used sources they are of long period but the delay causes an important increase in the cost.

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