HUNGARIAN PRACTICE AND SOME TYPICAL CASES

OLIVER TURÁK, LÁSZLÓ BALLAY

„Frédéric Joliot-Curie” National Research Institute for Radiobiology and Radiohygiene
H-1221 Budapest, Anna u. 5.

International Conference on „Control and management of inadvertent radioactive material in scrap metal”
23-27 February 2009, Tarragona, Spain
MONITORING SYSTEMS ON BORDER STATIONS

BORDER

Ukraine: 8
Serbia: 8
Croatia: 7

Romania: 13
Sum: 36
Measurement directions: (only inward)
Metal recycling place

Hungarian made detection system (NaI)

Gate monitors

Full plastic detection system
MONITORING SYSTEM IN A METAL RECYCLING PLACE

11 MONITORING SYSTEMS AT RECYCLING PLACES IN HUNGARY
GOOD CONNECTION WITH NATIONAL RADIOHYGIENE DUTY SERVICE
LOACKER Zrt, Budapest, 2008  
volume: 4 m³

metal recycling place
Th-232
doserate: 2-3 x BG
no injury or accident

recycling place called the National Radiohygiene Duty Service
melted in furnace of Dunafer (EUROFER)

ERECHO Zrt, Budapest, 2008  
volume: 0,5 m³
Sent back scrap metal from Bosnia

2007. April

Place: metal recycling place in Budapest

Ra-226 radioactive isotopes
ten sources

Cause: measuring only inward

Activity: ~ 1 MBq/source

Doserate on carriage: max. 15 µSv/h
Sent back scrap metal from Bosnia

Border station called the National Radiohygiene Duty Service

No out-going measurement, no injury or accident

Radioactive Waste Treatment and Disposal Facility, Püspökszilágy

Conclusion: You should measure both of the directions of the shipments (inward/outwards)
SOME OTHER CASES
NATIONAL RADIOHYGIENE DUTY SERVICE

- Decree 16/2000. (VI.8.) Ministry of Health
- Non-stop duty service in Hungary, responsible organisation in case of extraordinary events by radioactive isotopes
- Director, Deputy director
- 6 persons / officers
- 24 hours / 365 days
- Events: 50 events/year
  - 5 events on the scene
  - 1-2 scrap metal events
THE CAR OF NATIONAL RADIOHYGIENE DUTY SERVICE

Transport: up to 5 GBq Co-60 equivalent activity
SUMMARY

For discussing:

- One company, one gate and many parks/ recycling places
- Direction of measurements, inward/outwards
- If the source is taken to the RWTDF, who pay the costs (if there is not an owner)
THANK YOU FOR YOUR ATTENTION!