

Inspections in non-medical use of radiation in Finland in 2010-2014

XVII NSFS conference, Roskilde

Siiri-Maria Aallos-Ståhl
STUK - Radiation and Nuclear Safety Authority

Introduction

- In 2010-2014 STUK made 1020 inspections in the use of radiation
 - in industry,
 - research,
 - in servicing/installation/repair
- Number of orders issued: 3345
(total number of inspections 800)
- Number of inspections where no orders were issued: 220 (22 %)

Main observations/License

Field of observation	No. of orders for corrective actions
License for the use of radiation	
No license	2
Name of the licensee changed	8
License does not cover all apparatus	57
License does not cover all functions	30
Others	72
TOTAL	169

Main observations/ Radiation user's organization

Field of observation	No. of orders for corrective actions
Radiation user's organization	
Insufficient organization description	55
(RSO) duties not specified	147
Supplementary training missing	120
Others	33
TOTAL	355

Main observations/ Radiation safety officer

Field of observation	No. of orders for corrective actions
Radiation safety officer	
No RSO	10
RSO is not qualified	12
RSO is not really available in place of use of radiation	15
No deputy RSO	11
Others	12
TOTAL	60

Main observations/ Place where radiation used

Field of observation	No. of orders for corrective actions
Place where radiation used	
Lack of warning signs	90
Insufficient security arrangements	28
Insufficient radiation shielding	30
Insufficient safety or warning systems	21
Others	60
TOTAL	229



Main observations/Apparatus used

Field of observation	No. of orders for corrective actions
Equipment (radiation source/apparatus)	
Insufficient markings and labelling	526
Insufficient user's guidance	85
Insufficient radiation shielding	40
Insufficient safety devices	163
Apparatus not complying with requirements	64
Others	140
TOTAL	1018



Main observations/ Transport of the sources and record keeping for sources

Field of observation	No. of orders for corrective actions
Transport and record keeping	
Insufficient transport arrangements	73
Insufficient record keeping for sources	22
Others	7
TOTAL	102

Main observations/ Preparedness for abnormal incidents

Field of observation	No. of orders for corrective actions
Preparedness for abnormal incidents	
No local rules	379
Insufficient local rules	97
Others	10
TOTAL	486

Actions taken

- **STUK gives licensee one month to do corrective actions**
- **If corrective actions are not done, licensee gets a reminder**
- **After reminder possible actions are taken:**
 - Threat of fine