IAEA Incident & Trafficking Database (ITDB)

IAEA information system on incidents of nuclear and other radioactive material out of regulatory control

INCIDENT NOTIFICATION FORM

☒ Initial Notification
☐ Update on Previous Incident

ITDB Key: 2024-07-002
WebINF Key: SAF-24-001

PART I – Basic Info and Material Involved

Information provided in Part 1 will be disseminated by the IAEA to all States participating in the ITDB programme and selected International Organizations.

Incident Date:	1 May, 2024	**Country:**	South Africa
Incident Type:	Theft	**Location:**	Cape Town
Malicious Use:	☐ Yes ☒ No ☐ Unknown	**Latitude / Longitude:**	-33.922 / 18.423
Trafficking:	☐ Yes ☒ No ☐ Unknown	**Location Details:**	Transport Depot, Caledon Street, Cape Town
Incident Group:	Group III		

Materials involved in the incident

NUCLEAR MATERIAL

Nuclear Material	Isotopic Content	Quantity	Chemical Description	Physical Form	Application
Depleted uranium	U-235	13 kg			Shielding

SEALED RADIOACTIVE SOURCES

Nuclide	Activity Level	Dose Rate	Additional Details *Device, Material Application, Notes*	Category (RS-G-1.9)
Ir-192	555 GBq		Application: Industrial - Radiography (gamma camera) Notes: EXETUS DUAL 120 PROJECTOR	3

ADDITIONAL COMMENTS ABOUT THE MATERIAL

MATERIAL RECOVERY / REGULATORY CONTROL

Based on the latest available information, was the material recovered, seized or otherwise placed under regulatory control? *(please leave blank if not applicable)*

☒ Yes ☐ Partially ☐ No

PART II – Additional Information

If marked "Yes", the information provided in this section will be distributed to ITDB participating States.
If marked "No", the ITDB participant States will only receive the information provided in Part 1.

Distribution of Part 2 Information to ITDB Participant States

☒ Yes ☐ No

INCIDENT SUMMARY

1. Provide a brief summary of the incident, including a description of the incident's circumstances.

The industrial Gamma Projector was reported stolen a week later from the canopy of the bakkie parked on the high security premises in the Transnet Depot at Caledon Street, Cape-Town. On the 1st May 2024 four armed men attacked security and broke into two bakkies parked at the premises and got away with the contents among them there was EXETUS DUAL 120 PROJECTOR with Ir-192 source (555 GBq) at the time). The source was found and was retrieved from the rubble at the Mega Metals scrap yard on 6 May 2024.

CHARACTERISTICS

Occurred During Authorised Transport: ☒ Yes ☐ No

Metal Recycling Chain Detection: ☐ Yes ☒ No

Border Detection: ☐ Yes ☒ No

Unauthorized Cross Border Movement: ☐ Yes ☒ No ☐ Unknown
(fill out only if Border Detection is No)

DETECTION

2. How was this incident initially detected?

☒ Information Alert ☐ Instrument Alarm

2a. What was the initial source of the information alert?
(fill out only if initial detection by Information Alert)

☒ Inventory check
☐ Investigative lead / Tip-off
☐ Inspection / Regulatory activity
☐ Routine check / Random Search
☐ Inadvertent discovery
☐ Other

3. What type of entity/organization first detected the incident?
(select only one)

☐ Customs / Border Guard
☐ Regulatory Body
☐ Private Citizen
☐ Law Enforcement / Security Service
☒ Operator/Licensee
☐ Other
☐ Fire and Rescue Services
☐ Non-Licenced Company

4. Additional information on how the incident was detected
Please provide any additional relevant information on how the incident was detected

The source was detected by radiation portal monitor as truck was about to enter smelting company from the scrap metal.

LOCATION

5. Please specify the characteristics of the last known facility/site/location in which the material was under regulatory control?
Leave blank if not applicable, otherwise select all options that apply.

- ☐ Nuclear R&D
- ☐ Storage area
- ☐ Industrial (Nuclear Fuel Cycle)
- ☐ Aircraft/Airport area
- ☐ Ship/Harbour area
- ☐ Non-Nuclear R&D
- ☒ Vehicle
- ☐ Industrial (Non-nuclear Fuel Cycle)
- ☐ Train/station area
- ☐ Unknown
- ☐ Military
- ☐ Waste or dump
- ☐ Process/use location
- ☐ Medical
- ☐ Other

Additional information about the facility, site or location where the material was under regulatory control

High security area with security guards and CCT cameras.

THEFT CHARACTERISTICS

Only relevant for Theft incidents

6. What were the characteristics of the theft?

- ☐ The material was the only item stolen
- ☒ The material was stolen along with non-nuclear/non-radioactive items
- ☒ The material was stolen from the vehicle in which it was transported/stored
- ☐ The material was stolen along with the vehicle in which it was transported/stored
- ☒ The theft involved a threat, use of force or another form of intimidation
- ☐ The stolen material was, or probably was, the intended target
- ☐ Other

Additional details about the theft

None

MATERIAL RECOVERY

Only relevant for Theft, Loss or Missing incidents when material has been recovered

7. Please describe the circumstances of the material recovery

What type of entity/organization found the stolen, lost or missing material?
(select only one)

- ☐ Customs / Border Guard
- ☐ Regulatory Body
- ☐ Private Citizen
- ☐ Law Enforcement / Security Service
- ☐ Operator/Licensee
- ☐ Other
- ☐ Fire and Rescue Services
- ☒ Non-Licenced Company

How was the recovered material detected?
(select only one)

- ☐ Investigative Lead
- ☐ Electronic Tracking
- ☐ Inadvertent Discovery
- ☒ Other
- ☐ Search

Additional information on how the material was recovered
Please provide any additional relevant information on how the material was recovered

The source was found and was retrieved from the rubble at Mega Metals scrap yard on 6 May 2024

MATERIAL MOVEMENT

11. Is there any information pertaining to the transport route including its intended destination and mode of transport?

☐ Yes ☒ No ☐ Not Applicable

OTHER INFORMATION

12. Please provide a description of any associated container, packaging and/or labelling.

Industrial Gamma Projector

13. If an analysis of the material was made, please identify the laboratory at which this was performed. If possible provide the type of measuring equipment used

Nuclear Energy Corporation South Africa (NECSA) loaded the Ir-192 source (1386 GBq; 31 Jan 2024) on the projector

14. Please describe any criminal charges, convictions or any enforcement actions resulting from the incident.

Embargo was placed on the company authorization. Additional conditions were added on their licence.

15. Additional information and comments.

Yes, regulator has requested corrective actions to be addressed by the responsible company, no indication that this incident is related to another ITDB incident.

Phineas Mahlangu	12 July, 2024
Authorised Person Submitting Notification	Date