Summary of existing radiation regulations

Two metallurgical melting facilities and various scrap recycling companies are authorised to transport, process, store and recycle NORM contaminated material, below specified limits **(0,5 bq/g total activity.)**

A public release limit, allows material with very low levels of contamination to be released into the public domain **(below 0,4 bq/cm² beta and 0,04 bq/cm² alpha.)**

NORM contaminated material, above controlled release limits, defined as “prohibited list” must remain on the generators property, in a secure storage facility, if it cannot be decontaminated to below controlled release levels.

Redundant or damaged man-made sources should be transported to Pelindaba for safe storage, at the authorisation holders’ expense.

MONITORING POINTS

Scrap is usually handled and transported several times before it is used, and so there are a number of opportunities to monitor it for radioactivity. Should scrap be monitored two or more times within the transport chain the overall possibility of detecting radioactivity is substantially increased. It follows that it is in the interests of the final user of the scrap to monitor scrap as it arrives at the site, and where possible to purchase scrap from suppliers who perform monitoring themselves.

Issued by:

Metal Recyclers Association
National Recyclers Organisation
Non-Ferrous Metal Industry Association
South African Institute of Foundrymen
South African Iron and Steel Institute

General Radiation Detection Procedures

Version: Feb 2011

General radiation detection procedures

Immediate actions to be taken when an alarm level has been exceeded either by drive-through or hand-held detection devices :

1. **Repeat measure to check alarm validity;**
2. **Isolate the vehicle or container;**
3. **Contact the SAPS Bomb Squad with full details and await instructions (keep detailed record of instructions or directives);**
4. **Do not allow vehicle to leave premises without a SAPS/NNR directive (confirm that load arrived at licensed yard);**
5. **Advise HAZCOM secretariat of the incident for inclusion in the central hazardous scrap register.**

Note: The SAPS Bomb Squad provides the service of recovering manmade sources on site at no cost.

SAPS Bomb Squad

Official	Contact details
Bomb Disposal & Research, Pretoria Capt. WM Els	Tel: 012 393 2768 Fax:012 393 2780
Satellite Office: Vereeniging/ Sasolburg Lt Col. FP van der Walt	Tel: 016 450 2120 Fax:016 450 2125 082 575 1805
Cluster Office: Middelburg Capt. Wolmarans	Tel: 013 249 1707/11 Fax:013 249 1741 082 559 7897

National Nuclear Regulator

Mr. E P Mohajane Regulatory Officer	012 674 7130 082 882 5652 epmohajane@nnr.co.za
Mr. S Pheto Regulatory Officer	012 674 7802 082 901 7267 spheto@nnr.co.za
Ms. P Kegakilwe Regulatory Officer	012 674 7124 082 882 5635 peggy@nnr.co.za

Scrap recycling and metal producing companies are encouraged to:

- train their personnel,
- develop adequate procedures for e.g. visual inspection of the scrap, principally during collection to detect discrete sources early (at their point of entry to the recycling industry),
- install and use detection equipment. Detection equipment should be installed at crucial points of the recycling loop, in particular at entrance/exit points as well as checking final product and by-products e.g. slag, fume dust etc.