



CERTIFICATE OF REGISTRATION

IN TERMS OF THE NATIONAL NUCLEAR REGULATOR ACT, 1999 (ACT NO. 47 OF 1999)

CERTIFICATE OF REGISTRATION NO. COR-33

Certificate of Registration No. COR-33, is hereby granted by the National Nuclear Regulator (hereinafter referred to as the NNR) in terms of section 22 of the above Act

to

RAMPETE METAL PROCESSORS (PROPRIETARY) LTD

Registration number:	97/01529
Registered address :	23 Railway Avenue Klerkindustria KLERKSDORP 2571

(hereinafter referred to as the holder)

subject to the terms and conditions set out herein.

Dental Council and who has successfully completed the appropriate training in radiation protection.

1.3 RADIOACTIVE WASTE

- 1.3.1 The holder shall adhere to a radioactive waste management programme approved by the NNR in the revision mentioned in section 2.3 of this authorisation and which embodies all the requirements listed in section 2.3 of this authorisation.
- 1.3.2 A quarterly report shall be submitted to the NNR summarising the information recorded in terms of the radioactive waste management programme.

1.4 TRANSPORTATION

- 1.4.1 Transportation of radioactive material or of any equipment or objects contained with radioactive material off the site or on roads which are accessible to the public must be carried out in terms of the provisions of the Regulations for the Safe Transport of Radioactive Material for the International Atomic Energy Agency in the revision specified in section 2.4 of this Authorisation.
- 1.4.2 An annual report shall be submitted to the NNR detailing the number of consignments made during the preceding year, the radioactive content per consignment, the nature of the packaging and the names of the consignees.

1.5 PHYSICAL SECURITY

- 1.5.1 A physical security system, approved by the NNR, which will prevent unauthorised access to areas containing radioactive material and will prevent the unauthorised removal of such material, shall be in place.

1.6 OCCURRENCES

- 1.6.1 The NNR shall within the timescales specified in section 2.6 of this authorisation, be notified of any occurrences identified in section 2.6 of this authorisation. Such notification shall be carried out as specified by NNR document RD-009: "Verbal Emergency Communication with the National Nuclear Regulator: Mining and Minerals Processing", in the revision specified in section 2.6 of this authorisation.

1.7 QUALITY MANAGEMENT

- 1.7.1 The quality management provisions as set out in section 2.7 of this authorisation, shall be adhered to.

PART 1

AUTHORISATION CONDITIONS

1.1 SCOPE

- 1.1.1 The holder is authorised to carry out activities associated with radioactive material as set out, and on the site as identified, in section 2.1 of this Authorisation.

1.2 OPERATIONAL RADIATION PROTECTION

1.2.1 GENERAL

- 1.2.1.1 The holder shall, as a minimum, appoint a:

Radiation Protection Officer and
Radiation Protection Monitor with an alternate

and notify the NNR of their names

- 1.2.1.2 The holder shall appoint a Responsible Person and an alternate and notify the NNR of their names

- 1.2.1.3 The Responsible Person shall ensure compliance with the authorisation conditions.

- 1.2.1.4 The NNR shall be informed immediately of any change of persons mentioned in 1.2.1.1 and 1.2.1.2.

1.2.2 RADIATION PROTECTION PROGRAMME - WORKFORCE

- 1.2.2.1 The holder shall adhere to the control measures listed in section 2.2 of this authorisation and the provisions contained in the revision of documents listed in section 2.2 of this authorisation.

- 1.2.2.2 The holder shall on an annual basis submit a report on doses received by the occupationally exposed workforce. Verification of these doses shall be provided by a recognised Radiation Protection Specialist.

- 1.2.2.3 The holder shall on an annual basis submit a revised medical surveillance protocol, or a motivation for maintaining the existing protocol, prepared by a Medical Practitioner who is registered with the South African Medical and

PART 2

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1.8 SCHEDULE

1.8.1 The actions and completion dated as reflected in section 2.8 of this authorisation, shall be adhered to.

This Certificate of Registration is effective from the date of issue.

Issued at Centurion on the *29th* day of *May* 2003.



L B ZONDO
CHIEF EXECUTIVE OFFICER

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17 April 2003

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2.8	1	0

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SECTION 2.1: SCOPE

2.1.1 The Authorised site is:

The surface area demarcated with the black line A,B,C,D,E,F on the diagram headed Stilfontein GM Co. Ltd – Surface Plan, annexed to Controlled Copy 1 and Controlled Copy NNR of this authorisation.

2.1.2 The holder may, subject to the conditions in part 1 of this authorisation, carry out the following activities with radioactive material on equipment as released by authorised mining and minerals processing facilities:

Convey or cause to be conveyed
Possess
Process
Store

SECTION 2.2: OPERATIONAL RADIATION PROTECTION

2.2.1 The areas where activities involving equipment contaminated with radioactive material are carried out, shall be classified as Controlled Areas ("the areas") and the following control measures implemented:

2.2.1.1 The areas shall be suitably demarcated and appropriate warning signs shall be displayed at the access points to the areas.

2.2.1.2 Personnel whose duties require access to the areas shall be designated as occupationally exposed person. Such personnel shall:

- be eighteen years of age or older,
- be given instructions in the nature of radiation hazards, the principles of radiation protection and appropriate facility procedures controlling radiation hazards'
- be medically examined in accordance with an approved protocol'
- have their personal radiation doses assessed

2.2.1.3 A Radiation Dose Register which records the dose to occupationally exposed persons shall be maintained. This register shall be retained by the holder for a period of fifty years from the date of the last entry, unless otherwise directed by the NNR.

2.2.1.4 The personnel carrying out activities in the area shall wear gloves, boots and overalls that shall not be removed from the authorised site.

2.2.1.5 The holder shall submit to the NNR, for approval, a programme to provide reasonable assurance that skin contamination on persons leaving the area, and prior to them eating, drinking and smoking, is removed to as low as reasonably achievable and in any case below the following limits:

Alpha emitters:	0.04 Bq.cm ⁻²
Beta and gamma emitters:	0.4 Bq.cm ⁻²

(averaging over 300 cm² is permitted when monitoring for such contamination)

2.2.1.6 Activities in the areas shall be carried out in such a manner that the spread of contamination is minimised.

2.2.1.7 Eating, drinking, smoking and loitering shall not be permitted in the area.

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- 2.2.1.8 On a quarterly basis, the Radiation Protection Monitor shall conduct an open-probe, beta-gamma, on-contact survey of the areas on a 1 m² grid with a surface contamination monitor.

On an annual basis, the Radiation Protection Monitor shall conduct an open-probe, beta-gamma, on-contact survey of the areas on a 5 m² grid with a surface contamination monitor.

Records of these surveillances shall be maintained.

- 2.2.1.9 The holder shall submit to the NNR for approval, a surveillance programme for the purpose of individual dose assessment.
- 2.2.1.10 The holder shall submit to the NNR for approval, a procedure to be followed in the event of the specified set-point of the drive-through gamma dose-rate monitor or other appropriate monitoring device being triggered as well as all documentation related to the calibration and operation of the monitoring device.
- 2.2.1.11 The holder shall maintain a record of all the measurements taken by the drive-through bulk gamma dose-rate monitor or other appropriate monitoring device.

SECTION 2.3: RADIOACTIVE WASTE

- 2.3.1 The radioactive waste management programme shall make provision for:
- 2.3.1.1 The identification of wastes with a specific alpha (U-238, U-234, Th-230, Ra-226, Po-210, Th-232 and Th-228) activity concentration above and below 1000 Bq/g.
 - 2.3.1.2 The collection of the radioactive waste
 - 2.3.1.3 The disposal and/or storage of the radioactive waste
 - 2.3.1.4 A system of record keeping which details the content of all packages of radioactive waste, the nature of the packaging material as well as the location of storage and/or disposal.
- 2.3.2 RMPTPT (Rev 0) Procedure for the Transport of Scrap Metal to Licensed Scrap Smelters.
- 2.3.3 RD-004 (Rev 0) Requirements for Radioactive Waste Management: Mining and Minerals Processing

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SECTION 2.4: TRANSPORTATION

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2.4.1 TS-R-1 (ST-1, Revised)

Regulations for the Safe Transport of
Radioactive Material 1996 Edition
(Revised).

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SECTION 2.5: PHYSICAL SECURITY

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SECTION 2.6: OCCURRENCES

2.6.1 The NNR shall forthwith be notified of the following occurrences:

2.6.1.1 Transport accidents involving radioactive material

2.6.1.2 Triggering of the specified set-point of the alarm on the drive-through bulk gamma dose-rate monitor or other equivalent monitoring device.

2.6.1.3 Personal injury involving equipment contaminated with radioactive material.

2.6.2 RD-009 (Rev 0): "Verbal Emergency Communication with the National Nuclear Regulator: Mining and Minerals Processing".

SECTION 2.7: QUALITY MANAGEMENT

- 2.7.1 The executive manager shall define and issue a policy statement which includes objectives for and commitment to safety and quality.
- 2.7.2 Compliance with licence conditions shall be reviewed on an annual basis by executive management. During this review, non-compliance reports, corrective actions requests and records of any other performance related reporting mechanism shall be evaluated.
- 2.7.3 Documents related to the authorisation conditions in part 1 of this authorisation shall be prepared and reviewed by competent personnel and authorised for implementation by an individual designated by the executive manager.
- 2.7.4 An approved document control system, for ensuring the correct utilisation of document revision shall be established, documented, authorised and implemented.
- 2.7.5 A document control system, for ensuring the correct utilisation of document revision shall be established, documented, authorised and implemented.
- 2.7.6 Measures shall be established, documented, authorised and implemented to ensure that non-compliance with authorisation conditions are identified, corrected and recorded.

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SECTION 2.8: SCHEDULE

ACTION	COMPLETION DATE
<p>Appointment of the following persons as per section 1.2.1 of this authorisation:</p> <p>Responsible Person</p> <p>Radiation Protection Officer</p> <p>Radiation Protection Monitor</p>	
<p>Submission of the following documents:</p> <p>Medical Surveillance protocol</p> <p>Radioactive waste management programme</p> <p>Procedure for transport of scrap</p> <p>Training programme for occupationally exposed persons</p> <p>Monitoring programme required in condition 2.2.1.5</p> <p>Assessment programme required in condition 2.2.1.9</p> <p>Documentation required in condition 2.2.1.10</p>	
Site survey	
All other actions to ensure compliance with all authorisation conditions to be achieved	