



Quality Manual for AVINRA (Pty) Ltd

1. Introduction:

This Quality Manual defines the Quality Management System (QMS) for AVINRA (Pty) Ltd. It ensures compliance with South African legislation, international standards, and industry best practices in rubber recycling and repurposing.

- **Purpose:** Establish a framework for quality, safety, and sustainability.
- **Scope:** Covers collection, processing, repurposing, storage, distribution, and disposal of rubber materials.
- **Commitment:** Aligns with ISO 9001:2015, ISO 14001:2015, and South African environmental and occupational health laws.

2. Legal & Regulatory Framework:

The company complies with the following South African laws and regulations:

- **National Environmental Management: Waste Act (No. 59 of 2008):** This Act Governs waste management, licensing, and remediation.
- **Extended Producer Responsibility (EPR) Regulations (2020):** This requires producers and recyclers to ensure materials are reusable or recyclable.
- **Occupational Health and Safety Act (No. 85 of 1993):** This Act ensures safe working conditions and hazard management.
- **National Environmental Management: Air Quality Act (No. 39 of 2004):** This Act Regulates emissions from recycling processes.
- **National Water Act (No. 36 of 1998):** This Act governs water usage and wastewater discharge.
- **Hazardous Substances Act (No. 15 of 1973):** This Act controls handling of chemicals used in rubber processing.
- **Municipal By-Laws:** Local waste collection, zoning, and environmental requirements.
- **South African Bureau of Standards (SABS) Regulations:** Ensures product quality and safety.

3. Quality Policy:

- Commitment to zero harm to people and environment.
- Continuous improvement through ISO 9001 principles.



- Transparent reporting to stakeholders and regulators.
- Promotion of circular economy by maximizing reuse and repurposing.

4. Operational Procedures:

4.1 Collection & Sorting:

- Source rubber from tires, industrial scraps, and consumer products.
- Segregate hazardous vs. non-hazardous materials.
- Maintain records in National Waste Information System (NWIS).

4.2 Processing:

- Physical cutting or mechanical shredding, granulation, and devulcanization.
- Ensure emissions comply with Air Quality Act thresholds.
- Monitor water usage and effluent discharge per National Water Act.

4.3 Repurposing:

- Manufacture rubber mats, playground surfaces, road additives, and industrial products.
- Ensure compliance with SABS standards for product safety and quality.

4.4 Storage & Distribution:

- Store processed rubber in designated areas with fire prevention measures.
- Transport using licensed waste carriers per Waste Act.

5. Health, Safety & Environment (HSE):

- Risk assessments per OHS Act.
- PPE requirements: gloves, masks, protective clothing, etc.
- Emergency response plan for fire, chemical spills, and accidents.
- Continuous training and awareness programs.

6. Documentation & Records:

- Maintain licenses, permits, and compliance certificates.
- Track waste volumes, recycling rates, and emissions.
- Keep audit reports and corrective action records.



7. Monitoring & Auditing:

- Internal audits quarterly.
- External audits annually by accredited certification bodies.
- Compliance inspections by Department of Forestry, Fisheries and the Environment (DFFE).

8. Continuous Improvement:

- Regular review of legislation updates.
- Innovation in recycling technologies.
- Stakeholder engagement and community awareness programs.

APPENDICES TO FOLLOW



APPENDIX 1: Glossary of Terms

- **Devulcanization:** Chemical or thermal process that breaks sulphur bonds in rubber, allowing reuse.
- **Granulation:** Mechanical shredding of rubber into smaller particles.
- **EPR (Extended Producer Responsibility):** Legal requirement for producers to ensure products are recyclable or reusable.
- **NWIS (National Waste Information System):** South African government database for tracking waste volumes and types.
- **SABS (South African Bureau of Standards):** National standards authority ensuring product quality and safety.
- **QMS (Quality Management System):** Structured framework for managing quality, compliance, and continuous improvement.
- **PPE (Personal Protective Equipment):** Safety gear required under the Occupational Health and Safety Act.

APPENDIX 2: List of Applicable Standards (ISO, SABS)

- **ISO 9001:2015:** Quality Management Systems.
- **ISO 14001:2015:** Environmental Management Systems.
- **ISO 45001:2018:** Occupational Health and Safety Management Systems.
- **ISO 50001:2018:** Energy Management Systems.
- **SANS 10400:** Building regulations for facilities.
- **SANS 1929:** Safety standards for rubber products.
- **SANS 10228:** Classification of hazardous substances.
- **SANS 10229:** Packaging and transport of dangerous goods.

APPENDIX 3: Emergency Contact Numbers

- **Local Fire Department (Brakpan, Gauteng):** 011 740 0000
- **Emergency Medical Services (EMS):** 10177
- **South African Police Service (SAPS):** 10111
- **Poison Information Centre (Tygerberg Hospital):** 021 931 6129
- **Department of Forestry, Fisheries and the Environment (DFFE):** 012 399 9000
- **Company Emergency Coordinator:** Tanya Van-Niekerk; 071 611 1044

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4.2 Incident Report Form:

Incident Report Form	
Date/Time of Incident:	
Location:	
Description of Incident:	
Persons Involved:	
Immediate Action Taken:	
Root Cause Analysis:	
Corrective/Preventive Measures:	
Safety Officer Signature:	
Date:	



4.3 Internal Audit Checklist:

Audit Checklist – Compliance & Quality Control	
☐	Waste Act licensing compliance
☐	Emissions monitoring per Air Quality Act
☐	PPE availability and usage per OHS Act
☐	Waste segregation and NWIS reporting
☐	Emergency response drills conducted
☐	Documentation and record-keeping
☐	Training records updated
☐	Continuous improvement log maintained
Compliance Officer Signature: _____	
Date: _____	

4.4 Product Quality Inspection Form:

Product Quality Inspection Form	
Batch Number:	_____
Product Type (mat, additive, tyre etc.):	_____
SABS Compliance Check: ☐ Pass ☐ Fail	
Physical Inspection Results:	

Customer Feedback:	

Approval Signature:	_____
Approved by:	_____
Date:	_____



4.5 Continuous Improvement Log Form:

Continuous Improvement Log Form
Date: _____
Improvement Idea: _____ _____ _____
Source (Audit, Employee, Customer, Regulator): _____ _____
Action Taken: _____ _____ _____
Result/Outcome: _____ _____ _____
Follow-up Required?: ☐ Yes ☐ No
<i>*Instructions for Use:</i> • Date: Record when the improvement idea was identified. • Improvement Idea: Brief description of the suggestion or issue. • Source: Identify whether the idea came from an audit, employee feedback, customer complaint, or regulatory update. • Action Taken: Document corrective or preventive measures implemented. • Result/Outcome: Note measurable improvements (e.g., reduced waste, improved safety, cost savings). • Responsible Person: Assign accountability for implementation. • Follow-Up Required: Mark if additional monitoring or action is needed.