Industry Waste Tyre Management Plan

Prepared in response to the notice by the Minister in terms of Section 28 (1) read with Section 28 (5) of the National Environmental Management: Waste Act, 2008 (Act No.59 of 2008) to submit an Industry Waste Tyre Management Plan (IWTMP) for approval.

TWAMISA (Pty) Ltd (Reg.No. 2017/492345/07)
Tyre Waste Abatement and Minimisation Initiative of South Africa

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1 EXECUTIVE SUMMARY

South Africa has committed to championing the transition to a green economy as a critical lever for bringing about the structural transformation required for a resource efficient, climate-change resilient, low-carbon and pro-employment growth path. The Department of Environmental Affairs (DEA) has been pioneering such transition through, inter alia, the introduction of a pilot waste tyre Extended Producer Responsibility (EPR) scheme, which is now moving into its second contract term. The scheme was known as the Recycling and Economic Development Initiative of South Africa (REDISA) Integrated Industry Waste Tyre Management Plan (IIW TMP), before being withdrawn in October 2017 after a five-year implementation period.

In 2016, the Waste Management Bureau (Bureau) was established in terms of Section 34 of the National Environmental Management: Waste Act (Act No. 59 of 2008), with a mandate to implement and monitor the industry waste management plans, programmes and strategies. In September 2017 the Waste Tyre Regulations, 2017 (WTRs) were published and superseded all previous versions and amendments of the regulations. The WTRs provide transitional arrangements in the event that an industry waste tyre management plan (IWTMP) expires, be withdrawn or be terminated. In such event and while no other IWTMP exists in terms of Section 28 or 29 of the Act for the same or substantially the same waste stream, the Bureau assumes responsibility to facilitate, supervise and control the management of waste tyres for the interim until a new IWTMP is approved.

In light of the withdrawal of the REDISA IIW TMP and the non-existence of other approved IWTMPs, the DEA released a call, on 30 October 2017, for the preparation and submission of IWTMPs for approval (“Call”). The Tyre Waste Abatement and Minimisation Initiative of South Africa (TWAMISA) IWTMP is being submitted in response to the Call.

The Minister has the right to approve one or more IWTMPs for the tyre industry. In this Plan, TWAMISA presents an experience-based proposal for the separate management of the off-the-road (OTR) segment of the waste tyre industry and to do so separately from the other waste tyre categories. A detailed motivation is provided for the Minister to adopt a multi-plan approach to managing the industry, grounded in the specialised nature of the OTR waste tyre management processes, the stakeholders involved, and the introduction of a healthy competitive environment to foster innovation and incentivise performance. TWAMISA’s motivation supports the view that the co-existence of multiple plans is desirable, feasible and in no way prejudicial to the achievement of the DEA’s objectives for the waste tyre sector, while enhancing the overall effectiveness and efficiency of the waste tyre industry.

TWAMISA proposes an overall organizational structure for the industry, centred on a single perpetual non-profit company (NPC). This NPC will serve as the custodian of the industry strategy and the convergence point for the multiple specialised plans which will collectively implement the industry strategy. The NPC will be managed by experts according to the highest generally accepted corporate governance standards, and will remain independent of the industry at all times in order to avoid conflicts of interests.

The TWAMISA Plan reflects the interdependence of the success of the economy, social development and environmental preservation. The Plan acknowledges that South Africa is beginning to experience advances in responsible waste tyre management and presents a practical strategy to accelerate this progress. The Plan also acknowledges the importance of building on existing key sector infrastructure and knowledge, best practice, innovative approaches and circular economy principles in moving the waste tyre industry up the waste hierarchy. TWAMISA positions itself as the catalyst, planner, coordinator and thought leader of the OTR segment of the industry.

TWAMISA envisages the private sector playing a fundamental role in building the industry on a circular model, and thus amplifying the impact of the Tyre Levy. In exchange for their active and committed participation in the Plan’s programmes, private sector participants will benefit through various
mechanisms, including opportunities for the establishment of new commercial partnerships, service contracts, research and development initiatives, industry networking events, skills and business development support, and awareness campaigns. Moreover, private sector entities will be able to channel their Black Economic Empowerment (BEE) supply chain and/or enterprise development spend into deserving projects and Small and Medium Enterprises (SMEs) managed in terms of the Plan, thus investing in the transformation and sustainability of the industry they themselves depend on.

The integrated and reciprocal nature of these public-private partnerships will yield social dividends in the form of meaningful participation of historically disadvantaged individuals (HDIs) in the industry, and the upliftment of affected communities. The Plan’s social impact strategy focuses on supporting black youth, women and local people living in areas with limited formal economic activity, high levels of poverty and unemployment, inadequate provision of infrastructure, and poor service delivery.

TWAMISA is committed to ensuring that the costs of economic development do not fall disproportionately on those who are poor or vulnerable, and that the environment is not degraded in the process. Regular engagement with all stakeholders about matters that affect them plays an important role in how TWAMISA mitigates these risks, and determines impactful strategies for its Social Responsibility Program.

In this Plan, TWAMISA proposes that the allocation of the Tyre Levy revenue to OTR waste management operations be in line with the full cost of OTR waste management, which exceeds the Tyre Levy currently applicable to the OTR tyres. It is also suggested that no levy be applicable to OTR retreads. This will enable the South African government to more accurately match the Tyre Levy revenue to the environmental cost of the OTR tyre product and measure the impact of the waste tyre EPR scheme as a whole. It will also provide an incentive for the consumer to adopt reuse oriented OTR management strategies which are capable of motivating behavioural change among producers.

TWAMISA anticipates removing all historical stockpiles registered with the Minister as of the Plan’s commencement date and the backlog of REDISA OTR tyres within the Plan term. Legacy and new arising tyres will be dealt with gradually over the duration of the Plan, with the aim that all the OTRs which have become waste during the Plan term be included in current operations or scheduled for management within 12 months of the end of the term.

The TWAMISA Plan endeavours to leverage progress made by REDISA to date, while also addressing the recommendations made by iSolveit Consulting (Pty) Ltd and PricewaterhouseCoopers (PWC) in their reports on REDISA’s operations and performance, as commissioned by the DEA in 2016.

The spirit of the TWAMISA Plan is to establish and foster an environmentally conscious culture throughout the OTR tyre industry, to mobilise a network of actively participating stakeholders behind the industry ambition, and to deliver demonstrable and measurable benefits to all, within and beyond the Plan term.
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<th>Description</th>
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<tbody>
<tr>
<td>BEE</td>
<td>Black Economic Empowerment</td>
</tr>
<tr>
<td>CSR</td>
<td>Corporate Social Responsibility</td>
</tr>
<tr>
<td>DEA</td>
<td>Department of Environmental Affairs</td>
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<tr>
<td>ED</td>
<td>Enterprise Development</td>
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<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<tr>
<td>EPR</td>
<td>Extended Producer Responsibility</td>
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<tr>
<td>ETRTO</td>
<td>European Tyre and Rim Technical Organisation</td>
</tr>
<tr>
<td>HDI</td>
<td>Historically Disadvantaged Individual</td>
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<tr>
<td>IFRS</td>
<td>International Financial Reporting Standards</td>
</tr>
<tr>
<td>IIWMP</td>
<td>Integrated Industry Waste Management Plan</td>
</tr>
<tr>
<td>IPWMP</td>
<td>Integrated Pollution and Waste Management Policy</td>
</tr>
<tr>
<td>IWMP</td>
<td>Integrated Waste Management Plan</td>
</tr>
<tr>
<td>IWTMP</td>
<td>Integrated Waste Tyre Management Plan</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<tr>
<td>NPD</td>
<td>National Development Plan</td>
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<tr>
<td>NEMWA</td>
<td>National Environmental Management: Waste Act (Act No. 59 of 2008)</td>
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<tr>
<td>NEMWAA</td>
<td>National Environmental Management: Waste Amendment Act (Act No. 26 of 2014)</td>
</tr>
<tr>
<td>NPC</td>
<td>Non-Profit Company</td>
</tr>
<tr>
<td>NPSWM</td>
<td>National Pricing Strategy for Waste Management, 2016 (GN. 904)</td>
</tr>
<tr>
<td>NWIS</td>
<td>National Waste Information System</td>
</tr>
<tr>
<td>NWMS</td>
<td>National Waste Management Strategy</td>
</tr>
<tr>
<td>OTR</td>
<td>Off-the-road tyre</td>
</tr>
<tr>
<td>PFMA</td>
<td>Public Finance Management Act, 1999, as amended</td>
</tr>
<tr>
<td>PRO</td>
<td>Product Responsibility Organisation</td>
</tr>
<tr>
<td>PWC</td>
<td>PricewaterhouseCoopers South Africa</td>
</tr>
<tr>
<td>REDISA</td>
<td>Recycling and Development Initiative South Africa NPC</td>
</tr>
<tr>
<td>SAWIS</td>
<td>South African Waste Information System</td>
</tr>
<tr>
<td>SCD</td>
<td>Supply Chain Development</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goals</td>
</tr>
</tbody>
</table>
SHEQ  Safety Health Environment & Quality
SME  Small and Medium Enterprise
SIA  Social Impact Assessment
TWAMISA  Tyre Waste Abatement and Minimisation Initiative of South Africa
VAT  Value-Added Tax
WML  Waste Management License
WTR  Waste Tyre Regulations, 2017
### Glossary of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjudication Committee</td>
<td>A committee formed to award contracts.</td>
</tr>
<tr>
<td>Best practicable environmental option</td>
<td>The option that provides the most benefit, or causes the least damage, to the environment as a whole, at a cost acceptable to society, in the long term as well as in the short term.</td>
</tr>
<tr>
<td>BEE</td>
<td>Black Economic Empowerment as envisaged in the Codes of Good Practice of the Broad-Based Black Economic Empowerment, as amended.</td>
</tr>
<tr>
<td>Bureau</td>
<td>The Waste Management Bureau established by the Minister of the DEA, in terms of section 34A (1) of the NEM: WA, 2008, to oversee the implementation of industry waste management plans.</td>
</tr>
<tr>
<td>Code of Conduct</td>
<td>A code designed specifically for the waste tyre management sector to establish a benchmark of high ethical conduct for operators’ trade.</td>
</tr>
<tr>
<td>Date</td>
<td>The date on which the TWAMISA Plan is gazetted as approved by the Minister of Environmental Affairs.</td>
</tr>
<tr>
<td>De-bead</td>
<td>Removal of steel beads contained in pneumatic tyres.</td>
</tr>
<tr>
<td>Downstream</td>
<td>For the purposes of the Plan, the downstream stage involves locating and collecting waste OTR tyres on depot sites, followed by the transportation, downsizing and processing of OTR tyres into raw material usable in other processes. The downstream stage includes the sale of the recycled product to customers.</td>
</tr>
<tr>
<td>Full life cycle</td>
<td>The process from the collection of whole waste tyres to the reuse of reusable tyres, and the sale of separated and downsized waste tyre-derived materials for energy recovery or recycling purposes.</td>
</tr>
<tr>
<td>High impact</td>
<td>For the purposes of the Plan, the combination of environmental, social and financial returns yielded by an activity, project, campaign, investment or an SME.</td>
</tr>
<tr>
<td>Historical stockpiles</td>
<td>Known stockpiles registered with the Minister of Environmental Affairs and stockpiled anywhere in South Africa as at the Date, excluding REDISA tyres.</td>
</tr>
<tr>
<td>Historical waste tyres</td>
<td>Waste tyres which became waste before the Date, to which no Tyre Levy applied and which do not form part of a registered historical stockpile and/or remain uncollected.</td>
</tr>
<tr>
<td>IFC Standards</td>
<td>Set of eight Performance Standards compiled by the International Finance Corporation (IFC) providing guidance on how to identify risks and impacts. The standards are designed to help avoid, mitigate, and manage risks and impacts as a way of doing business in a sustainable way, including stakeholder engagement and disclosure obligations in relation to operational activities. The standards are applied to manage environmental and social risks and impacts so that development opportunities are enhanced.</td>
</tr>
<tr>
<td>King IV</td>
<td>The King IV Report on Corporate Governance for South Africa, published by The King Committee in 2016, which sets out the philosophy, principles,</td>
</tr>
</tbody>
</table>
practices and outcomes which serve as the benchmark for corporate governance in South Africa.

**Legacy tyres**
Tyres which were, at the Date, fitted to motor vehicles and sold or imported, or manufactured before the Date and are not legally waste tyres at the Date.

**Local**
Either (a) Based within a 100km radius of a depot or business operating site location, or, (b) Local to South Africa, as the context may indicate.

**Manco / Manager**
A company appointed by the NPC and approved by the DEA to handle all operational aspects of an industry plan. This company maintains strictest confidentiality on competitive information.

**Minimisation**
The avoidance of the amount and toxicity of waste that is generated and, in the event where waste is generated, the reduction of the amount and toxicity of waste that is disposed of.

**Minister**
The Minister of Environmental Affairs of South Africa

**New arising waste tyres**
Tyres which have become waste after 'the Date' but before the end of the Plan term.

**Non-OTR tyres / non-OTR**
Tyres other than OTR tyres as defined in this document.

**Occupational Health and Safety**
Refers to the range of endeavours aimed at protecting workers from injury or illness associated with exposure to hazards encountered in the workplace or while working.

**OTR tyres / OTR**
Off-the-road and mining tyres, as defined in the editions of the European Tyre and Rim Technical Organisation (ETRTO) manuals valid as at the date of submission of this Plan.

**NPC**
Non-profit company, established in accordance with this Plan as the custodian of the tyre waste stream.

**Part worn tyre**
A used tyre that conforms to the Road Traffic Act and can be safely returned to its original intended use.

**Plan**
Industry waste management plan.

**Plan network**
The broader network of businesses with contracts awarded in terms of the Plan, or other parties in any way involved in the upstream or downstream sectors of the waste tyre industry.

**Pollution**
Refers to both hazardous and non-hazardous pollutants in the solid, liquid, or gaseous forms, and is intended to include other forms such as nuisance odours, noise, vibration, radiation, electromagnetic energy, and the creation of potential visual impacts including light.

**Processor**
Any person or entity that is engaged in the commercial reuse, recycle or recovery of waste tyres.

**PRO**

**Recovery**
The controlled extraction of a material, or the retrieval of energy from waste tyres.
Recycle - A process whereby waste is reclaimed for further use, which involves the separation of waste from a waste stream, and the processing of the separated material as a product or raw material.

REDISA tyres - Tyres which became waste tyres during the term of the REDISA IIWTMP and include OTR tyres collected and stockpiled on depot sites by REDISA.

Retreading - A process whereby new tread is applied to selected worn-but-undamaged tyres, also referred to as “casings.”

Reuse - The use of waste tyres, in whole or in part, without changing the composition, form or properties of the waste tyre.

Reverse logistics - The process of moving goods from their typical final destination for the purpose of capturing value, or proper disposal.

SME - Small or medium enterprise with an annual turnover not exceeding R50m.

Storage Sites/Depots - A site for waste tyre storage as defined in the Waste Tyre Regulations.

Supplier and/or Enterprise Development - An envisaged in the Codes of Good Practice of the Broad-Based Black Economic Empowerment.

TWAMISA Plan / Plan - The TWAMISA industry waste tyre management plan, as proposed in this document.

Tyre - The continuous covering made of natural rubber or synthetic rubber or a combination of natural and synthetic rubber encircling a wheel, whether new, used or retreaded.

Tyre Dealer - A person or entity that distributes or otherwise deals commercially in tyres.

Tyre Levy / EPR fee - Environmental Levies as legislated in terms of the Customs and Excise Act No. 91 of 1964 and the Rules thereto, applicable to tyres manufactured in, or imported into, South Africa, and imposed on tyre manufacturers and importers. The levy applies to new and/or re-treaded tyres manufactured in South Africa. Re-treaded tyres of a kind used on motor cars (including station wagons and racing cars), and those of a kind used on busses and lorries are excluded from paying the environmental levy.

Tyre producers - A person or institution engaged in the commercial manufacture or import of tyres and retreadable casings, and the import of vehicles fitted with tyres for distribution in South Africa, as defined in Regulation 1 of the Waste Tyre Regulations, 2017.

VAT - Value-Added tax as governed by the Value-Added Tax Act, 1991
5 INTRODUCTION

The Tyre Waste Abatement and Minimisation Initiative of South Africa (TWAMISA) (Proprietary) Limited is an initiative of Danubia HI (Proprietary) Limited, a high impact management and advisory company focused on serving the global impact investment industry by originating and supporting deserving economic development opportunities in South Africa which are built on the principles of social inclusion and environmental sustainability.

In addition to our direct experience with the waste tyre management industry, our team’s strengths include a variety of related fields, from fund and asset management, compliance and executive and risk management in the financial services sector, to environmental assessment and management, commercial property, social services, and SME development. Our team is professional, highly ethical, detail oriented, mission driven, adaptable and approachable.

TWAMISA’s environmental team is well-versed at navigating the technical and regulatory environment in South Africa to ensure a thorough understanding and strict compliance with the legal obligations arising from any of the project activities. They’ve been instrumental in the planning and impact assessments of a number of complex large scale projects throughout South Africa and gained invaluable insight into the best impact practices in key sectors such as mining, energy, waste management and community projects.

TWAMISA’s economic development team brings with it an exemplary track record, including the structuring and analysis of over R1.2bn in high impact unlisted investments in South Africa. With a particular focus on enterprise development, the team has managed a number of high impact investment portfolios that have delivered consistent above average investment returns, and 100% capital preservation for investors. Inspired by the ideal of collective responsibility of those who have the ability and resources to generate solutions that create sustained value, in the lives of others, TWAMISA has the expertise to introduce new skills and formats to waste management that have the potential to unlock opportunities for social change, and to uplift the lives of many.

TWAMISA’s social development team draws on wide-ranging experience in working with local, national and international governmental and non-governmental agencies to secure funds, develop programmes, cultivate relationships and strategies and implement projects that are sustainable, financially sound and impactful, in the social development sector of Sub-Saharan Africa.

TWAMISA believes that its strengths position it well to deliver on the DEA’s objectives for the waste tyre industry. To this end TWAMISA responds to a call for proposals by the Minister in terms of Section 28(1) read with Section 28(5) of the National Environmental Management: Waste Act, 2008 (Act No.59 of 2008) (NEM: WA) and herewith presents its industry waste tyre management plan (IWTMP) for approval.

The TWAMISA IWTMP has been compiled in accordance with the requirements as set out in Section 4 of the Call, dated 30 October 2017. The reader is directed to Annexure A which provides a cross-reference table of the TWAMISA IWTMP to the requirements of the Minister’s call.

6 BACKGROUND

6.1 INTERNATIONAL CONTEXT

In September 2015, 193 world leaders agreed to 17 Global Goals for Sustainable Development (SGDs) following the outcomes of the previous Global Millennium Goals. These 17 Goals aim to end extreme poverty and inequality, and to mitigate climate change by 2030. Goal 12 – “Responsible consumption and production” details the targets and outcomes pertinent to the management of waste in all its forms.
South Africa recognises the importance of international cooperation in dealing with complex waste management issues, particularly with regard to highly dangerous materials and internationally prioritized waste streams. As such, the country has acceded to various international agreements, non-binding conventions and protocols relevant to waste management.

Through various global and national forums on waste recycling, the establishment of a circular economy was identified as a priority in order for South Africa and its international partners, such as BRICS (the association of the five emerging national economies viz. Brazil, Russia, India, China and South Africa) and the European Union, to reach future cooperation agreements. Such global covenants were ratified through the SA-EU Trade, Development and Cooperation Agreement and Strategic Partnership Joint Action Plan. Together these agreements established the international frameworks needed to achieve the environmentally sound management of various wastes, including tyres.

6.2 CIRCULAR ECONOMY

It is now generally accepted that if the world at large is to preserve its resources and a healthy natural environment for future generations, it needs to set zero waste generation as a target wherever possible. The creation of a recycling economy can help, but without the introduction of fundamental changes at the points of product design and product consumption, recycling alone is not enough to sustainably address the goals of zero waste and mitigation of climate change. To effectively address such an agenda, there needs to be a move beyond recycling into the largely uncharted territory at the higher end of the waste hierarchy: to reuse, reduce and avoid.

Reaching far beyond the current "take, make, use and dispose" linear extractive industrial model, the circular economy is restorative and regenerative by design. It aims to keep products, components, and materials at their highest levels of utility and value at all times. Relying on industry-wide innovation, the circular economy model aims to redefine products and services, and to design waste out of product life-cycles. It achieves this through the application of a few core principles, such as incentivizing manufacturers to change their processes, designing products which use fewer raw materials, and designing products which have the minimum negative impact on the environment at the end of their useful lives. The circular model builds economic, environmental and social capital in the process.

6.3 THE SOUTH AFRICAN PERSPECTIVE

In order to domesticate a sustainable transition of the SDGs into South African policy, the international frameworks and the circular economy model were used to shape the South African National Development Plan 2030 which set its vision as the "transition to an environmentally sustainable, climate change resilient, low-carbon economy and just society." The Department of Environmental Affairs developed various mechanisms to support the implementation of the NDP goals in terms of the management, reuse and recycling of waste.

The country's sustainable development vision is outlined in the National Framework for Sustainable Development (2008) as follows: “South Africa aspires to be a sustainable, economically prosperous and self-reliant nation state that safeguards its democracy by meeting the fundamental human needs of its people, by managing its limited ecological resources responsibly for current and future generations, and by advancing efficient and effective integrated planning and governance through national, regional and global collaboration.”

The National Environmental Management Act (Act No. 107 of 1998) (NEMA) and the National Environmental Management: Waste Act (Act No. 59 of 2008) (NEM: WA), as overarching policies, were developed to regulate the industry and aimed at strengthening waste management practices countrywide by bolstering compliance monitoring, enforcement capacity, and reinforcing the implementation of authorized waste management best practices. Development and implementation of
the activities are the responsibility of the provincial authorities and local municipalities, and they are held accountable through the Integrated Development Plan (IDP) reporting system.

In 2009 the Minister of Environmental Affairs and Tourism promulgated regulations in respect of the management of waste tyres under the Environment Conservation Act, 1989 (Act No. 73 of 1989). The subsequent Waste Tyre Regulations of 2009 and 2017 (WTRs) provided regulatory mechanisms to address the funding and management of such waste by, among others, tyre producers. The WTRs provide for the preparation and submission to the Minister of an Integrated Industry Waste Tyre Management Plan (IIWTMP) for approval. The WTRs call for either tyre producers to submit their own IIWTMP for approval, or to subscribe to an approved plan.

The IIWTMP submitted by Recycling and Economic Development Initiative South Africa (REDISA) was selected, approved and gazetted, as the only plan, on 30 November 2012 and implemented in the same year. The main objectives of the plan were to support and promote waste tyre collection and recycling, job creation, and SMME development within the tyre industry.

The National Pricing Strategy for Waste Management (NPSWM) was established in 2016 in terms of Section 13A of the National Environmental Management: Waste Amendment Act (Act No. 26 of 2014) and gives effect to the National Waste Management Strategy (NWMS). The NPSWM contains guiding methodologies for the setting of waste management charges, aimed at funding the re-use, recycling or recovery of waste and the implementation of IWMPs for specific waste streams.

The primary aim of the Extended Producer Responsibility (EPR) schemes, applicable to waste tyres, is to raise revenue to drive behavioural changes in producers. The purpose of EPR fees themselves, and hence the basis for their calculation, is to provide funding to cover the costs of establishing and implementing systems (for collection, sorting, and treatment, where required, prior to the sale of materials to recyclers) and the provision of incentives, subsidies, infrastructure and/or information (to consumers, collectors and/or processors) so as to stimulate the use of recyclable materials.

The level of the fees is ultimately determined by the market. An EPR scheme is a management system established in order to ensure that the supporting infrastructure and systems are implemented to support the separation, transportation, recycling and recovery of recyclables. EPR schemes are customized to the socio-economic environment of the country, and the goals of the EPR scheme.

EPR schemes differ in their design based on the unique characteristics and properties of a product, product category or waste stream. The various sectors must therefore develop plans in the context of the unique aspects of the specific sector.

In 2016, the Waste Management Bureau (Bureau) was established in terms of Section 34 of the National Environmental Management: Waste Act (Act No. 59 of 2008), with a mandate to implement and monitor the industry waste management plans, programmes and strategies, to ensure transparency and consultation in the design of EPR schemes within the waste industry, to increase understanding of the targets and their purpose, and to ensure ongoing communication in the process of implementation of NPSWM.

In September 2017 the Waste Tyre Regulations, 2017 (WTRs) were published and superseded all previous versions and amendments of the regulations. The WTRs provide transitional arrangements in the event that an industry waste tyre management plan (IWTMP) expires, be withdrawn or be terminated. In such event and while no other IWTMP exists in terms of Section 28 or 29 of the Act for the same or substantially the same waste stream, the Bureau assumes responsibility to facilitate, supervise and control the management of waste tyres for the interim until a new IWTMP is approved.
7 MOTIVATION FOR THE TWAMISA PLAN

7.1 PROBLEM STATEMENT

The REDISA IIWTMP was withdrawn in October 2017 and REDISA was placed under final liquidation. The reasons cited were DEA’s dissatisfaction with REDISA’s lack of transparency, poor governance, inadequate reporting and a failure to achieve its objectives. Also, Off-the-road (OTR) tyre waste was not being managed, despite the tyre levy on these tyres having been collected by REDISA, creating a significant backlog in the industry.

In light of there being no other IWTMP approved in terms of section 28 or 29 of the Act for the same or substantially the same waste stream, the Minister must find a suitable successor or an alternative to the REDISA IIWMP to ensure that the DEA’s objectives for the tyre waste stream are met, and that the EPR scheme is managed in a professional and accountable manner.

This TWAMISA IWTMP is being submitted in response to the call for IWTMP proposals published by the Minister and gazetted on 30 October 2017.

7.2 OVERALL INDUSTRY WASTE MANAGEMENT APPROACH

The TWAMISA Plan suggests the following key interventions:

7.2.1. Multiple plans for the industry

Experience acquired through the REDISA IIWTMP has shown that the transition of the waste tyre industry towards a circular economy model is an undeniably large and complex task, placing high performance expectations on the Product Responsibility Organisation (PRO) and, by extension, on the Manager of the IWTMP (Manco). The mandate, being the management of all types of waste tyres, is simply too wide to be achievable by a single party within the required timeframes. This makes the subdivision of the industry into appropriate segments, each independently managed, a more efficient and achievable proposition.

Introducing multiple management companies to carry out specific mandates which collectively achieve the overall strategic objectives of the NPC will benefit the industry by accelerating the Plan roll out, introducing a healthy level of competitive tension between the Managers, harnessing the power of a greater number of knowledge contributors, sharing appropriate strategic partnerships, and facilitating constructive collaboration. Multiple plans will accelerate the advancement of the industry by narrowing the focus of each, and in so doing simplifying delivery by any one Manager.

Any plan supporting an approved EPR scheme needs to be focused, professionally managed, goal-orientated, low-cost, low-complexity, inclusive and transparent if it is to succeed as intended.

7.2.2. Single plan for each industry segment

The TWAMISA Plan focuses on a single, distinct segment of the tyre industry, viz. the management of the OTR waste tyres. The Plan sets relatively few high impact goals, but all of these goals are achievable during the term proposed by the Plan (i.e. five years).

It is important to clarify that TWAMISA proposes only one plan per segment in order to avoid a situation where tyre producers may be able to switch to another plan during the course of the plan term, thus compromising the completion and sustainability of the Manco’s efforts towards
the achievement of the plan objectives. This approach will invariably have other benefits: unified implementation method of OTR related operations, reduced set up and administration costs, economies of scale, SME funder confidence, service contracts continuity, etc.

7.2.3. **Single structure and collaborative ethos**

The only way to achieve the ambitious goals set out at the national level is to foster trusting and highly collaborative partnerships between government and the industry, and to establish a sustainable structure to facilitate this.

TWAMISA proposes a holistic and perpetual strategic oversight and management structure to drive the transition to a circular economy within the waste tyre industry.

7.2.4. **Tyre Levy commensurate with the environmental cost of a product**

The Plan highlights various aspects of the OTR product and OTR waste management that differentiate it from the rest of the industry and cause the environmental costs of disposal of OTR waste to exceed the current Tyre Levy, which currently is uniformly applicable to all tyre categories. Adoption of a segmented approach to managing the industry will necessitate the revision of the Tyre Levy revenue allocation to waste management operations. This will enable the South African government to more accurately understand and measure the impact of the waste tyre EPR scheme.

7.3 **RATIONALE FOR A SEPARATE OTR SEGMENT PLAN**

Whilst some progress has been made by REDISA in the OTR segment of the waste tyre industry, this segment remains largely underserviced and underdeveloped.

The OTR segment possesses unique characteristics which make it substantially different from the rest of the industry and consequently requires a customised approach. These characteristics and their significance in terms of the TWAMISA Plan are as follows:

7.3.1. **User profile**

The users of OTRs are concentrated primarily in the mining, civil engineering and agricultural sectors. These users differ significantly from the general public in that they comprise relatively few, large and sophisticated corporate entities. These users are generally subject to stringent operating and reporting requirements, as set out in their respective industry charters or similar frameworks, which coerce environmentally and socially sensitive approaches. As such they are inherently inclined to align their projects with meaningful and sustainable community development, economic and supplier development, and best practice as envisaged by the BEE Codes of Best Practice.

The TWAMISA Plan has been designed with reference to this very aspect and as such it is positioned to be entirely complementary to the pre-established objectives of the OTR users’ industries and to facilitate rapid acceptance and greater impact.

7.3.2. **User size**

The OTR segment is dominated by a small number of large scale users. As such OTR tyres represent a major expense for most individual users. Adoption of effective reuse and minimisation strategies will have a meaningful favourable financial impact on each user.

The TWAMISA Plan intends to present users with tangible opportunities (some of which have to date been absent in South Africa) to realise these financial benefits, motivating wider adoption by users, which will in turn move this segment into the higher tiers of the waste hierarchy.
7.3.3. Compliance related complexity of users

The conclusion of contracts for services with commercial enterprises of the size, nature and stature of typical OTR users is often complex and protracted. The strict regulation of large-scale stockpile owners’ businesses requires advanced SHEQ, OHS, medical clearances, track record, local and sustainability strategy, and other compliance on the part of the service provider.

Unlike non-OTR waste tyre management, which can and does facilitate the participation of many small operators from the informal sector, OTR waste operations necessitate the involvement of existing businesses with proven core capability, access to funding, resources and the relevant know-how.

The TWAMISA Plan acknowledges this aspect of the OTR industry segment and presents a solution which enables meaningful integration of HDIs and BEE consortia into the industry through a sustainable SME incubation program undertaken with suitable and established incubation partners.

7.3.4. Concentration of historical stockpiles

Historical stockpiles are concentrated in the hands of relatively few users who currently bear the responsibility for their disposal in terms of their approved waste tyre stockpile abatement plans (WTSAPs). The most efficient way of ensuring the sustainability of solutions designed and financed to execute these approved WTSAPs is to subsequently use the infrastructure set up for this purpose for new arising tyre waste. From the perspective of the PRO, using the same infrastructure to manage new arising OTR waste tyres falling under the Plan, on an ongoing basis, presents a valuable opportunity to reduce infrastructure setup costs, simplify stakeholder relationship management and ensure demand-driven sustainability of SMEs set up for this purpose. Infrastructure sharing and concurrent management of historical stockpiles and new arising waste tyres will result in significant economies of scale experienced by individual users, groups of users operating within the same broader area, and the PRO. Moreover, it will simplify the competitive landscape for contract bidders in both the abatement plans and the EPR scheme environments, and minimise the risk of actual or perceived unfair market interventions and incentives by the PRO.

As such, the TWAMISA Plan presents a holistic solution which will facilitate the integration of historical stockpiles and new arising waste tyres for the benefit of the industry.

7.3.5. Segment dominated by imports

OTRs represent a specialised sector of the South African tyre industry, dominated by a few multinational manufacturers and importers, with imports by far exceeding local manufacture.

The TWAMISA Plan addresses this economic setback by promoting local OTR re-treading and environmentally conscious local OTR manufacture with the aim of reducing imports and new tyre waste and increasing the number of new manufacturing jobs created in terms of the Plan.

7.3.6. Physical attributes of OTR tyres

The constitution of OTRs makes environmentally responsible management thereof much more onerous than that of non-OTR waste tyres categories:

7.3.6.1. Different loading, off-loading and handling equipment is required due to the tyres’ large dimensions and weight;
7.3.6.2. Specialised, capital-intensive processing equipment is required due to the tyres’ large dimensions and internal structure designed to endure the harshest conditions for long periods of time which render the tyre de facto indestructible;

7.3.6.3. Handling and transportation of OTR tyres poses greater health and safety risks;

7.3.6.4. Transportation costs are extremely high due to the difficulty in optimising standard payloads and the elevated costs of abnormal payloads;

7.3.6.5. Some OTR waste arises in small numbers across wide catchment areas, rendering the setup of OTR infrastructure in such areas not to be economically viable. These OTRs need to be transported over long distances to the closest suitable OTR pre-processing depot, thus increasing the costs of transport to depot;

In summary, environmentally responsible management of OTR waste tyres, at any level of the waste hierarchy, requires considerable expertise, experience and a sophisticated business setup, with a large initial capital outlay and an ability to sustain substantial cash flows over time.

The nature of this industry segment is therefore best suited to a few well-established enterprises, as proposed in the TWAMISA Plan, as opposed to numerous small operators.

The distinct characteristics set out above result in specific costs associated with the management of OTR waste tyres, which exceed the costs of management of non-OTR waste tyres. As such, a differentiation between the allocation of the Tyre Levy revenue between the OTR and non-OTR segments of the industry is required to appropriately cover the true environmental cost that arises from the management of these different tyre waste types.

A Product Plan as envisaged in NPSWM and proposed by TWAMISA, which is aligned with the specific needs of the OTR tyre user group, as described above, is primed to benefit from enhanced stakeholder buy-in and mobilisation, more effective waste minimisation awareness campaigns, faster and more concrete campaign results and more in-depth market data collection and analysis. Moreover, OTR tyre users are both legislatively motivated and well positioned to meaningfully and sustainably support a plan containing SME development programs such as those envisaged in the TWAMISA Plan, thereby offering a strong foundation for the possible development of future public-private partnerships in this area.

The past combination of the OTR and non-OTR waste tyre segments under a single plan did not result in any demonstrable administrative savings, economies of scale, or other material efficiencies which may justify that the same approach continue. To the contrary, there are multiple reasons, as outlined above, to approve a separate plan specifically for the OTR waste tyre segment of the industry.

7.4 REDISA AND CO-EXISTENCE WITH OTHER PLANS

TWAMISA’s primary objective is to support the DEA and the Bureau in their broader goal of responsible waste management and it is open and willing to collaborate with all plan Managers in this regard.

TWAMISA will endeavour to integrate any suitable existing OTR-specific infrastructure set up by REDISA into its operations. Existing contracts for OTR related services will be honoured on merit, i.e. in accordance with the contract award provisions of the TWAMISA Plan set out in section 12.11 CONTRACT AWARD PROCESS.

While the TWAMISA Plan is intended to exist independently from any other plan, there will undoubtedly be tangible long-term synergies with the other approved industry plans, and thus opportunities for meaningful collaboration between the appointed Managers.
Examples include, but are not limited to:

- Sharing of depot sites in areas where it may be difficult or unfeasible to set up specialised OTR or non-OTR depot infrastructure, on commercial terms;
- Collaboration in fulfilling offtake agreements where the OTR and non-OTR derived materials may be interchangeable and cost-savings can be realised;
- Co-funding of research and development projects beneficial in both tyre segments;
- Jointly designing key performance indicators (KPIs) and establishing appropriate reporting standards;
- Sharing of administrative and IT systems infrastructures where feasible.

Should the intended approval of multiple IWTMPs reveal implementation complications for any party to both IWTMPs, TWAMISA is committed to finding practical solutions in collaboration with the relevant IWTMP Manager/s and the industry.

7.5 PLAN ADVANCEMENTS

TWAMISA recognises that the industry has made important progress in educating the South African public about sound waste tyre management principles. As is often the case for industry pioneers, hindsight has demonstrated which strategies have been most effective, and revealed where further improvements and innovations are required in order move the waste tyre industry towards a circular economy.

The TWAMISA Plan will accelerate delivery on the objectives set for the industry as follows:

7.5.1. Limited and focused mandate

TWAMISA will be able to dedicate 100% of its resources and expertise to the OTR sector of the industry from day one of the Minister’s approval of the Plan.

7.5.2. Prioritising environmental impact

The primary objective of the TWAMISA Plan is the management of waste OTRs in line with the principles as described in section 11.1 WASTE HIERARCHY, within the timeframes set out in section 10.3 IMPLEMENTATION TIMEFRAMES. This objective will be pursued in the most sustainable manner at all times. TWAMISA believes that the success of the Plan and the sustainability of the industry are both firmly grounded in commercial efficiency, competitiveness, and the resilience of the solutions implemented. TWAMISA’s focus will be on creating decent jobs through supporting and establishing demand-driven enterprises.

7.5.3. Mobilising through collaborative management

TWAMISA’s intention is to serve as the facilitator, unifying platform, catalyst and manager of the OTR industry segment. It will support deserving projects and enterprises which share the TWAMISA Plan’s vision and values. Its role will not involve setting up businesses under its control, or businesses in competition with the existing pre-processing, processing and/or recycling industry.

7.5.4. Emphasis on local and proudly South African

The transition to a circular economy model in South Africa necessitates the building of local capacity at most, if not all, levels of the waste tyre industry. In line with this goal, TWAMISA will favour supporting and incentivising enterprises using and/or developing local equipment and technologies.
7.5.5. **High impact management**

TWAMISA’s expertise in high impact investing and project development will attract value-adding business partnerships and co-funding to the waste tyre industry. These investments will enhance the impact that the prescribed tyre levy can generate, catalyse meaningful transformation of the sector, move the sector towards the circular model, and reduce the risks related to SME failure rates.

7.5.6. **Enhanced social impact**

Structures will be put in place to enable the industry to transform itself from within, and to use the benefits it generates for the meaningful and sustained upliftment of HDIs. This may take the form of industry participants redirecting their voluntary initiatives—such as social responsibility programs, training, community development, and others—towards these structures, with the goal of achieving more streamlined benefits, and higher impact within the industry.

8 **OBJECTIVES OF THE PLAN**

The TWAMISA Plan sets out to support and further the achievement of the following objectives, within the OTR segment of the tyre industry:

- Assisting South Africa with the implementation of a circular economy approach as a more sustainable economic growth model;
- Actively pursuing the national objective of permanent reduction in new arising tyre waste;
- Application of best national and international practice to move this waste segment up the waste hierarchy, into the reduce and reuse levels;
- Implementation and execution of environmentally responsible waste management practices for tyre waste which cannot be avoided;
- Incorporation of SME business incubation programs and other high-impact practices to achieve sustainable socio-economic development and meaningful inclusion of previously disadvantaged communities into the tyre industry;
- Establishment of an SME co-funding and benefits-sharing platform to enable sustainable transformation within the industry; and
- Building and promoting trusting and collaborative partnerships between the government, the industry at large, and related industries.

9 **INDUSTRY AND ORGANISATIONAL STRUCTURE**

The organisational structure presented below is intended to apply to the entire waste tyre industry, of which TWAMISA proposes to manage the OTR tyre segment only, as one of multiple managers.
9.1 FLOW OF FUNDS

The Tyre Levy is raised from the tyre producers with the understanding that the proceeds will be appropriately applied to manage waste tyres for the benefit of all South Africans, and the environment. The South African Revenue Services (SARS) collects the levy and transfers the revenue to the National Treasury, responsible for all financial disbursements to Government Departments. The National Treasury in turn transfers the approved finances for the funding of waste management activities to the DEA/Bureau.

The Bureau oversees the implementation of IWMPs, including the management and the disbursement of revenue collected from waste management charges across various waste streams.

Subject to the provisions of the public finance management system, the NPC applies for funding to the Bureau by way of an annual budget, to be prepared by the respective Manco/s. The Manco/s disburse funds specific to the Plan/s under its/their management on behalf of the NPC. The Manco/s earn a management fee for this service.

The proposed key industry structures are described in detail below:

9.2 NPC

A non-profit company (“NPC”) is to be established as the main and sole governing body of the tyre waste stream, under the oversight of the Bureau. The NPC will be an independent, perpetual entity incorporated to encompass and safeguard the purpose, principles, assets and relationships of the IWTMP/s, as the Minister may approve.

The NPC’s primary governance roles and responsibilities should include, but not be limited to:

- Support the Bureau in the carrying out of all aspects of its responsibilities with regard to the tyre waste stream;
- Apply for revenue and collect revenue from the Bureau
- Oversee and monitor implementation and execution of the Plan/s by the respective Manco/s;
- Continuously assess the Plan to ensure that it remains relevant to achieving its objectives
- Steer and set strategic direction with regards to both the NPC’s strategy, and the way in which specific governance areas are to be approached, addressed and conducted;
- Approve policy and planning that give effect to the strategy and the set direction;
- Custodian of the industry’s central registration system of the Plan/s network participants;
- Ensure accountability for organisational performance by means of, among other measures, reporting and disclosure;
- Ensure ongoing alignment of the Plan/s with all relevant legislation;
- Ensure that anti-competitive behaviour in the sectors in which it is involved is not permitted;
- Ensure that tyre producers are not able to exercise undue influence on the waste tyre management industry;
- Maintain strict confidentiality with regards to all market data and intellectual property of the industry participants and of each Manco;
- Ensure the accumulation of industry-specific knowledge and experience within the NPC and undertake adequate succession planning to protect the longevity of the NPC’s strategy, and the continuous delivery on DEA’s objectives for the tyre waste stream from a practical, legal and financial point of view;
- Ensure that Manco/s meet the set KPIs and where these are not being met, provide guidance and assistance to Manco/s;
- Set up policy and procedures for removal and replacement of non-performing Manco/s, together with adequate transitional arrangements to ensure that the industry segment affected is not unduly disrupted by changes in management structures.

Given its accountability to the government and the public at large, the NPC will function as a quasi-government entity and should apply the highest appropriate level of corporate governance best practice. As a minimum, this would entail compliance with King 4 Report on Corporate Governance and the Companies Act 71 of 2008. Any deviations from the King 4 recommendations should be explained and only permitted for as long as the limiting circumstances prevail. The NPC should align, as appropriate, with the relevant aspects of Preferential Procurement Regulations, 2017.

In order for the TWAMISA Plan to be successful, collaboration within the industry is crucial. For this reason it is essential that all industry participants can contribute to the decisions undertaken by the NPC Board. This will facilitate total integration across the industry, a culture of knowledge sharing, and a positive outlook to the proposed Plan/s. Furthermore, collaboration will generate an environment conducive to disrupting the established ethos and behaviour in order to spark innovative solutions with the potential to radically transform the industry and pioneer a new era in waste management.

The NPC Board should comprise, at a minimum:

- 1-2 DEA / Bureau representative/s
- 1 Manco representative for each approved industry plan
- Chemical engineer with experience in a related sector
- Finance, risk and compliance professional
- Legal professional
- Sustainable development professional
- By invitation:
  - Representatives of committees representing the industry’s interests, set up by the Manco/s. From the perspective of the TWAMISA Plan, these are the “OTR Industry Committee” and the “OTR Users Committee”.

Other members may be selected and attend meetings of the Board by invitation.
The Board will have access to professional and independent guidance on corporate governance and its legal duties via the appointment of a dedicated Company Secretary, whose role will remain independent and separate of the Board.

Members of the Board will have limited involvement in the day to day running of NPC. Their focus will be on the strategic objectives of the NPC while individually and collectively cultivating and exhibiting an ethical tone in order to, *inter alia*, promote credibility, enhance reputation, and strengthen stakeholder relationships and operational processes. Members of the Board will remain independent of the industry at all times, and will have no vested interest in any waste reuse, recycling, recovery or disposal businesses so as to avoid conflicts of interest.

It is here-by proposed that a seat on the Board of the NPC should be viewed as a high calibre quasi-public appointment, and should be advertised publicly, at national level.

Intellectual property, information systems, financial records, physical assets and contractual rights and obligations will reside within the NPC itself and remain the property of the NPC, irrespective of Manco/s appointment/s. Manco/s will, in turn, manage their respective mandates within authority levels set by the NPC.

By structuring the NPC in the above manner, its long-term independence and sustainability is protected.

The NPC will have a Memorandum of Incorporation (MOI) governing its activities.

### 9.3 MANCO/s

The day-to-day operations of the NPC and related functions will be outsourced in terms of comprehensive management agreements with the Manco/s. The Board will set parameters which define the extent to which the Board delegates its responsibilities to the Manco/s. The Board however, will at all times, remain accountable.

In recognition of the fact that the fiduciary duties relating to the management of the waste tyre industry reside with the NPC board, the management companies will fulfil an advisory role to the NPC. It may, however, be appropriate for the Managers to hold certain well-defined discretionary powers essential to efficiently carrying out of their day-to-day operational duties.

Manco/s’ roles and responsibilities will include, but not be limited to:

- Advising the NPC with regard to the formulation of policy, strategic plans, and board committees;
- Implementation of all aspects of the Manco/s’ respective Plan/s;
- Identification, improvement and promotion of best practices in all areas of its mandate;
- Operational and risk management;
- Compliance with all applicable legislation;
- Administration and management of all commercial contracts in terms of the Plan;
- Design, implementation and monitoring of the impact of programs and campaigns;
- Management and monitoring of the impact of incentives and disincentives;
- Meaningful inclusion of local and previously disadvantaged communities into the Plan network;
- Regular re-assessment of the Plan to ensure its continued efficiency and relevance;
- Auditing and reporting in terms of the Plan;
- Administration of the central information database related to the Plan under Manco’s mandate.

Basic requirements for the appointment of a juristic person as a MANCO should include, but not be limited to:

- Track record in managing public funds;
• Track record in managing high value projects;
• Track record in managing high-impact environmental and/or social development projects;
• Track record in the establishment and incubation of SMEs;
• Demonstrable knowledge of the industry;
• Sustainable business plan.

9.4 OTR INDUSTRY COMMITTEE

Based on its consultations with various downstream industry participants, TWAMISA will facilitate the functioning of a formal OTR Industry Committee from the ranks of transporters, tyre dealers, pre-processors, processors, re-treaders, recyclers and any other voluntary members.

The OTR Industry Committee’s function will be to represent the interests of, and to participate in decisions affecting, the downstream industry. The committee will meet at least twice a year. It will elect a person of appropriate calibre and experience to act as Chairperson and to represent the committee at NPC Board level, by invitation. Regular and effective communication with the committee will assist TWAMISA in monitoring the developing downstream capacity nationwide, understanding the challenges faced by the market participants, and providing appropriate support in the form of campaigns, programmes and incentives to build capacity and demand for secondary products.

9.5 OTR USERS COMMITTEE

Based on its consultations with various OTR tyre users, TWAMISA will facilitate the functioning of a formal OTR Users Committee, comprising of representatives of the mining, civil engineering, agricultural and any other businesses which generate material volumes of OTR tyre waste through their operations.

The OTR Users Committee’s function will be to represent the interests of, and to participate in decisions affecting, the upstream industry, i.e. the sources of waste. The committee will meet at least twice a year. It will elect a person of appropriate calibre and experience to act as Chairperson and to represent the committee at NPC Board level, by invitation. Regular and effective communication with the committee will assist TWAMISA in its research of innovative reuse and use reduction strategies, as well as implementation and monitoring of the related campaigns and incentives, mapping out of stockpile locations nationwide, and in understanding the challenges faced by users in their waste minimisation and avoidance efforts.

9.6 ESTABLISHMENT OF ORGANISATIONAL STRUCTURES

The NPC board should be appointed by the Bureau in collaboration with the Manco/s of the Plans approved by the Minister. This will ensure the board’s independence from the industry and the ability of the Bureau, the NPC and the Manco/s to work together effectively to manage the industry and to implement the Plan/s.

TWAMISA will nominate suitable persons to be appointed as members of the NPC Board, upon the Minister’s request. TWAMISA will facilitate the setting up of the OTR Industry Committee and OTR Users Committee.
10  SCOPE OF THE PLAN

10.1  OTR TYRES DEFINED

The TWAMISA plan will apply only to OTR tyres, as defined in the edition of the European Tyre and Rim Technical Organization (ETRTO) manuals, valid as at the date of this proposal.

Section 22 ANNEXURE B – AFFECTED TARIFF CODES sets out the SARS Tariff Codes which will fall within the scope of this Plan.

10.2  TYRE TYPES AND QUANTITIES

Between 2013 and 2015, the net tonnage of OTR tyres manufactured and imported into South Africa amounted to approximately 25 000 tons per annum, after accounting for exports and rejects. It is anticipated that approximately 20% of this mass will be lost to normal wear and tear during the productive life of the tyre. Due to the nature, use and size of these tyres, it is assumed that the proportion of these tyres which may become lost in the environment and thus uncollectible is negligible. Zero market growth assumption has been made due to the sensitive nature of the industries using OTRs and the current economic landscape. It is therefore estimated that new arising OTR tyre waste will approximate 20 000 tons per annum, for at least the duration of the Plan’s term.

OTR tonnages that have arisen during the REDISA IIWTMP consist of OTRs collected but not yet processed, as well as OTRs not yet collected. These volumes are estimated at approximately 100 000 tons.

Reliable information relating to the volumes of historical stockpiles will be confirmed with the Minister and the registered stockpile owners. TWAMISA estimates that the volumes which will be voluntarily subject to the TWAMISA Plan by the stockpile owners are in the region of 50 000 tons.

10.3  IMPLEMENTATION TIMEFRAMES

The period that is required for the implementation of the TWAMISA Plan is 5 years.

All dates will be calculated starting from 60 days after the date on which the TWAMISA Plan is published in the Government Gazette as approved by the Minister.

The first 60 days will form the initial handover period, during which TWAMISA will receive handover of all waste OTR-related information from the NPC, DEA/Bureau or as the case may be.

OTR waste tyre collection will commence after the expiry of the initial handover period. All categories of OTR tyres, as defined, will be included in the management process.

Envisaged timeframes for managing all OTR waste tyres through the TWAMISA Plan are as follows:
The most serious potential impediment to TWAMISA's delivery on the above targets will be the time required to process environmental authorisation applications for OTR depot and processors' sites by the national and/or provincial environmental departments. To this end, TWAMISA will work closely with the relevant departments to find acceptable solutions to facilitate these processes.

### 10.4 IMPLEMENTATION COSTS

Implementation costs presented in Figures 3 and 4 below are the best estimate, at the time of drafting, of the OTR specific infrastructure required to achieve the targets set out in section 10.3 IMPLEMENTATION TIMEFRAMES.

The costs are specific to the OTR operations and exclude costs related to the set up and functioning of the NPC for the benefit of the entire tyre waste stream. These estimates have been arrived at using the full cost accounting method and reflect the costs reasonably associated with rendering the service, including but not limited to capital, operating, maintenance, administration and replacement costs, reporting and internal and external audit.

<table>
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<th>Year 4</th>
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<td>292 887</td>
<td>281 111</td>
<td>280 448</td>
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*Figure 3: Implementation costs over the term of the TWAMISA Plan, after inflationary adjustments*
In order to arrive at a fair and just calculation of the implementation costs, TWAMISA will use the initial handover period, as discussed in section 10.3 IMPLEMENTATION TIMEFRAMES, to better understand the current status of REDISA’s OTR infrastructure. The initial handover period may reveal circumstances which may justify a reduction or necessitate an increase in the estimates provided above. By the end of the handover period, TWAMISA will present the Minister with a corroborated estimate of the Plan costs for approval.

The costs associated with the management of OTR waste materially exceed the costs of the management of non-OTR waste. As such, and with reference to the way in which EPR fees are calculated, differentiation of the EPR levy between OTR and non-OTR tyres would be required to appropriately reflect the true environmental liability that arises from each.

The REDISA IIWTMP fell short of detailing this distinction and a flat EPR fee of R2.30 + VAT per kilogram was levied on all tyre categories since the levy was introduced. Had the OTR segment been managed as envisaged in the REDISA IIWTMP targets, this would have resulted in a material under-recovery of OTR waste management costs through the EPR fee and the effective cross-subsidisation of the OTR segment from the proceeds of non-OTR EPR fees.

To enable the industry to deal with the OTR waste tyres, the increased costs of management will have to be funded either through adjustments to the Tyre Levy on OTR tyres or through cross-subsidisation by the Tyre Levy proceeds on non-OTR tyres.

The OTR Tyre Levy should remain subject to annual revision on the basis of material changes to the actual unavoidable costs of management (verifiable by external auditors). TWAMISA will include a levy analysis in the annual budgets submitted to the Bureau.

It is envisaged that the OTR Tyre Levy should increase in line with inflation until year 5 of the Plan. By then it is TWAMISA’s goal to have dealt with both the stockpiles and new arising tyres up to and including the last year of the Plan’s term. It may be appropriate to re-evaluate the costs of ongoing upkeep with the management of new arising tyres after that point, taking into account progress made in moving up
the waste hierarchy and the need or otherwise for specific programs and campaigns at that point. It is
TWAMISA’s view that proper establishment of a financially healthy and sustainable OTR waste
management network will lead to the reduction the OTR Tyre Levy in the future.

TWAMISA will strive to conduct its business in terms of the Plan in a financially efficient manner at all
times, with the objective of setting up the OTR and other Plan infrastructure in a way that will lay a solid
foundation for the future containment or reduction of the Tyre Levy.

10.5 IMPLEMENTATION TARGETS

The table below provides targets for waste minimisation through the reduction, reuse, recycling, and
recovery over the next five years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Energy recovery</th>
<th>Reuse / Repair / Retread</th>
<th>Recycling</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>60%</td>
<td>0%</td>
<td>40%</td>
<td>100%</td>
</tr>
<tr>
<td>Year 2</td>
<td>50%</td>
<td>0%</td>
<td>50%</td>
<td>100%</td>
</tr>
<tr>
<td>Year 3</td>
<td>30%</td>
<td>10%</td>
<td>60%</td>
<td>100%</td>
</tr>
<tr>
<td>Year 4</td>
<td>20%</td>
<td>20%</td>
<td>60%</td>
<td>100%</td>
</tr>
<tr>
<td>Year 5</td>
<td>10%</td>
<td>30%</td>
<td>60%</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Figure 5: Waste hierarchy targets over the term of the Plan*

11 ENVIRONMENTAL IMPACT

11.1 WASTE HIERARCHY

The waste management hierarchy is a nationally and internationally accepted guide for prioritizing
waste management practices, with the objective of achieving optimal environmental outcomes. It sets
out the preferred order of waste management practices, from most to least preferred. The aim of the
waste hierarchy is to extract the maximum practical benefits from products and to generate the
minimum amount of waste. The proper application of the waste hierarchy can have several benefits. It
can help prevent emissions of greenhouse gases, reduce pollutants, save energy, conserve resources,
create jobs, and stimulate the development of green technologies.⁴
11.1.1. DISPOSAL

No OTR waste tyre, shredded rubber or steel scrap will be disposed of in landfill.

11.1.2. ENERGY RECOVERY

OTR tyre waste will only be managed at this level of the hierarchy where all other options have been exhausted:

Waste tyres have a high calorific value which can be released through incineration at high temperatures. Use of tyre waste in the cement, metallurgical and power generating industries globally is a proven and an environmentally acceptable method of disposing of such waste. The most significant high-volume use of waste tyres in South Africa is via energy recovery through incineration by the cement industry and pyrolysis plants.

The advantage of incineration is that large volumes of waste can be effectively extinguished in this manner. The difficulty with this method however is that it requires downsizing of the OTRs into a more manageable size, a process which carries a significant cost. Incineration for energy recovery is therefore more suitable for non-OTR tyre waste and OTR tyre waste will only be managed at this level of the hierarchy where all other options have been exhausted.

11.1.3. RECYCLING

TWAMISA’s core strategy will be the stimulation and stabilization of the supply and demand dynamics in the OTR rubber recycling sector, through incentives and subsidies, until such time as the market becomes self-driven as is the case in other established industries:

Tyres are a problematic source of waste, due to the large volumes produced and the difficulty and costs involved in stripping and separating the component parts of the tyre into mutually uncontaminated reusable materials – i.e. steel scrap with no rubber contamination and rubber scrap with no steel contamination.

While there is a growing global demand for high quality tyre shred, the market continues to experience challenges with the mainstream adoption of waste rubber material by recyclers, which limits its ability to consistently absorb large volumes of rubber shred over extended periods of time. Markets therefore
remain highly unpredictable in terms of prices. The recycling industry in South Africa is gradually investing in research and development, but its capacity to absorb large quantities of the waste rubber continues to be limited and highly inconsistent. The recycling industry generally requires the waste rubber in crumb form, which is used to fully or partially replace virgin rubber in the production of a wide variety of moulded or extruded rubber products, additives, paving applications, and certain civil engineering applications.

TWAMISA will initially focus on and favour relationships with recycling clients capable of absorbing large and consistent volumes of waste tyre shred and crumb, as these will have the ability to impact on the demand side of the downstream industry in an accelerated and more impactful way. Nevertheless, low volume offtake clients do often hold a promise for future innovation and diversification of the secondary industry, which only adds to its economic health. These market players will be supported through specific programs, such as OTR R^3, as described in section 32 NATIONAL AWARENESS, PROGRAMS AND CAMPAIGNS.

11.1.4. REUSE

A major share of TWAMISA’s focus will be directed at the research and promotion of repair and reuse of OTR tyres:

There is a thriving OTR repair and re-treading industry in countries such as the US and Australia, while this sector of the industry is underdeveloped in South Africa. New technological advancements in diagnostic and repair technologies mean that tyres once deemed unworthy of repair are now being successfully repaired and reused. Repair and retreading can significantly extend a tyre’s useful life and provide major cost savings to the end users, in addition to reducing consumption of tyres and the generation of tyre waste.

TWAMISA will assimilate the experiences gained globally in OTR retreading and repair and will report on its findings to the OTR users in South Africa, through the OTR INNOVATION HUB as described in section 32 NATIONAL AWARENESS, PROGRAMS AND CAMPAIGNS. This targeted international developments awareness campaign will aim to redirect current user practices towards repair, reuse and/or re-sale of reusable casings where possible, with adherence to the applicable safety standards.

TWAMISA will support local research, development and investment into demand-driven projects and enterprises which build capacity in this area of expertise. SMEs established for this purpose will be best positioned to fulfil the role of independent assessors of the tyre condition and their interests will be aligned with the waste minimization objectives of the TWAMISA Plan.

Development of national standards for the repair, reuse and re-sale of OTRs and OTR casings will be workedshopped with the South African Bureau of Standards (SABS) and promoted by TWAMISA.

11.1.5. MINIMISATION AND AVOIDANCE

Achieving waste minimisation and avoidance means reaching the highest point on the waste hierarchy and attaining the ultimate goal of creating an environmentally sustainable industry which generates only unavoidable waste.

This level can only be reached through fundamental changes affected at the point of product design, and it requires serious commitment by product manufacturers. Aspects which promote successful circular design include material selection, standardized components, long-lasting products, design for easy end-of-life sorting, separation and reuse of products and materials, and design-for-manufacturing criteria that take into account possible useful applications of by-products and wastes. Building core competencies in these complex areas requires advanced skills, time and incentives.
Given that OTR tyre manufacturers are large multinational conglomerates, such a dramatic technological transformation of the OTR industry would be an unreasonable expectation of this Plan, at least for the foreseeable future. However, action will be taken at national level to sensitize tyre producers to the implications of transitioning from a linear to a circular economic model, and to identify attractive and viable ways to catalyse their support for end-user transition to a more reuse driven consumption model. To this end TWAMISA will engage with the tyre producers through its research and development program to explore ways in which the OTR repair and retreading industry can make a real difference in the waste volumes generated while safeguarding the sustainability of the tyre producers’ South African business.

A further opportunity to be explored with the tyre producers is the potential for vertical integration of the relevant SMEs, set up in terms of this Plan.

11.2 IMPORT AND EXPORT

TWAMISA will campaign against imports of beneficiated rubber into the country, while stimulating efficient, price competitive domestic production, and encouraging vertical integration across user supply chains.

The combination of the export of waste and the re-import of beneficiated materials derived from such waste is particularly damaging to the economy, and undermines the commercial and transformational potential of the tyre industry.

TWAMISA will assist the South African government with the implementation of a circular economy model within the tyre industry; i.e. the development of an economically viable and sustainable closed cycle industry within the borders of South Africa. Local capacity building in waste tyre beneficiation and recycling industries is fundamental to the TWAMISA Plan.

Export of rubber waste will be pursued only as a last resort, where all other strategies of managing excess OTR tyre supply over processed OTR rubber demand have been exhausted. Such strategies may include, but are not limited to:

1. Stockpiling of waste at processing depots;
2. A negotiated time delay in the processing of stockpiles of a client or a group of clients, or in a particular geographic area where depot sites are at capacity;
3. Supply to authorized facilities for incineration / energy recovery.

Commercially viable exports, however, may be highly desirable and would indicate the healthy functioning and international competitiveness of the local industry. Such circumstances may include:

- Export of reusable tyre casings to markets experiencing shortages;
- Export of beneficiated raw material for recycling;
- Exports of recycled products.

11.3 PREVENTION OF POLLUTION AND ECOLOGICAL DEGRADATION

11.3.1. Legislative compliance

TWAMISA will actively minimise the adverse impacts on the environment from the implementation of the Plan. TWAMISA will enforce strict measures to prevent pollution or ecological degradation
throughout its service provider network and will promote the same measures with all independent parties handling OTRs or OTR derived material throughout its broader network.


Compliance assistance will be provided to the network participants, as detailed in section 11.4 NATIONAL AWARENESS, PROGRAMS AND CAMPAIGNS.

11.3.2. Operating practices and policies

TWAMISA will apply best international and national environmental practice during the term of this Plan. TWAMISA will implement a sound environmental risk policy; an in-house environmental expert will be contracted to carry out regular site visits and internal audits across TWAMISA’s network. The findings will be used to assess compliance, identify new areas of risk, and to implement appropriate mitigating actions.

TWAMISA will regularly report to the NPC Board on the effectiveness of the policy, nature and consequences of any incidents which may occur, as well as recommending corrective action to prevent re-occurrence.

Environmental compliance and risk assessment will form a core part of the due diligence that TWAMISA will carry out before entering into contractual agreements with any industry participant.

11.3.3. Depot sites

Depot sites will be established and managed strictly in compliance with the applicable environmental laws, regulations, norms and standards, and best industry practices. Depots will be secured on a 24/7 basis to mitigate the risk of air pollution caused by fire or arson.

11.3.4. Staff and contractors

All staff and contractors dealing with OTRs or OTR material will be trained in the areas of fire prevention, vermin awareness (snakes, mosquitoes) and general health and safety, to enable them to recognize and appropriately address ecological risks arising from operations. Each operating site will have a dedicated and appropriately qualified SHE Officer (Safety, Health and Environment) to oversee all activities on an ongoing basis.

11.3.5. All waste accounted for

TWAMISA will promote full and documented control over tyre waste generated by the users of OTRs, up to the point of entry into the NPC network:

- All OTRs to be accounted for in line with acceptable inventory management practices, for the entire duration of their useful lives, to ensure completeness of waste OTR collection;
- All staff and contractors dealing with OTRs to be properly trained in the applicable waste tyre regulations, fire and vermin prevention, OHS, first aid and emergency response to incidents;
- No dumping or disposal into landfills to be permitted under any circumstances;
- Proper documentary evidence to accompany waste tyres being transported and dropped off at depot sites to facilitate accuracy of records;
• Periodic reconciliation between tyres purchased, tyres withdrawn from production and tyres delivered to NPC’s depot sites, with any discrepancies properly accounted for.

11.3.6. Minimise carbon footprint

TWAMISA’s full life cycle management, of both historical stockpiles and newly arising tyres, will embrace a holistic approach to ecological protection. Effective removal of tyre waste from the environment and its movement up the waste hierarchy shouldn’t come at the cost of an excessive carbon footprint generated inside or outside of the South African borders.

TWAMISA will aim, as far as possible, to:

• Optimize logistical arrangements to reduce transport across the network;
• Stimulate local industry integration into its operations to reduce distances over which tyres or tyre material are transported;
• Implement reverse logistics for transport of tyres to processing sites; and
• Discourage the export of waste and the import of beneficiated materials.

11.4 NATIONAL AWARENESS, PROGRAMS AND CAMPAIGNS

The role of the NPC in the waste tyre industry will be one of accelerating the transition to a circular economy through catalytic, innovative, and focused business leadership interventions.

Engagement with stakeholders in the design and implementation of awareness campaigns and management programs has been shown to be effective in increasing stakeholder commitment, maintaining transparency in the industry, increasing the likelihood and speed of meeting the Plan’s objectives, and reducing the overall costs of the programs and campaigns.

TWAMISA will support the NPC in its role through the following:

• **OTR R^3.** This initiative is designed to advance the broader industry’s understanding of the reduce-reuse-recycle principles of a circular economy, build organizational capacity, and exploit networking opportunities across business, government, cities, and academic institutions. The initiative’s aim is to bring together the network participants, to organise networking events and to provoke action-oriented knowledge sharing with the view of developing the demand side of the industry.

• Facilitating permanent collaboration circles for stakeholders from across the industry such as:
  - **OTR INNOVATION HUB** which will bring together corporate OTR tyre users, processors, recyclers, academic and other research institutions, emerging innovators and enterprises, among others. The hub will serve to explore and pilot new technologies, with a view to stimulating the development and adoption of reuse and waste minimization strategies.
  - **LOCAL OTR SERVICE HUBS** which will bring together OTR waste tyre management companies, transporters, tyre dealers, re-treaders, processors, recyclers and other parties involved in or wishing to participate in the supply chain of the NPC. The hubs will be located in areas with a high concentration of OTRs, i.e. at or near OTR depot locations as described further in section 12.5 WASTE STORAGE SITES.

• **OTR PARTNERSHIP,** a program that will provide a conduit for private sector participation in the transformation of the industry, and specifically in the building of capacity through the establishment of sustainable SMEs, as described in section 14.2 NEW SMEs.
• Conceptualizing specific campaigns in response to the industry’s needs, as identified through the above programs and in line with the objectives of the TWAMISA Plan.

In addition, TWAMISA will run further ad hoc programs and campaigns focused on, but not limited to, the following:

• Awareness campaign for the network participants covering all relevant legislation and legislative changes;
• Awareness campaign for OTR users advocating best international tyre maintenance practices, with a specific focus on stock control, and the significant extension of the useful lives of tyres;
• OTR repair, retreading and reuse awareness campaign targeting OTR tyre dealers and building their knowledge and expertise to manage the OTR tyres in their possession in accordance with the TWAMISA Plan;
• Regular newsletter to be sent to the subscribers to, supporters of and the network participants of the TWAMISA Plan, reporting on current and planned activities, progress on programmes underway, industry-related events, upcoming commercial or other partnership opportunities, and any other topics of interest;
• Participation in global events and programs promoting the minimization of OTR waste.

The OTR user segment of the waste tyre industry is represented by a limited number of relatively sophisticated commercial entities. As such, TWAMISA will deliver on its task of raising public awareness mostly through direct channels of communication, as described above. In specific circumstances where public campaigns may be more effective, these will be conducted via the most appropriate national or regional media.

11.5 RESEARCH AND DEVELOPMENT

Meaningful investment in research and development is fundamental for the transition to a circular economy in the tyre industry. Due to the unrelenting speed with which new tyre waste arises, the success of the Plan will lie in TWAMISA’s ability to facilitate the introduction of new technologies at a fast pace, yet in a well-controlled manner, supported by advanced skills and expertise.

Work streams for focused research and development activities will flow from the OTR Innovation Hub and the Local OTR Service Hubs.

Specific attention will be paid to the quality and competitiveness of nationally produced crumb and recycled products in relation to international markets.

Opportunities will be sought to collaborate with the South African and/or global tyre manufacturers and/or waste rubber derived product manufacturers undertaking research and development relevant to the Plan’s objectives.

A national call for research and development proposals will be made to universities, research institutes and any other interested parties. TWAMISA will support proposals aiming to analyse opportunities arising from the unique conditions and environments present in South Africa, with a view to identifying and testing specific waste rubber derived product applications, usable on a large scale.

The selected proposal/s will be supported through a grant and bursary/ies, as appropriate, to fund its activities and develop expertise.
12 MANAGEMENT OF WASTE OTR TYRES

12.1 WASTE TYRE LIFECYCLE

All TWAMISA’s decisions will be guided by the goal of achieving the best practicable environmental outcomes, i.e. choosing courses of action which offer the most benefit, or cause the least harm to the environment as a whole, at a cost acceptable to society, in the long term as well as in the short term. It will achieve this through a full life cycle management approach which aims to move the waste management practises up the waste hierarchy, as far as possible:

![Diagram of waste tyre lifecycle](Diagram.png)

Figure 7: Full lifecycle management in terms of the TWAMISA Plan

12.2 PARTIES TO THE PLAN AND NETWORK PARTICIPANTS

All relevant role players will be registered with the TWAMISA Plan. These will include network participants already registered with the Bureau, i.e. tyre producers (manufacturers and importers), tyre dealers, pre-processors, processors/recyclers of waste rubber and scrap steel, transporters, depot site owners, depot operators, etc. Registration will be mandatory for these participants. Their duties are regulated in terms of the Waste Tyre Regulations of 2017 and it is the responsibility of each participant to comply with the provisions contained there-in. This document details additional specific provisions only where relevant.
Any new participants which may emerge from the implementation of the Plan will also be registered and allocated a registration number by TWAMISA.

Historical stockpile owners registered with the DEA as a result of approved abatement plans will have the opportunity to register with the Plan on a voluntary basis. For this group, registration will mean that their stockpiles will be managed in terms of the provisions of this Plan, as opposed to separate agreements which would otherwise be specifically negotiated with TWAMISA.

All known OTR tyre producers will be invited to subscribe to the TWAMISA Plan. Associations that will be invited to support the Plan, its structures and programs will include, amongst others:

- SATMC – The South African Tyre Manufacturers Conference
- RMI – The Retail Motor Industry
- TIASA – The Tyre Importers Association of South Africa
- TDAFA - Tyre Dealers and Fitment Centre Association
- AIDC – Automotive Industry Development Corporation
- NRCS – National Regulator of Compulsory Standards
- IWMSA – Institute of Waste Management of Southern Africa

### 12.3 TYRE PRODUCERS

The Waste Tyre Regulations of 2017 provide the tyre producers with an opportunity to determine the manner in which they wish to manage and finance the management of tyres once they become waste. Tyre producers are required to register with the Minister and thereafter to prepare and submit to the Minister an IWTMP for approval or, alternatively, subscribe to a plan approved by the Minister. Any tyre producer that does not belong to an approved IWTMP will not be entitled to manufacture or import new, part-worn, retreadable casing or vehicles fitted with tyres, or to distribute or sell new, part-worn or retreaded tyres, and will be subject to the sanctions provided in the regulations and other applicable legislative provisions.

Registration of tyre producers and collection of the Tyre Levy are now well established.

Tyre producer registrations and statistics should be aggregated and analysed with sufficient regularity to enable timely planning, evaluation, and action by the NPC and TWAMISA. TWAMISA can provide administrative support for these aspects on the DEA’s request.

The Tyre Levy collection and administration will be the responsibility of SARS, and the revenue so collected will flow to TWAMISA as described in section 9.1 FLOW OF FUNDS. Any changes to the amount of the Tyre Levy will be announced by the Minister of Finance in the annual Budget Speech.

While the Tyre Levy is intended to assign financial responsibility for the actual cost of environmentally friendly disposal of their products to the producers, its primary goal is incentivising producers to change their processes and design products which reduce the negative impact on the environment.

TWAMISA therefore proposes that the OTR Tyre Levy be adjusted in future to reflect the full cost of OTR waste management, while no levy should be applicable to OTR retreads, as is currently the case.

The desirable outcomes of the TWAMISA Plan with regards to tyre producers are as follows:

1. Reduction in new OTR net manufacture and import, and an increase in the manufacture and import of OTR retreads, within the borders of South Africa;
2. Uptake of opportunities to partner with TWAMISA and other industry participants on focused research and development initiatives;
3. Uptake of opportunities to channel their economic and supply chain development efforts and spend into the SME co-funding platform developed in terms of this Plan;
4. Uptake of opportunities to channel their social responsibility efforts and spend into initiatives developed in terms of this Plan.

Committed participation by tyre producers in the Plan’s programmes will have the effect of enabling innovation in the industry, enhancing their BEE scores, as well as contributing to the resilience and sustainability of their businesses in South Africa.

12.4 TYRE DEALERS

The Waste Tyre Regulations of 2017 stipulate that, *inter alia*, tyre dealers are obliged to manage all waste tyres in their possession in accordance with the approved IWTMP/s.

These provisions place the following responsibilities, arising from the TWAMISA Plan, on the tyre dealers:

1. To differentiate between OTR and non-OTR tyres;
2. To make a decision on the re-usability or otherwise of an OTR tyre.

TWAMISA will provide every tyre dealer dealing with OTR tyres with a list of tyre brands and models falling into the OTR tyre category, as defined in the Plan. Furthermore, TWAMISA will design an awareness campaign specifically to build the tyre dealers’ expertise in the above areas, and to enable them to advise users in accordance with the objectives of the Plan.

OTR repair, re-treading and re-use in South Africa varies from non-existent to under-developed, depending on the geographical location.

However, it is envisaged that large volumes of OTRs will bypass the tyre dealers’ premises and will be delivered directly to TWAMISA’s depots. As the OTR repair, retreading and re-use sector is better mapped, consolidated and reinforced to deal with the volumes of OTRs arising in the future, and as TWAMISA moves from pre-processing of all of the waste to pre-processing only those tyres which aren’t re-usable, the above-mentioned expertise will be required at stockpile locations and depot sites. For this purpose, TWAMISA will train dedicated OTR inspectors to perform the above duties. The inspectors will be employed by the depot operators, or an SME established for this purpose, and will be independent of tyre dealers and pre-processors.

TWAMISA will consider incentives which may be effective for tyre dealers to accelerate the achievement of the Plan objectives.

The desirable outcomes of the TWAMISA Plan with regards to tyre dealers are as follows:

1. Actively and demonstrably promoting the repair, retreading and re-use of OTR tyres;
2. Ability to expertly differentiate between repairable OTR tyres, retreadable OTR casings and waste OTR tyres and/or pro-actively engaging with TWAMISA in managing these decisions in accordance with the Plan;
3. Partnering with TWAMISA in the implementation of reverse logistics for OTR collections;
4. Uptake of opportunities to channel their economic and supply chain development efforts and spend into the SME co-funding platform developed in terms of this Plan;
5. Uptake of opportunities to channel their social responsibility efforts and spend into initiatives developed in terms of this Plan.

Committed participation by the tyre dealers in the Plan programs will have the effect of transitioning the OTR aspects of their businesses into a more sustainable circular model as well as enhancing their BEE scores.
12.5 WASTE STORAGE SITES

Adequately sized depots will be set up in areas of high concentration of historical stockpiles and new arising waste tyres.

Depots will preferably be located off user premises in order to allow other users in the area to drop off tyres without restrictions. Operations on user premises will be permitted only in circumstances where the stockpile is large enough to justify an individual site set up and where its location has no proximity to other sources of waste OTRs. A cost-benefit analysis will be performed for this purpose.

All sites must be developed to the minimum fit-for-purpose specifications required for storage and down-sizing of tyres, in compliance with the tyre storage regulations, and all applicable laws and by-laws, including but not limited to:

- Appropriately permissive industrial municipal zoning;
- Environmental Impact Assessment Regulations;
- Registration as a Waste Tyre Storage Facility with SAWIC;
- National Norms and Standards for the Storage of Waste;
- Environmental authorisations as may be required.

Sites will be leased at market-related rates.

Depot sites will be established as multi-purpose operating hubs and will comprise of the following areas to be managed by depot managers: receipting and weighing of whole tyres coming in, stockpiles of whole tyres, pre-processing, equipment storage, servicing, office and ablutions, vehicle parking, stockpiles of material (rubber shred, steel bead and steel wire) and loading/offloading zone.

Each depot will have a dedicated 24/7 onsite security presence and a weighbridge, or other accurate method for weighing tyres and materials.

Five key locations have been identified for this purpose – Kathu (Northern Cape), Rustenburg (North West), Steelpoort (Limpopo), Pretoria (Gauteng), and Durban (Kwa-Zulu Natal).

Other locations may be established in other geographic locations on the basis of identified need.

Depots will be managed by local SMEs set up specifically for this purpose. Depot manager staff will be appropriately trained and will include appropriately qualified full time SHE Officers overseeing all activities. Depot managers will be responsible for depot compliance with all prescribed legislation, standards and regulations, off/loading equipment, maintaining complete and accurate records of all tyre and materials movements through the depot, and investigating any discrepancies.

The desirable outcomes for the TWAMISA Plan waste tyre depot sites are as follows:

1. Integration of existing REDISA properties suitable for OTRs into the TWAMISA Plan;
2. Establishment of sustainable property ownership SMEs through the OTR partnership;
3. No depot ownership by the NPC;
4. Close collaboration between depot owners, depot managers and pre-processors on depot sites to ensure well-established, efficient and sustainable operations.

Committed participation by depot site owners in the Plan programmes will have the effect of generating sustainable returns on their property investments through an annuity income stream secured by the Plan.

12.6 WASTE TYRE PRE-PROCESSORS AND PROCESSORS

Waste tyre pre-processing consists of the downsizing of whole OTR waste tyres into shred and, in the process, separating the rubber and steel components of the tyres. Waste tyre processors include any
person who undertakes an activity involving the reuse, recycling or recovery of a waste tyre. The Waste Tyre Regulations of 2017 stipulate that processors must ensure that their activities are more sustainable and less harmful to the environment than the disposal of waste tyres.

The commercial success of processors at the higher levels of the hierarchy, such as recyclers and retreaders is of fundamental importance to the success of the TWAMISA Plan and any other plan pursuing the objectives of a circular economy in South Africa. Processors represent the key point at which the demand and supply dynamics of the market converge, i.e. promoting or impeding the creation of an active market. Manufacture of a high-quality value-adding product, and securing of consistent product offtake by the processors, will in turn secure the sustainability of pre-processors, and ultimately reduce dependence of the Plan network participants on subsidies and incentives.

While some depots may experience constant and adequately high inflow of OTR tyres, others may require periodic stockpiling before pre-processing equipment is brought in to downsize the stockpiles. TWAMISA will therefore favour waste tyre pre-processors with mobile equipment which will enable them to service the Plan’s requirements on a need basis, nationwide.

The desirable outcomes of the TWAMISA Plan with regards to waste tyre pre-processors and processors are as follows:

1. Development of pre-processing and processing capacity in the industry through the pre-processors’ and processors’ participation in OTR partnership;
2. Product and market development through the processors’ meaningful and committed participation in OTR Innovation Hub and OTR R^3 program;
3. Development and support of local technologies and innovations;
4. Close collaboration between depot owners, depot managers and pre-processors on depot sites to ensure well-established, efficient and sustainable operations;
5. Uptake of opportunities to channel their economic and supply chain development efforts and spend into initiatives developed in terms of this Plan;
6. Uptake of opportunities to channel their social responsibility efforts and spend into initiatives developed in terms of this Plan.

Committed participation by pre-processors and processors in the Plan programs will have the effect of scaling their production, opening new markets, and building forward-thinking, sustainable and internationally competitive businesses for them.

12.7 COLLECTORS

Collection of OTR waste tyres requires the use of heavy duty loading equipment to collect and load the tyres onto transport vehicles. In cases where the stockpile owner and/or tyre dealer is not able to perform this task, the responsibility will fall to the nearest depot manager who will dispatch their trained staff, and suitable equipment, to the source location. Depot manager’s staff will carry out the loading itself and all related documentation tasks.

12.8 WASTE TYRE TRANSPORTERS

The primary role of transporters is to collect whole waste OTR tyres from stockpile owners, or tyre dealers, for delivery to approved depots, or to transport separated and/or pre-processed material from depots to approved processor sites.

For this purpose, transporters must keep complete and accurate records of tyres collected and delivered (i.e. bar code, mass, number of tyres, collection and delivery location, distance travelled, etc.).

Transporters must be appropriately certified and comply with the applicable road ordinance.

The desirable outcomes of the TWAMISA Plan with regards to waste tyre transporters are as follows:
1. Development of dedicated transport capacity at or in close proximity to the OTR depot locations, through established transport enterprises or through their participation in OTR partnership program;
2. Setup and implementation of reverse logistics networks and routes, through their participation in Local OTR hubs and OTR R^3 program;
3. Uptake of opportunities to channel their economic and supply chain development efforts and spend into initiatives developed in terms of this Plan;
4. Uptake of opportunities to channel their social responsibility efforts and spend into initiatives developed in terms of this Plan.

Committed participation by transporters in the Plan programmes will have the effect of building more sustainability into their businesses and enhancing their BEE scores.

12.9 STANDARDS APPLICABLE TO SERVICE PROVIDERS

Industry standards will apply to all services required in terms of the TWAMISA Plan, including, but not limited to, the following legislation, regulations and standards, as applicable to the network participants:

- Environment Conservation Act (Act 73 of 1989)
- National Environmental Management Act (Act No. 107 of 1998)
- Hazardous Substances Act (Act 5 of 1973)
- Health Act (Act 63 of 1977)
- Municipal Structures Act (Act 117 of 1998)
- Municipal Systems Act (Act 32 of 2000)
- National Environmental Management Laws Amendment Act (25 of 2014)
- National Norms and Standards for the Storage of Waste, 2013
- National Norms and Standards for the Sorting, Shredding, Grinding, Crushing, Screening or Baling of General Waste, 2017
- National Policy on Thermal Treatment of General and Hazardous Waste
- National Pricing Strategy for Waste Management
- National Waste Tyre Regulations, 2017
- Waste Classification and Management Regulations, 2008
- Norms & Standards for Assessment and Disposal of Waste to Landfill
- Dust Control Regulations, 2013
- Hazardous Chemical Substances Regulations, 1995
- Electrical Installation Regulations, 1992
- Electrical Machinery Regulations, 1988
- Driven Machinery Regulations, 1988
- General Machinery Regulations, 1988
- Vessels under Pressure Regulations, 1996
- General Administrative Regulations, 1994
- General Health and Safety Regulations, 1986
The applicable standards will be specified in each contractual agreement entered into in terms of the Plan.

TWAMISA will employ suitably qualified compliance specialists to ensure ongoing compliance at all levels of TWAMISA’s operations, and to assist all contracted parties with compliance relevant to their services.

12.10 REGISTRATION OF NETWORK PARTICIPANTS

Most network participants are currently registered with the Bureau. In order to avoid inconsistencies, and the need for reconciliations, TWAMISA supports the establishment of a single central registration system for the industry. The NPC will be the custodian of the system, with each Manco responsible for the system’s maintenance and administration, to the extent of their specific mandates.

All the necessary information relating to registrations or links to such information will be provided on the websites of the NPC, each Manco, and the Bureau/DEA.

Any person may register as an interested party and receive a registration number, by filling out a form to be supplied on the NPC website. Such registration will entitle the person to receive all public communications of the NPC and/or the Manco/s via email, and to have access to the list of approved Plan contractors who wish to make their contractor status available to the industry at large.

In this way, the SMEs incubated and/or contracted through the TWAMISA Plan will have an opportunity to present a credible profile to the industry and attract business independent of the waste tyre sector, thus further reinforcing their sustainability.

12.11 CONTRACT AWARD PROCESS

All jobs, internships, invitations to pre-qualify for commercial contracts over the threshold of R100 000, and other opportunities will be advertised on the websites of the NPC and TWAMISA, with links provided on the DEA/Bureau’s website.

Parties interested in commercial contracts will register with TWAMISA, who will subsequently release a detailed overview of the contract to the registered parties. The pre-qualification submission will address the requirements set out in section 14.1 EXISTING ENTREPRISES, as well as business activities of the party or consortium, track record, empowerment status, basic financial information, quality of relevant personnel, and vision for the project.

The purpose of the pre-qualification process is to identify bidders capable of carrying out the project, or participating in an appropriate SME partnership, and to reduce the costs of contract award administration.

TWAMISA will shortlist up to five bidders, who will be invited to submit full technical and commercial proposals (existing enterprises), or who will proceed through the OTR partnership programme as potential incubation and/or empowerment partners (new SMEs).
TWAMISA will evaluate the shortlisted bidders’ complete submissions, and make an assessment of both the technical (including environmental and social impact) and commercial aspects of each. As well as meeting all minimum technical requirements, the technical solution proposed by a bidder must be feasible, deliverable, robust, based on safe and reliable technologies, and the costs and financial structure must be consistent with the technical solution. The applicant must have adequate project management competency and, in the case of a bidding consortium or partnership, the bidder must come across as a cohesive entity rather than a collection of companies aggregated just for bidding purposes.

Applications demonstrating the greatest positive environmental, social and local sustainable development impact, coupled with commercial efficiency, will be favoured.

The contract award process is intended to be as inclusive as possible for any interested party. TWAMISA understands that bidding can be a time consuming and costly process for both the bidder and the evaluator, and will ensure that contract award administration is managed with speed and efficiency.

Pre-qualifying enterprises, or persons with a congruent vision but limited resources, will be supported through the process to ensure that the process itself does not represent a barrier to entry for small businesses and HDIs.

12.12 ADJUDICATION

TWAMISA will establish an adjudication committee which will be involved in the establishment, composition and functioning of tender specifications, and which will make the final contract award decisions.

Committee members will be approved by the NPC and will comprise two members of TWAMISA’s board of directors, two members of the NPC board, and a certified auditor.

Adjudications will require at least a two-thirds majority. They will take into account the basic criteria set out in sections 14.1 EXISTING ENTREPRISES and 14.2 NEW SMEs, and the specifics of each tender.

13 MANAGEMENT OF SERVICE PROVIDERS

13.1 APPOINTMENT OF SERVICE PROVIDERS

All appointees will be required to sign a contractual agreement with the NPC containing provisions in accordance with the TWAMISA Plan, and to subscribe to the TWAMISA Code of Conduct and Ethical Trading Practice policy. All appointments will be valid for a term, as required in the particular circumstances and will remain subject to TWAMISA’s performance review at any time, but at least twice per annum. Details of the training that will be provided by TWAMISA to the service providers are provided below.

13.2 TRAINING OF SERVICE PROVIDERS

All appointees for services dealing directly with OTR tyres or OTR material will be required to attend introductory training before undertaking any activities. This training will be provided by TWAMISA free of charge and will cover the TWAMISA Plan, overview of applicable legislation, general health and safety including the importance of personal protection equipment, identification of risks and hazards, response to emergency incidents and complaints, TWAMISA internal control procedures relating to records to be maintained and reports to be submitted on a regular basis, and other service provider specific contractual requirements.
TWAMISA will provide further ad-hoc training to service providers as and when necessary. Detailed records and attendance registers will be kept by TWAMISA with regard to all training delivered.

13.3 REVIEW OF SERVICE PROVIDERS

All contracts will contain adequate protections for the NPC in the event of service providers’ unsatisfying performance, breaches of contract, and/or the Code of Conduct.

TWAMISA will monitor the performance of all service providers in accordance with their contracts as follows:

- Monthly reporting;
- Quarterly job numbers and capacity review;
- Performance review twice per year;
- Ad-hoc inspections conducted at pre-agreed times at the registered sites;
- An external auditor may be employed to verify any documentary evidence, compliance with applicable legislation, compliance with the provisions of the Plan and or service provider’s contract, renewable company certificates and licenses, etc.

Regardless of the duration of the contract, all service provider contracts will be reviewed annually, and will only be continued on the basis of satisfactory performance, as per the results of the above reviews.

13.4 PAYMENT OF SERVICE PROVIDERS

All service providers will be paid at market-related rates. Where a market is not well-established, TWAMISA will endeavour to arrive at an appropriate mechanism for a fair determination of a price for a product or service, which will be agreed with the service provider/s affected before a contractual agreement is concluded.

Payments will be effected in accordance with generally accepted best practice for internal procedures on payments (i.e. for authorised goods and services only, based on a signed or otherwise validated proof of delivery and/or service, segregation of duties between persons loading and releasing of payments, to approved service providers and verified bank accounts only, etc.).

Payments will be effected by electronic funds transfer and in accordance with the provisions of service provider contracts, weekly or on a pre-approved ad-hoc basis in specific circumstances.

TWAMISA understands the importance of cash flow in emerging and small businesses and will ensure that no service provider is unfairly prejudiced by the company’s internal payments policy.

14 ECONOMIC IMPACT

TWAMISA Plan’s primary objective is the building of a well-integrated and sustainable OTR waste abatement and minimisation sub-sector within the tyre industry.

Pursuit of this objective will create numerous opportunities for people and businesses within and outside of the industry. While no person will be precluded from participating in such opportunities, TWAMISA will support the broader transformation goals of the South African government by favouring historically disadvantaged individuals and enterprises which are or will be majority black-owned and managed.

14.1 EXISTING ENTREPRISES

The pre-qualification criteria to apply for contracts in terms of the Plan will be as follows:
14.1.1. Sustainable, independently verified, BEE rating at Level 2 or higher. Where this is not the case, demonstrable drive and ability to become an SME incubation partner, as described in section 14.2 NEW SMEs below;

14.1.2. Registered legal entity or identifiable natural persons;

14.1.3. Established bank account at a registered South African financial institution;

14.1.4. Tax clearance certificate;

14.1.5. Letter from external auditor confirming the year of the last available annual financial statements, whether or not those statements are prepared in accordance with IFRS or IFRS for SMEs, that the entity is not in contravention of the Companies Act of South Africa and that the issued audit opinions for at least the last two years were unqualified;

14.1.6. Not barred from participating in government procurement;

14.1.7. Not credit blacklisted through a default judgement or an un-rehabilitated insolvent;

14.1.8. Demonstrable and relevant track record in the services being applied for;

14.1.9. Contactable industry references able to corroborate track record;

14.1.10. Requirements specific to the contract being advertised, such as quality of the personnel to be involved and vision for the contract execution;

14.1.11. Additional documentation may be requested, as relevant.

All contractors will be required to provide all necessary equipment, labour, management, certifications and licensing. TWAMISA will provide basic training to all new contractors, as described in section 13.2 TRAINING OF SERVICE PROVIDERS.

14.2 NEW SMEs

Research studies report that SMEs typically face barriers to entry or constraints related to high cost of inputs, lack of access to finance, lack of access to appropriate equipment and technology, limited product differentiation, insufficient opportunities for training staff, shortage of technical skills, difficulty competing with large, established manufacturers and foreign imports, poor quality and inconsistency of supporting infrastructure, and difficulty securing industry-specific accreditation or certification.

The tyre industry is experiencing similar challenges, exacerbated further by technical and business management skills shortages, and a lack of capacity to undertake in-depth market research.

Within this context, emerging SMEs within the industry will benefit significantly from the OTR PARTNERSHIP programme. The programme will provide additional or improved support in sector-specific incubation and mentorship, assistance to improve the quality of products and services to meet recognized standards, support to improve the SME’s understanding of and ability to access existing and new markets, assistance to develop new, innovative product and service offerings, and securing finance and support to build or strengthen relationships and supply chain linkages with large enterprises.

Collaboration with a multitude of stakeholders and the establishment of well-structured sustainable SME incubation partnerships and co-funding mechanisms will be vital to break down the barriers that SMEs face and ensure their long-term sustainability, market competitiveness and resilience.

The incubation partnerships will be set up with a 5 year incubation horizon and may emerge at any level of the supply chain, i.e. tyre management services, tyre repairs, transportation services, waste tyre downsizing, beneficiation, recycling, depot site ownership, depot site management, re-treading, demand-building services, product sales and/or exports, etc.

All potential partner applications will have to be accompanied by a detailed business plan and a budget, and will be subject to the following eligibility criteria:
14.2.1. Relevance
The proposed business must fill a need of the TWAMISA Plan and be aligned with the Plan’s objectives. The incubation partner must be able to demonstrate relevant experience in the waste, waste tyre or other similar industries.

14.2.2. Transformation
The proposed business must be or have a plan to be at least 51% BEE owned, with adequate protections to preserve its BEE status indefinitely, beyond the incubation horizon.

14.2.3. Commitment to meaningful job creation, inclusion and sustained support of HDIs
The proposed business plan must include a detailed strategy for the inclusion, ongoing skills development, continued mentorship and ultimate integration into top management and other decision-making structures of local black people, unemployed black youths and black women, within the incubation horizon. At a minimum, the SME must subscribe to the training and development programs of the Plan, as set out in section 15.1 MEANINGFUL PARTICIPATION OF HDI below.

14.2.4. Sustainability
Profitability and commercial sustainability are a pre-requisite for the establishment of an SME under the OTR Partnership Program. These must be supported by a verifiable business plan and budget during the partner application process and the applicant must have a strategy for attracting external finance beyond the incubation horizon.

14.2.5. Addionality
A demonstrable funding gap for proposed business exists, which cannot be fulfilled without TWAMISA’s facilitation. Over and above any incentive and/or co-funding capital that TWAMISA may provide to the SME, the incubation partner must demonstrate access to financial resources to co-fund the business to the extent of that partner’s shareholding.

14.2.6. Ability to scale up and/or replicate and diversify
The proposed business will preferably have the ability to be rolled out to other sites and/or to diversify its operations into other areas of waste (or other industries) to ensure that its long-term survival is not dependent only on TWAMISA’s revenue stream and/or reliant on incentives beyond the envisioned incubation horizon.

14.2.7. Measurement, Evaluation and Reporting
Partners must demonstrate willingness and commitment to measure and evaluate the impact of the SME on a regular basis, and to report on the progress of the incubation partnership in terms of the objectives of the Plan.

Furthermore, potential incubation partner applicants need to provide evidence of meeting the same criteria as the existing businesses providing goods and services in terms of the Plan, as set out above.

The 5 year incubation horizon granted to all SMEs established through the program will be subject to the SMEs’ successful achievement of the goals set out in their approved business plans and budgets. SME performance will be measured against a business-specific performance scorecard and assessed twice annually in a comprehensive review.
Each SME will be structured to suit the specific circumstances of the incubation partner, the empowerment partner and the business. As depicted in the above diagram, each SME will be funded through a combination of tyre-levy funding and external finance. Empowerment partners will include HDI staff of the SME, and TWAMISA will invite the industry to introduce other suitable parties to fulfil this role. HDI groups will be prioritised and supported through all stages of their involvement. Existing black industrialists with value-adding business development capabilities and networks will be encouraged to participate and supported in securing external funding where required.

A tailored, FSB-approved SME co-funding platform will be set up by TWAMISA to facilitate the participation of the industry through channelling their Supplier and/or Enterprise Development spend into the development of existing and new SMEs.

These funds will be professionally managed and used to capitalize the SMEs, adequately cover their working capital requirements, and to provide for capacity building, training and business management support required to succeed in becoming sustainable businesses. The development funding will be provided on favourable terms, thus assisting SMEs supported through the program to overcome one of the largest hurdles to starting a new business. The SMEs’ revenue stream will be secured by contracts with the NPC and with the program partners, further enhancing the SMEs’ ability to become sustainable and the program partners’ ability to secure a reliable and consistent supply of waste-tyre derived materials and/or products.

It is TWAMISA’s intention to ensure that the SMEs in the OTR value chain do not rely on subsidies indefinitely, but aim to become profitable, self-sustainable and scalable businesses that can generate meaningful jobs and transformation in the industry sectors in which they operate.

TWAMISA will allocate business through a process as described in section 12.11 CONTRACT AWARD PROCESS.
Similar to the normal management of their existing businesses, incubation partners will be responsible for the SME’s strategy, planning, setup, capacity building, management, financial control, tax matters, system of internal controls, administration, audit, corporate governance, reporting to TWAMISA, business development, contractual matters, on-the-job staff training and mentoring, licensing and certifications, insurances, etc.

TWAMISA will support SMEs in the incubation period in the areas of staff training, development of business plans, strategies and external funding applications, specific depot setup and/or securing funding for equipment. Support will be provided via in-specie legal, financial or other professional services, incentives and/or subsidies, as considered fair and appropriate in each case.

14.3 INCENTIVES AND SUBSIDIES

For widespread reuse of materials and higher resource productivity to become commonplace, market mechanisms will have to play a dominant role. In the meantime, the emerging waste tyre management industry will benefit from well-targeted support enabled through the Tyre Levy.

Subsidies and incentives are indispensable in motivating the market participants to build an integrated industry locally in South Africa and to remove the barriers separating HDIs from meaningful inclusion and participation in the industry, in an uplifting and sustainable way.

Manufacture of a high-quality value-adding product, and securing consistent product offtake by the processors, will bring about the sustainability of processors, and in turn lock in the jobs and skills development generated in terms of the Plan, all along the downstream supply chain.

TWAMISA will channel a portion of the NPC’s revenue to subsidies and incentives aimed at funding critical aspects of this developing industry, such as:

- Establishment of recycled product demand through subsidising the necessary pilot tests to be performed by potential offtake customers, as appropriate;
- Processor incentives where these are demonstrably effective in progressing the industry into the higher levels of the waste management hierarchy;
- Financing of specific technologies and/or developments which can demonstrably move the industry into the higher levels of the waste management hierarchy and/or remove barriers to the meaningful participation of HDI’s in the industry;
- Establishment of SMEs through the OTR Partnership, as described in section 14.2 NEW SMEs;

Processor incentives will be granted on the basis of quantity of material used by the processor and the level of the waste hierarchy at which the processor operates. TWAMISA will prioritise supply allocations to processors in line with its goal of promoting waste avoidance and minimising waste generation and management, as follows:

<table>
<thead>
<tr>
<th>Priority</th>
<th>Reuse / Repair / Retreading</th>
<th>Recycling of Shred</th>
<th>Recycling of Crumb</th>
<th>Energy Recovery</th>
<th>Recycling of Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incentive (%)</td>
<td>130%</td>
<td>100%</td>
<td>100%</td>
<td>75%</td>
<td>0%</td>
</tr>
<tr>
<td>Incentive (R/kg)</td>
<td>0.52</td>
<td>0.4</td>
<td>0.4</td>
<td>0.3</td>
<td>-</td>
</tr>
</tbody>
</table>

Figure 9: Processor incentives and supply allocation priorities

Payments of incentives and subsidies will be effected in accordance with the provisions of specific contracts entered into for this purpose, and standard internal controls will apply. Payments will be
subject to the recipient’s satisfactory performance and continued alignment to the Plan, as measured and evaluated by TWAMISA as per section 13.3 REVIEW OF SERVICE PROVIDERS.

14.4 REVENUE

To ensure sustainability of the TWAMISA downstream industry network means to reach a point where sufficient revenue is generated by the network participants through the reduction, re-use, recycling and recovery of the OTR tyre waste. At this stage, the industry is in a start-up stage and estimating revenues over the term of the Plan, under conditions as complex as those described in this document, would be misleading.

TWAMISA will, however, aim to stimulate the secondary product markets in such a way as to enable the industry to substantially reduce the amount of subsidies required to process the full supply of new arising OTRs, by the end of the Plan term.

15 SOCIAL IMPACT

15.1 MEANINGFUL PARTICIPATION OF HDI

TWAMISA will carry out social impact assessments to obtain the information necessary to develop and implement a Social Impact and Jobs Development Plan. The plan will focus on promoting the long-term development of the workforce within its network, and in the surrounding communities, and will serve as a management and benchmarking tool for the duration of the Plan term.

TWAMISA Plan’s mechanisms for the meaningful participation of historically disadvantaged individuals in the industry and in the implementation of the Plan include:

15.1.1. Decent jobs and skills development opportunities for all
TWAMISA’s Decent Jobs Program will echo the principles promoted by the International Labour Organization and Goal 8 of SDGs: Decent Work and Economic Growth through generating and promoting work that is productive and delivers a fair income, security in the workplace, social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives, and equality of opportunity and treatment for all women and men. Participation in the program will be mandatory for all service providers, who will report to TWAMISA on a number of key performance indicators linked to the above principles, on a quarterly basis.

15.1.2. Preferential opportunities for youth, women and local people
TWAMISA believes that youth and women have a crucial role in achieving sound economic growth and poverty reduction and are an essential part of public and private sector development. TWAMISA’s depot sites will be located in areas with limited economic opportunities for local people, thus presenting an opportunity for their integration into the TWAMISA Plan network. TWAMISA’s Skills Development and Training Program will be focused on guiding and supporting business activities, enterprises and projects which create decent jobs and skills development opportunities for black youth, women and local people living within a 100km radius of the TWAMISA network sites.

The program will include on-the-job training and skills development opportunities that are in line with the objectives of the Plan, with the aim of increasing productivity and general employability of the above target groups through equipping young professionals with the skills, confidence and competence to secure full time jobs, enjoy meaningful careers, and catalyse
further job creation in the waste management sector. Participation in the program will be mandatory for all service providers, who will report to TWAMISA on a number of key performance indicators linked to the above, on a quarterly basis.

15.1.3. Catalysing empowerment and transformation in the industry
As described in sections 11.4 NATIONAL AWARENESS, PROGRAMS AND CAMPAIGNS and 14 ECONOMIC IMPACT, existing enterprises and new SMEs aligned with the principles of meaningful and sustainable inclusion of HDIs will be well supported through various mechanisms. Equity and decision-making participation of HDIs in the supported enterprises will be mandatory for all service providers, who will report to TWAMISA on these key indicators on a quarterly basis.

15.1.4. Social Responsibility Program
Promoting the health and wellbeing of employees and their families within and around the TWAMISA Plan network operating sites, as further described below.

15.2 SOCIAL RESPONSIBILITY PROGRAM

TWAMISA’s Social Responsibility Program commits to counteract the effects that the Plan’s implementation may have on the environment and surrounding communities.

It is essential that TWAMISA maintain a positive relationship with the communities affected by its operations, in order to maintain its “public license” to operate. Some of TWAMISA’s temporary and/or permanent operating sites will be located in underdeveloped rural areas, characterised by limited formal economic activity, high levels of poverty and unemployment, inadequate provision of infrastructure, and poor service delivery.

Inclusive engagement of all the relevant stakeholders involved in TWAMISA’s activities will underpin its approach to ensuring that human rights are respected and stakeholder aspirations and concerns in the affected communities are effectively addressed. As much as TWAMISA seeks to build sustainable operations in the areas identified for its depot sites, it will also build durable relationships with these communities and aim to deliver to them meaningful developmental benefits and opportunities created through the TWAMISA Plan programs and campaigns.

In order to gain key insights into the effects of the Plan on, and the needs of, specific historically disadvantaged communities, TWAMISA will carry out social impact assessments and use their findings to define the goals of individual projects to be implemented through the Social Responsibility Program. This may include issues of access to essential healthcare services, reducing the communities’ reliance on dominant employers, education initiatives and beautification of public areas, among others.

TWAMISA will encourage all stakeholders, and the industry participants at large, to participate in the Social Responsibility Program either passively, through contributing part or all of their CSR allocations to a fund set up for this purpose, or actively, by developing and managing programs that TWAMISA’s Social Responsibility Program can co-fund and/or otherwise support. This is another mechanism through which TWAMISA aims to achieve inclusiveness and the effective redistribution of the benefits produced by the waste tyre industry within the industry itself, and the people associated with it.

15.3 SOCIAL IMPACT TARGETS

The social impact of a business is generally easier to identify than to measure. Effective measurement is, however, vital to TWAMISA’s understanding of the effects that its own activities, and the activities of the Plan network participants, have on the socio-economic environment in which they operate, and how individuals and communities are affected.
To ensure that its development plans are data driven and measurable, and that TWAMISA is accountable for its performance outcomes, TWAMISA will conduct social impact assessments at its operating sites to support informed decision-making. The assessments will be aligned with the International Finance Corporation (IFC) Standards.

The assessments, together with regular reports collected from the Plan network participants in terms of the Decent Jobs Program, the Skills Development and Training Program, and the Social Responsibility Program, will facilitate informed reporting on the Plan’s social impact to the NPC and the Bureau.

TWAMISA’s Decent Jobs Program targets are as follows:

<table>
<thead>
<tr>
<th>Per location</th>
<th>No. of operations</th>
<th>Manco</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depot management</td>
<td>12</td>
<td>5</td>
<td>60</td>
</tr>
<tr>
<td>Pre-processing</td>
<td>8</td>
<td>4</td>
<td>32</td>
</tr>
<tr>
<td>Transport</td>
<td>5</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Management company</td>
<td></td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Indirect - crumbing</td>
<td>5</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Indirect - recycling</td>
<td>5</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Indirect - other recovery</td>
<td>3</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Indirect - reuse (potential)</td>
<td>7</td>
<td>5</td>
<td>35</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>45</strong></td>
<td><strong>34</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>

*Figure 10: Decent Jobs Program targets*

TWAMISA’s Skills Development and Training Program targets are as follows:

<table>
<thead>
<tr>
<th>PROGRAMME PARTNERS</th>
<th>TARGET OUTCOMES</th>
<th>TARGET NO. OF PARTICIPANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic TWAMISA Plan training</td>
<td>Understanding of and compliance with the standards applicable to the waste tyre management industry as a whole. Standard operating procedures and internal controls</td>
<td>all new jobs and relevant existing and new SME staff</td>
</tr>
<tr>
<td>Ad-hoc specialised training</td>
<td>On-the-job training, upskilling and increasing employability in the waste management sector</td>
<td>50</td>
</tr>
<tr>
<td>Bursary Program</td>
<td>Adding to skills pool of youth talent for the waste management industry</td>
<td>10</td>
</tr>
<tr>
<td>University Graduate Internship Program</td>
<td>1 year internships for deserving graduates at the Plan network participant businesses</td>
<td>10</td>
</tr>
<tr>
<td>Fast Track Management Program</td>
<td>Management level skills development for exceptionally performing staff, interns and/or graduates at the Plan network participant businesses</td>
<td>5</td>
</tr>
</tbody>
</table>

*Figure 11: Skills Development and Training Program targets*
16 INFORMATION AND RECORDS

All service provider contracts will include provisions dealing with complete and accurate record keeping, reconciliations and regular reporting to TWAMISA.

The overriding aim of the record keeping and reporting procedures at service provider level is to accurately and transparently account for waste tyre volumes at every stage of disposal:

- Stockpile owners and tyre dealers prepare a list of tyres ready for collection, including their ID numbers and quantities. Where this is not practical due to the large size of the stockpile, such lists will be compiled by collectors;
- Transporters reconcile ID numbers and quantities of tyres collected from source location to the list prepared by stockpile owners and tyre dealers. Upon delivery to the depot, they supervise the weighing process and co-sign the resulting weighbridge certificate issued by the depot manager;
- Depot managers keep a detailed record of all tyre movements (tyre ID and mass), i.e. tyre volumes redirected for re-use, tyres classified as waste, tyres pre-processed, mass of tyre derived materials despatched to processors, etc. They are responsible for regular reconciliations of volumes and investigation of any discrepancies identified;
- Transporters supervise the loading of materials and reconcile each load collected from depot to the despatch advice prepared by depot manager when ordering transport. Upon delivery to the processor, they supervise the weighing and verification process and co-sign the delivery note;
- Processors inspect materials delivered and co-sign the delivery note as evidence of having received all materials in good order and in the correct quantity.

Segregation of duties between independent service providers will be the primary control relied on to prevent misstatement of volumes and other errors, as well as fraud.

TWAMISA will perform independent verification of volumes reported to it through reconciliation of reports from separate stages of the waste tyre management process, as submitted by unrelated service providers and ad-hoc internal audit visits.

The overriding aim of the record keeping procedures at TWAMISA level is to accurately and transparently account for the disposal of waste tyres in terms of the waste hierarchy and to reconcile the Tyre Levy revenue received to actual costs incurred in achieving the environmental, social and economic benefits as set out in the TWAMISA Plan. TWAMISA will achieve these objectives through regular aggregation and reconciliation of the relevant volumetric and financial data collected from service providers.

In addition, TWAMISA will keep the following records:

16.1. TWAMISA operations:
16.1.1. Contracts register and copies of all contracts entered into in terms of the Plan by NPC and TWAMISA;
16.1.2. Policies and internal operating procedures approved by NPC;
16.1.3. Training register, all training attendance registers and training curricula;
16.1.4. Minutes of all important meetings undertaken by TWAMISA in the discharge of its duties in terms of the Plan;
16.1.5. Minutes of meetings related to programs and campaigns facilitated by TWAMISA;
16.1.6. Reports, as prescribed in terms of the Plan, presented to the NPC Board and the Bureau;
16.1.7. Reports concluding on specific research and development assignments;
16.1.8. Register of social responsibility programs undertaken, their content and outcomes;
16.1.9. Any deviations from the Plan approved by the Minister;
16.1.10. Documentary evidence as required by Companies Act 71 of 2008 and other company related legislation.

16.2. **Existing Enterprise service providers:**
   - 16.2.1. Approved application packs;
   - 16.2.2. Quarterly jobs and capacity review;
   - 16.2.3. Performance review twice a year.

16.3. **New SMEs under incubation:**
   - 16.3.1. Approved application packs;
   - 16.3.2. Monthly reporting;
   - 16.3.3. Quarterly jobs and capacity review;
   - 16.3.4. Performance review twice a year.

TWAMISA will operate a standard accounting system suitable for entities of a similar size and complexity, and will account in terms of International Financial Reporting Standards (IFRS). Stock movements will be tracked through a suitable inventory management system, capable of appropriate modifications to accommodate the peculiarities of waste management, such as no-value or subsidised stock, etc.

17 **AUDITING AND REPORTING**

As indicated in the Codes of Good Practice for South African Non-Profit Organisations, issued by the Department of Social Development, “An NPO exists and is sustained by its ability to maintain open and productive relationships with its key stakeholders.” Therefore accountability and transparency will underpin TWAMISA’s approach to reporting. Successful collaboration thrives in an environment of full disclosure, and innovation in the industry depends on it.

Financial, environmental impact, risk and corporate governance reporting will be based on generally accepted best practices and systems of internal controls which facilitate effective handling of resources. Appropriately skilled personnel will be appointed to manage these systems. A set of internal policies and procedures will be developed for the NPC and their effectiveness monitored and reported on a quarterly basis with the ultimate aim of providing timely, accurate and actionable information to the Board. This will enable the Board to make timeous decisions, and guide the NPC in order to achieve its strategic objectives.

All network participants with valid contracts will submit aggregated reports, in a predetermined format, to TWAMISA on a monthly basis. The reports will set out financial and volumetric information relevant to TWAMISA’s assessment of the industry’s performance in terms of the Plan objectives, and will form the basis of TWAMISA’s reporting to the NPC.

TWAMISA will develop appropriate tools and metrics for estimating how effective the OTR segment of the tyre industry is in making the transition from a linear to a circular model of operation.

On an annual basis, TWAMISA will report on its progress in terms of the provisions of the Plan to the Bureau, and ensure that all reporting timelines of the Bureau are adhered to. The annual report will be audited by an independent auditor and will address, at a minimum, the following:

1. Compliance with the approved Plan;
2. Compliance with the relevant legislation;
3. Record keeping and reporting as required by the Plan;
4. Details of agreements reached for the abatement of historical stockpiles;
5. Financial reports.

Variance between the Plan targets, annual budgets and actual expenditure will be appropriately explained and pre-approved or ratified by the NPC in line with the adopted internal procedures.

The annual report will include TWAMISA’s recommendations with regard to the amount of the OTR Tyre Levy, based on actual operational experience.

18 HISTORICAL STOCKPILES

The WTRs require any person or entity who has a waste tyre stockpile on their premises, or is a stockpile owner, to register with the Minister and submit an abatement plan within 120 days. No Tyre Levy was collected on historical stockpiles which arose before the commencement date of the REDISA IIWTMP and as such their abatement is the responsibility of the stockpile owners.

The TWAMISA Plan recognises that the historical stockpiles and the post-Tyre Levy tyres “subsectors” of the industry are in fact one and the same, only differentiated by the way each is funded.

The TWAMISA Plan advocates a unified approach to managing all OTR waste tyres, which will maximise the opportunities for economies of scale, sustainability of local HDI inclusion solutions and new jobs, and drive the costs of OTR tyre waste management down for both the PRO and the historical stockpile owners. Furthermore, such approach will simplify the market environment and open access to the industry for all aspiring service providers, regardless of the funding source of the projects.

TWAMISA will strongly encourage the historical stockpile owners to voluntarily subscribe to the Plan.

Where stockpile owners elect such voluntary subscription, the stockpile abatement will be managed in terms of the provisions of this Plan, at a cost equal to the per kilogram budget allocation by the Bureau to the TWAMISA Plan, which may be adjusted for items which do not apply to the specific abatement projects. TWAMISA will provide details of agreements reached between the NPC and the stockpile owners to the Bureau.

Should the parties not reach an agreement and/or should the stockpile owner elect to manage the stockpile abatement project independently of the Plan, the stockpile owner will contract service providers independently. The NPC will have no further role in such arrangements. However, should the owner so request, the NPC/TWAMISA may consider incorporating infrastructure built for the purpose into the Plan infrastructure, if and when feasible.

Collected and uncollected REDISA tyres which attracted a Tyre Levy for their environmentally responsible disposal, were the responsibility of REDISA. Once the volumes of these OTR tyres are validated during the initial handover period, the corresponding revenue must be made available to enable TWAMISA to deal with these tyres. Should the revenue be insufficient to cover the inflation adjusted costs of fully compliant disposal in terms of the TWAMISA Plan, TWAMISA will engage the Bureau to formulate a viable solution to deal with those tyres.

The details of any unregistered stockpile, which may be identified during the course of the TWAMISA Plan term, will be communicated to the DEA and duly registered.

Collection and processing of tyres which qualified as legacy tyres at the commencement of the REDISA IIWTMP and to which no Tyre Levy applied, will be funded from the Tyre Levy excess created by the fact that every kilogram of tyre attracts the levy, while 20% of tyre mass is uncollectible due to wear and tear on road and thus requires no processing and disposal.
TWAMISA will start collecting all OTR tyres concurrently, aiming to have abated the forecast historical stockpiles (estimated to be voluntarily subscribed to the TWAMISA Plan) and REDISA tyres as at the Date by the end of its contract term, and to have all legacy tyres and new arising tyres which have become waste during the Plan term included in current operations or scheduled for disposal in terms of this Plan within 12 months of the end of the term.

19 LIMITATIONS OF THE TWAMISA PLAN

This Plan was prepared at the time of REDISA’s (contended) liquidation by the Minister, on the basis of non-disclosure and non-cooperation with the DEA. TWAMISA was unable to corroborate some of the assumptions made in this document, and develop others which would have contributed to a more detailed and accurate Plan. Targets presented are based on the best available evidence at the time of preparing the Plan. Further evidence may have a material effect on the numbers presented. It is therefore anticipated that certain aspects of the Plan will require the input of the DEA and/or Bureau before the Plan is approved and/or during the initial handover period.

The most sensitive assumption is the volume of historical stockpiles which are likely to be managed under the TWAMISA Plan. These volumes have an inverse relationship with the overall Plan costs per kilogram of OTR tyre. The higher the volumes, the higher the potential for spreading the costs of infrastructure set up and administration over greater volumes of waste, thus driving the costs of management of the OTR waste segment down.

Where applicable, the relevant aspects which may require alterations, will be included in the final TWAMISA Plan.

20 CONCLUSION

The spirit of the Plan is to rally all stakeholders around the ambitious, yet achievable goal of transitioning the tyre industry, and in particular its OTR segment, to a circular mode of functioning.

This effort will be headed by TWAMISA in a highly collaborative and inclusive manner to ensure broad-based buy-in, fair and effective redistribution of the benefits generated by the industry within the industry itself, and meaningful and sustainable participation of historically disadvantaged individuals in the industry.

Founded on the principles of high impact project development, the Plan offers a vision of highly integrated environmental, social and economic outcomes. Such integration is essential in gradually leading the industry to self-sustainability, and a reduced reliance on government funded subsidies along the way.

A hallmark of the TWAMISA Plan is its commitment to effective collaboration with co-existing plans, to measure and report on the social and environmental performance and progress of underlying campaigns and investments, ensuring transparency and accountability, while building public trust in its operations and intentions.

TWAMISA is driven by delivering quality service at all times. Decisions will be made on fundamentals, i.e. progressing the transition to a circular economy in the most efficient and sustainable way. Where any doubt arises with regard to the continued accuracy of this proposal, TWAMISA will enter into open dialogue with the network participants and the Bureau and agree on the most appropriate courses of action. This is not to be viewed as a qualification but rather TWAMISA’s recognition that the sector is still in its start-up phase and there are many eventualities which cannot be known with sufficient certainty at this stage.
We trust that this document has offered sufficient detail to demonstrate TWAMISA’S preparedness and ability to deal with any foreseen and unforeseen challenges that the Plan implementation may present.

We look forward to serving the tyre industry, the government and the people of South Africa.
21 ANNEXURE A – CROSS-REFERENCING TABLE

Table 1: Requirements of Section 4 of the DEA Call for Proposal, October 2017

<table>
<thead>
<tr>
<th>Section 4 of the DEA Call for Proposal – 30 October 2017</th>
<th>TWAMISA IWTMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Identify the parties to the industry waste tyre management plan</td>
<td>Section 12.2</td>
</tr>
<tr>
<td>(b) Provide details of the governance model for the industry waste tyre management plan, including how industry representative and participation will be addressed and how the existing infrastructure in the waste tyre industry will be taken into account</td>
<td>Section 9, Section 7.4</td>
</tr>
<tr>
<td>(c) Provide annual projection of the quantities and types of tyres that are manufactured or imported that will become waste tyres and will be managed through the industry waste tyre management plan</td>
<td>Section 10 (10.2)</td>
</tr>
<tr>
<td>(d) Indicate how the waste hierarchy will be given effect to, in the industry waste tyre management plan</td>
<td>Section 11 (11.2)</td>
</tr>
<tr>
<td>(e) Include measures to prevent pollution or ecological degradation</td>
<td>Section 11 (11.3)</td>
</tr>
<tr>
<td>(f) Include measures or programmes to minimise the generation of waste tyres and final disposal of waste tyres</td>
<td>Section 11 (11.4 and 11.5)</td>
</tr>
<tr>
<td>(g) Include measures or actions to be taken to manage waste tyres</td>
<td>Section 12</td>
</tr>
<tr>
<td>(h) Identify the manner in which waste tyre processors who will receive waste tyres through the industry waste tyres management plan will be identified and registered</td>
<td>Section 12 (12.10, 12.6)</td>
</tr>
<tr>
<td>(i) Identify the manner in which waste tyre transporters will be identified and registered through the industry waste tyres management plan and their duties</td>
<td>Section 12 (12.10, 12.8)</td>
</tr>
<tr>
<td>(j) Identify the potential number of waste tyre storage sites that will be used by the waste tyre management plan and the manner in which these sites will be registered with the plan</td>
<td>Section 12 (12.5)</td>
</tr>
<tr>
<td>(k) Identify the industry standards that will apply to waste tyre transporters, waste tyre storage sites and waste tyre processors</td>
<td>Section 12 (12.9)</td>
</tr>
<tr>
<td>(l) Indicate how information on waste tyres collected and treated will be recorded</td>
<td>Section 16</td>
</tr>
<tr>
<td>(m) Identify the timeframes in which the different types of tyres will be managed for a period of five years, noting that all tyres and sizes of tyres must be managed through an industry waste tyre management plan within 60 days of date of approval of a plan</td>
<td>Section 10 (10.3)</td>
</tr>
<tr>
<td>(n) Provide estimations of the costs of implementing the waste tyre management plan for a period of five years and the submission of an annual business plan to the Minister including a breakdown of the activities of the industry waste tyre management plan together with their costs</td>
<td>Section 10 (10.4)</td>
</tr>
<tr>
<td>(o) Be aligned to the National Pricing Strategy for Waste Management (Extended Producer Responsibility tax; government managed model) as published under Government Notice 904 of 11 August 2016</td>
<td>Sections 6 (6.3) and 7 (7.3)</td>
</tr>
<tr>
<td>(p) Provide targets for waste minimisation through the reduction, recycling and recovery of waste tyres for a period of five years</td>
<td>Section 10 (10.5)</td>
</tr>
<tr>
<td>(q) Provide where applicable, an estimate of revenue that will be generated through the implementation of the industry waste tyre management plan for a period of five years</td>
<td>Section 14 (14.4)</td>
</tr>
<tr>
<td>(r) Indicate how the industry waste tyre management plan will raise national awareness regarding the management of waste tyres;</td>
<td>Section 11 (11.4)</td>
</tr>
<tr>
<td>(s) Provide detailed measures on how the industry waste tyre management plan will address issues of social responsibility in the tyre industry and issues of historically disadvantaged communities</td>
<td>Section 15 (15.2)</td>
</tr>
<tr>
<td>(t) Provide specific measures in which historically disadvantaged individuals will meaningfully participate in the tyre industry and the implementation of the industry waste tyre management plan</td>
<td>Section 15 (15.1)</td>
</tr>
<tr>
<td>(u) Provide specific targets on job creation, the promotion of small businesses, training and development, including the meaningful participation of the historically disadvantaged individuals that will be realised in the tyre industry</td>
<td>Section 15 (15.3)</td>
</tr>
<tr>
<td>(v) Indicate the frequency and extent of monitoring, auditing and reporting on the industry waste tyre management plan to the Waste Management Bureau envisaged</td>
<td>Section 17</td>
</tr>
<tr>
<td>(w) Provide measures to be implemented to give effect to best environmental practice respect of waste tyre management</td>
<td>Section 11 (11.4 and 11.5)</td>
</tr>
<tr>
<td>(x) Indicate the measures to be put in place to address the stockpiles of waste tyres</td>
<td>Section 18</td>
</tr>
<tr>
<td>(y) Provide a costed annual implementation plan for the implementation of the industry waste tyre management plan for a period of five years, on the year prior to the year of implementing that implementation plan</td>
<td>Section 10 (10.4)</td>
</tr>
<tr>
<td>(z) Provide for the obligation to annually provide details of agreements reached terms of any waste tyre stockpile abatement plans</td>
<td>Section 17</td>
</tr>
</tbody>
</table>
## ANNEXURE B – AFFECTED TARIFF CODES

<table>
<thead>
<tr>
<th>Environmental Levy Item</th>
<th>Tariff Subheading</th>
<th>Article Description</th>
<th>Rate of Environmental Levy</th>
</tr>
</thead>
<tbody>
<tr>
<td>152.02</td>
<td>4011.70</td>
<td>Of a kind used on agricultural or forestry vehicles and machines:</td>
<td></td>
</tr>
<tr>
<td>152.02.25</td>
<td>4011.70.10</td>
<td>Having a rim size of less than 91 cm</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>152.02.27</td>
<td>4011.70.20</td>
<td>Having a rim size of 91 cm or more</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>152.02</td>
<td>4011.80</td>
<td>Of a kind used on construction, mining or industrial handling vehicles and machines:</td>
<td></td>
</tr>
<tr>
<td>152.02.29</td>
<td>4011.80.10</td>
<td>Having a rim size of less than 91 cm</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>152.02.31</td>
<td>4011.80.20</td>
<td>Having a rim size of 91 cm or more</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>152.03</td>
<td>4012.1</td>
<td>Retreaded tyres:</td>
<td></td>
</tr>
<tr>
<td>152.03.13</td>
<td>4012.13</td>
<td>Of a kind used on aircraft</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>152.03.19</td>
<td>4012.19</td>
<td>Off-the-road vehicles</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.00</td>
<td>87.01</td>
<td>Tractors (excluding tractors of heading 87.09):</td>
<td></td>
</tr>
<tr>
<td>153.00.01</td>
<td>8701.10</td>
<td>Single axle tractors</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.01</td>
<td>8701.20</td>
<td>Road tractors for semi-trailers:</td>
<td></td>
</tr>
<tr>
<td>153.01.05</td>
<td>8701.20.10</td>
<td>Of a vehicle mass not exceeding 1 600 kg</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.01.07</td>
<td>8701.20.20</td>
<td>Of a vehicle mass exceeding 1 600 kg</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.01.09</td>
<td>8701.30</td>
<td>Track-laying tractors</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.04</td>
<td>87.04</td>
<td>Motor vehicles for the transport of goods:</td>
<td></td>
</tr>
<tr>
<td>153.04</td>
<td>8704.10</td>
<td>Dumpers designed for off-highway use:</td>
<td></td>
</tr>
<tr>
<td>153.04.05</td>
<td>8704.10.25</td>
<td>G.V.M. not exceeding 50 t</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.04.07</td>
<td>8704.10.90</td>
<td>Other</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.04</td>
<td>8704.21</td>
<td>G.V.M. not exceeding 5 t:</td>
<td></td>
</tr>
<tr>
<td>153.04.09</td>
<td>8704.21.10</td>
<td>Shuttle cars for use in underground mines; low construction flame-proof the rear, for use in underground mines</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.04.11</td>
<td>8704.21.40</td>
<td>Off-the-road logging trucks</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.04.23</td>
<td>8704.21.90</td>
<td>Other</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.04</td>
<td>8704.22</td>
<td>G.V.M. exceeding 5 t but not exceeding 20 t:</td>
<td></td>
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<tr>
<td>153.04.25</td>
<td>8704.22.10</td>
<td>Shuttle cars for use in underground mines; low construction flame-proof the rear, for use in underground mines</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.04.27</td>
<td>8704.22.20</td>
<td>Off-the-road logging trucks</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.04.29</td>
<td>8704.22.90</td>
<td>Other</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.04</td>
<td>8704.23</td>
<td>G.V.M. exceeding 20 t:</td>
<td></td>
</tr>
<tr>
<td>153.04.31</td>
<td>8704.23.10</td>
<td>Shuttle cars for use in underground mines; low construction flame-proof the rear, for use in underground mines</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.04.33</td>
<td>8704.23.20</td>
<td>Off-the-road logging trucks</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.04.35</td>
<td>8704.23.90</td>
<td>Other</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.04</td>
<td>8704.31</td>
<td>G.V.M. not exceeding 5 t:</td>
<td></td>
</tr>
<tr>
<td>153.04.37</td>
<td>8704.31.30</td>
<td>Off-the-road logging trucks</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.04</td>
<td>8704.32</td>
<td>G.V.M. exceeding 5 t:</td>
<td></td>
</tr>
<tr>
<td>153.04.53</td>
<td>8704.32.10</td>
<td>Off-the-road logging trucks</td>
<td>R2.30/kg net</td>
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<tr>
<td>153.04.55</td>
<td>8704.32.90</td>
<td>Other</td>
<td>R2.30/kg net</td>
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<tr>
<td>153.04</td>
<td>8704.90</td>
<td>Other:</td>
<td></td>
</tr>
<tr>
<td>153.04.61</td>
<td>8704.90.30</td>
<td>Off-the-road logging trucks</td>
<td>R2.30/kg net</td>
</tr>
</tbody>
</table>
Special purpose motor vehicles (excluding those principally designed for the transport of persons or goods) (for example, breakdown lorries, crane lorries, fire fighting vehicles, concrete-mixer lorries, road sweeper lorries, spraying lorries, mobile workshops, mobile radiological units):

<table>
<thead>
<tr>
<th>153.05</th>
<th>87.05</th>
<th>Description</th>
<th>Unit Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>153.05.01</td>
<td>8705.10</td>
<td>Crane lorries</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.05.03</td>
<td>8705.20</td>
<td>Mobile drilling derricks</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.05.05</td>
<td>8705.30</td>
<td>Fire fighting vehicles</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.05.07</td>
<td>8705.40</td>
<td>Concrete-mixer lorries</td>
<td>R2.30/kg net</td>
</tr>
<tr>
<td>153.05.09</td>
<td>8705.90</td>
<td>Other</td>
<td>R2.30/kg net</td>
</tr>
</tbody>
</table>

Road wheels and parts and accessories thereof:

<table>
<thead>
<tr>
<th>153.08</th>
<th>8708.70</th>
<th>Description</th>
<th>Unit Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>153.08.21</td>
<td>8708.70.10</td>
<td>Identifiable for use solely or principally with tractors (excluding road tractors)</td>
<td>R2.30/kg net</td>
</tr>
</tbody>
</table>
23 ANNEXURE C - REFERENCES


21. Minister Edna Molewa's speech to the UN Secretary-General's High-Level Event on Climate Change | Department of Environmental Affairs. 2017. Minister Edna Molewa's speech to the UN Secretary-General's High-Level Event on Climate Change | Department of Environmental Affairs. [ONLINE] Available at: https://www.environment.gov.za/speech/molewa_speechtounsecretarygeneral. [Accessed 07 June 2017].


- Environmental Impact Assessment Regulations, 2014
- National Norms and Standards for the Storage of Waste, 2013
- National Waste Tyre Regulations, 2017
- Public Finance Management Act, 1999, as amended