# **GOVERNMENT NOTICE**

# DEPARTMENT OF ENVIRONMENTAL AFFAIRS

No. 564

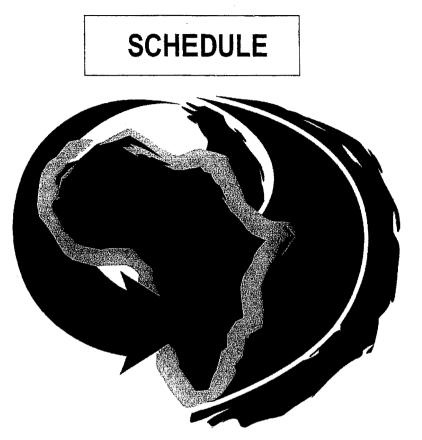
23 July 2012

# NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008)

# NOTICE OF APPROVAL OF AN INTEGRATED INDUSTRY WASTE TYRE MANAGEMENT PLAN FROM THE RECYCLING AND ECONOMIC DEVELOPMENT INITIATIVE OF SOUTH AFRICA

I, Bomo Edith Edna Molewa, Minister of Water and Environmental Affairs, hereby give notice of approval of the Integrated Industry Waste Tyre Management Plan (IIWTMP) of the Recycling Economic Development Initiative of South Africa in terms of Regulation 11(4) of the Waste Tyre Regulations, 2009. The approved IIWTMP is set out in the Schedule hereto, and is hereby published for implementation.

ÉDNA MOLEWA MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS



# RECYCLING AND ECONOMIC DEVELOPMENT INITIATIVE OF SOUTH AFRICA

REIDISA NPC Reg No. 2010/022733/08

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# REDISA INTEGRATED INDUSTRY WASTE TYRE MANAGEMENT PLAN

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# 2. Introduction

For purposes of the implementation of the Plan, a Non-Profit Company has been registered bearing the name REDISA NPC (Recycling and Economic Development Initiative South Africa), ("REDISA"), Registration 2010/022733/08, which represents numerous categories of persons that produce waste in the tyre industry.

REDISA will have a Memorandum of Incorporation (MoI) governing its activities. An organisation controlling a project of this magnitude must have sustainability. A properly drafted MoI imposes codes of conduct and governance, and guards against narrow sectoral influences or private enterprises taking over or high-jacking the aims of the organisation

The draft MoI will be submitted within 90 days, and finalised no later than 12 months, after final gazetting of the Plan or as required by law, whichever is the earlier. The MoI will need to:

- ensure the independence of the REDISA Board;
- mandate REDISA to ensure, within its powers, a strict separation between Processors and Tyre Producers (the latter being manufacturers and importers);
- provide for industry-specific committees to advise the Board;
- ensure confidentiality of industry-sensitive information including, inter alia, market share data;
- ensure to the extent it is within its powers that anticompetitive behaviour in the industries it is involved in is not permitted;
- mandate REDISA to fulfil socio-economic objectives of job creation and BBBEE development; and
- define Environmental objectives.

The REDISA board members will be made up of:

- two executive directors;
- one legal expert;
- one financial expert;
- five captains of industry and higher learning;
- one from the informal business sector.

No board member may represent any waste stream managed by REDISA.

## 2.1. Motivation for acceptance of the REDISA Plan

The Waste Act, in Section 28(1), addresses the case where "waste affects more than one province or where such an activity is conducted in more than one province" and in that case envisions the creation of "an industry waste management plan." The drafters of the Waste Act clearly anticipated the need to address national issues with holistic national plans. The REDISA Plan was drafted taking cognisance thereof.

The DEA is tasked with protecting the environment and public health, a key objective of government. The Waste Act itself declares its objectives as being to protect health, well-being and the environment.

The government's objectives for a better South Africa include key fundamentals that must be considered in a project of this magnitude. The REDISA (Recycling and Economic Development Initiative of South Africa) Plan is consistent with these objectives which can be seen to be incorporated into various areas within the Plan.

The REDISA Plan is structured around there being only one waste tyre management plan, on the basis that that is the only workable approach.

The arguments for a single plan centre on the following aspects:

- Job creation
- Fostering of SMMEs and BBBEE
- Need for informal participation
- Fairness
- Effectiveness and efficiency
- Financial and audit control
- Ease of implementation
- Training and communication
- Resilience and longevity

The first two points above, job creation and fostering of SMMEs and BBBEE, are key objectives necessary to meet the social needs of the country. Nevertheless, any plan should also meet the requirements of fairness, effectiveness in fully addressing the waste tyre problem, efficiency in avoiding needless expense through standardisation and consistency, auditability and resistance to fraudulent manipulation, and minimising the impact on existing businesses. It will also be important to drive awareness to the industry and the public.

## Job Creation

Multiple plans represent multiple interests and a splintered economic base. It is not reasonable to expect that each of a set of multiple plans will share or readily be constrained to observe the same overarching objectives of job creation, not least because of the economic realities. Splitting the scope of tyre collectors to limit them to sub-sectors of the waste tyre stockpile will make it harder for the smaller operators to survive: a collector arriving at a tyre dealer and, for example, being allowed only to collect tyres from one or two manufacturers will find it much harder to be viable. Consequently, the larger operators with economies of scale and better information and connections to the larger chains will inevitably squeeze out the small operators.

SMMEs will be further disadvantaged by the sheer complexity and record-keeping needed to comply with a multiplicity of plans.

A single plan can be structured from the start to maximise employment generation and the building and support of SMMEs within a BBBEE framework. The REDISA Plan is so constructed.

## SMMEs and BBBEE

One of the biggest hurdles for SMMEs is access to capital. Establishment of depots requires capital that SMMEs do not generally have access to.

Under the REDISA Plan, because it is a single plan that addresses the entire industry, depots will at first be funded by REDISA and leased to BBBEE entrepreneurs. This has the secondary advantage that should a depot fail through mismanagement – and it is inevitable that out of 150 depots some will – then it is far easier to re-start the operation with new management.

Managers of these depots can over time, as they prove themselves and become fully selfsustaining, take over full ownership of their depots.

## **Need for Informal Participation**

Whilst in principle it is correct that the tyre manufacturers and importers must shoulder the primary responsibility for waste management, in practice it must be recognised that once the tyres leave manufacturers or importers they have no further contact with them. It is the tyre dealers who handle the tyres through their life cycle, and the management approach must fit in with the practicalities of the retail industry. Specifically, the informal sector deals with a

large proportion of the scrap tyres, estimated to be at least 75% of the total, so without informal sector participation, no plan will succeed: the plan must be inclusive of the informal sector, not exclusive.

## Fairness

Any imposition of new regulations and taxes or levies will inevitably attract criticism and opposition, no matter how praiseworthy the aims may be. The strongest argument against such opposition is fairness. Multiple plans, unless essentially the same plan replicated in different guises, will always be seen to be unfair to one or more parties.

Any approach other than basing the Waste Tyre Management Fee on mass of rubber in a tyre is open to abuse which can only lead to further perceptions of unfairness as the large operators will have many opportunities to game the system.

A single plan approach, with a simple and equitable system for apportioning the waste tyre management fee, will level the playing field, and simplified administration and auditing will make it far less open to suspicions of behind the scenes manipulation by the bigger participants.

## **Effectiveness and Efficiency**

Although in some senses secondary to the goals of job creation, SMME support and BBBEE, waste tyre management is a necessity that needs to be addressed effectively and efficiently. It is not enough to pay lip service and create activity if a large part of the problem remains unsolved.

There are many importers and manufacturers of tyres, and vast stockpiles of historical waste tyres. Failing to address segments of the total waste tyre problem will only make it harder to devise ways at a later date of "mopping up" the segments that have been ignored. Multiple plans for addressing the problem would be like sending out street cleaners in separate groups: one to collect cigarette butts and crisp packets, one to collect plastic shopping bags and soft drink tins, another to collect paper, and so on. And if no group was created to pick up tins, they would rust in place.

A single, universal plan that addresses all categories of waste tyres, from all sources, and of whatever age, is clearly more effective and efficient. It is important to note that efficiency in this context means minimising wasted cost, as in multiple trucks visiting one collection point, whilst still being designed to create decent work for as many people as possible.

#### Financial and Audit Control

The management of waste tyres on a national scale is a massive undertaking involving very large sums of money. Proper management of the money involved is essential, not only to avoid losses due to errors and omissions, but also to combat the inevitable attempts at misappropriation that will arise.

Any plan needs to have strict controls, but the more complex a system is, the harder it is to close the loopholes that dishonest people will be looking for. In the case of waste tyre recycling, the problem is compounded by the fact that if a plan is in any way linked to the brand or type of tyre then by its very nature the evidence of fraudulent manipulation gets destroyed: shredded, crumbed or burnt tyres do not have any identity. Manipulation of records to falsify tyre quantities, for example reporting bigger tyres as a larger quantity of smaller tyres, will be almost impossible to prevent.

If there are multiple plans, there will also be differences between the plans (otherwise they are all the same plan). That will mean that people will find ways to deliberately misallocate

stock to move tyres between the plans to gain advantage. It is not possible to predict now how that will be done, but we can be quite certain that it will happen.

Multiple plans would mean that every participant in the tyre industry would have to comply with multiple sets of rules and be subject to multiple audits. When one considers that there are approximately 2300 tyre dealerships nationally, the scale of the potential problem is massive, as would be the cost – cost that would be diverted from productive job and SMME creation.

A single plan based on mass of rubber with control at every step in the collection and recycling process based simply on mass of tyre material is vastly easier to audit.

## Ease of Implementation

The difficulties of multiple plan financial controls discussed above imply a complex implementation plan with corresponding paperwork that retailers will be reluctant to deal with and tempted to skimp on or ignore (or deliberately manipulate).

The REDISA Plan applies a waste tyre management fee at source: at the tyre manufacturers and importers. From this point on, participants in the tyre industry have an incentive to take part and work within the plan to remove a problem they have. This approach is simple and eliminates much of the audit and policing complexity, but can only be applied under a single plan approach.

Any other approach creates additional administrative burdens, both in observing the rules, and in collecting and accounting for the funds. It would also necessitate constant external monitoring and policing to ensure that all waste tyre management fees charged are indeed accounted for and returned to the waste tyre management fund.

## Training and Communication

A significant success factor will be training, and the REDISA Plan provides for this. Multiple plans would require multiple training programmes, at higher cost and lower efficiency.

Similarly, there will be a need to market the concept of waste tyre recovery and encouraging participation. A single plan with consolidated funding is not only more effective, but the message is far simpler and more easily communicated.

## **Resilience and longevity**

The REDISA single plan approach produces an organisation with guaranteed viability and ready translation to related fields. There are many other sources of environmental waste that can and should be tackled on the same basis, namely that the original producer of the waste, be it electrical goods, small appliance batteries, compact fluorescent lights, and many others, should contribute towards a fund to cater for the eventual safe recycling and disposal of their goods.

It is a simple concept with a relatively simple underlying structure, which avoids affiliations with particular industry players and is structured to carry out government mandates.

## In Conclusion

We submit that a multiple plan approach is fraught with complications, shortcomings, costs . and opportunities for fraud. It is inefficient and cannot be fully effective. Above all, it is not consonant with primary government objectives of job creation and support of SMMEs and BBBEE.

A single plan approach as proposed by REDISA is superior in all respects.

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# 3. Definitions

| "Accreditation Card"         | means measurable card for determination of compliance to various aspects as required for specific processes;   |
|------------------------------|--|
| "Adjudication Committee"     | means a committee formed to award contracts, with or without a tender process, as appropriate;   |
| AQA                          | means the Air Quality Act, 2004 (Act No. 39 of 2004)   |
| "BBBEE"                      | means the objectives set out in the Broad-Based Black<br>Economic Empowerment Act 53 of 2003;  |
| "BEP"                        | means Best Envronmental Practice;  |
| "BPEO"                       | means Best Practicable Environmental Option informed through the use of Best Available Technology/Technique;   |
| "Code of Conduct"            | means a code designed specifically per sector to set a benchmark by which operators can trade according to and at high standards, ethics and morals;   |
| "Date"                       | means the date on which the REDISA Plan is gazetted as approved by the Minister of Environmental Affairs;  |
| "De-bead"                    | means removal of steel beads contained in pneumatic tyres;   |
| "DEA"                        | means Department of Environmental Affairs;   |
| "GPS"                        | means a global positioning system;   |
| "General Waste"              | means Waste that does not pose an immediate hazard or<br>threat to health or to the environment, and includes:<br>(a) domestic waste;<br>(b) building and demolition waste;<br>(c) business waste; and<br>(d) inert waste; |
| "Historical Waste Tyres"     | means tyres that are waste tyres at the Date but do not form part of a Historical Waste Tyre Stock Pile;   |
| "Historical Waste Tyre Stock |  |
| Piles"                       | means waste tyres which were collected before the Date and stockpiled anywhere in South Africa;  |
| "Legacy Waste Tyres"         | means tyres which were at the Date, fitted to motor vehicles<br>and sold or imported or manufactured before the Date and<br>are not legally waste tyres at the Date;   |
| "Metropoles"                 | means specific areas identified within the republic of South<br>Africa, where the concentration/consumption of tyres is high;  |
| "Management Company"         | means the company appointed by REDISA to handle all operational aspects of the plan;   |
| "NCCS"                       | means the National Centralised Computer System;  |
| "NEMA"                       | means the National Environmental Management Act, 1998<br>(Act No. 107 of 1998) as amended by the National  |

|  | Environmental Management Amendment Act, 2008 (Act No.<br>62 of 2008)  |  |  |
|--|---|--|--|
| "OHS Act"  | means the Occupational Health and Safety Act 85 of 1993;  |  |  |
| "Processor"  | means any person or entity that is engaged in the commercial re-use, recycling or recovery of waste tyres;  |  |  |
| "Plan"   | means this Integrated Industry Waste Tyre Management Plan,<br>written and operated by REDISA, in terms of the Waste Tyre<br>Regulations;  |  |  |
| "Producer"   | means tyre producer;  |  |  |
| "Recycle"  | means the separation and processing of waste tyres for further use as new products and resources;   |  |  |
| "REDISA"   | means REDISA NPC, Registration number 2010/022733/08, a non-profit company duly incorporated in the Republic of South Africa;   |  |  |
| "Re-grooved tyres" means tyres whose original grooves have been re-cut and<br>where this practice is not explicitly allowed by the<br>manufacturer as evidenced by markings on the side wall of the<br>tyre; |   |  |  |
| "Relevant Role Players"  | means parties specifically involved in a sector of the industry;  |  |  |
| "Storage Sites/Depots"   | <b>pots"</b> means a site for waste tyre storage as defined in the waste tyre regulations;  |  |  |
| "Subscribers"  | means any Producer that registers with the REDISA Integrated<br>Industry Waste Tyre Management Plan;  |  |  |
| "Tyre Categories"  | for ease of management tyres will be divided into nine different categories:  |  |  |
|  | 1Passenger Car Tyres2Light commercial Tyres3Heavy commercial Tyres4Agricultural Tyres5Motorcycle tyres6Industrial Tyres7Aircraft Tyres8Earth moving Tyres9Any other pneumatic Tyres                       |  |  |
| "Tyre Dealer"  | means a person or entity that distributes or deals commercially in tyres;   |  |  |
| "Tyre Producer"  | means any person or institution engaged in the commercial<br>manufacture or import of tyres and retreadable casings, and<br>the import of vehicles fitted with tyres for distribution in South<br>Africa; |  |  |
| "Waste Act" means the National Environmental Management: Waste 59 of 2008;   |   |  |  |

| "Waste Tyre"             | means a new, used, retreaded or un-roadworthy tyre, not<br>suitable to be retreaded, repaired, or sold as a part worn tyre<br>and not fit for its original intended use;             |
|--------------------------|--|
| "Waste Tyre Management"  | means the collection and transportation, storage and pre-<br>processing for delivery, the funding and operational activity<br>involved in reducing waste tyres from the environment; |
| "Waste Tyre Management   |  |
| Fee"                     | means a non-commercial fee collected by REDISA from<br>Producers for the effective management of waste tyres;  |
| "Waste Tyre Regulations" | means the Waste Tyre Regulations, 2009 promulgated in terms of the Environment Conservation Act 73 of 1989.  |

# 4. Subscribers to the Plan

Any tyre producer, in terms of part 3 of the Waste Tyre Regulation, must subscribe to an integrated industry Waste Tyre Management Plan (IIWTMP) approved by the Minister. A tyre producer's failure to subscribe to an approved IIWTMP whilst continuing to produce tyres would constitute an offence.

In order for the proper operation of the Plan, all subscribers will have to sign a deed of adherence acknowledging the existence of the IIWTMP and the requirements of the Waste Tyre Regulations. In order to register, all producers are referred to REDISA's web-site: www.redisa.org.za.

Initial subscribers already signed up are listed in Annexure A.

All subscribers must provide to the external accounting company a monthly declaration of their tyre production (including rejects), imports and exports.

All subscribers must furthermore provide annual audit certificates confirming their declarations of masses of tyres imported and/or manufactured, and permit spot check audits to be conducted by REDISA's auditors.

## 4.1. Consultation

Extensive consultation has taken place with all role players, concentrating in particular on the informal sector, which at present deal with the waste tyres in South Africa.

The Plan has been widely advertised in the press and on radio, and legal notices inviting comment on the Plan have been published in eight regional and national newspapers.

Comment has been invited on the web site, as well as by email from interested parties registered on the REDISA web site.

We understand very clearly that for the REDISA Plan to be successful it needs a broad-based buy-in of all role players. We understand that it is not enough to simply communicate the intention of the REDISA Plan: we consulted all different sectors in the creation of our Plan. Through our consultation in the industry it has become very clear to us that most role players believe that the REDISA Plan is the only workable solution to the South African waste tyre problem. We recognised that it is vital to the success of the Plan that we consulted in particular those people who on a day to day basis handle waste tyres and receive income from waste tyres. A list of these meetings and consultations is available on request.

# 5. **Projected volumes**

Approximately 11 million tyres per year are currently sold locally. All these tyres (except tyres exported) will become waste tyres. The estimated mass of the tyres sold (and which in turn will become waste) is 275 000 tonnes.

The Regulations require that within five years all categories of tyres must be included in the recycling or energy recovery process. However, we believe that approaching the problem selectively will create confusion, resistance and inefficiency in the collection process. The project cash flows will allow REDISA to address all classes of tyres from the start, will foster acceptance of the Plan and will simplify the entire administrative process.

We will therefore engage all the relevant role players in the different segments of the industry.

# 6. The Waste Tyre Hierarchy

The waste tyre hierarchy must be addressed with flexibility to adjust for changing technologies and supply conditions. The National Centralised Computer System ('NCCS') will be central to efficient management of resources and allocation of waste tyres in the optimal manner.

For recycling, the hierarchy will be applied by giving preference to processes which:

- produce products of a higher quality or value;
- produce products which reduce imports;
- create recycled products for export;
- create recycled products for local use.

## 6.1. Avoid

Consumer education will promote measures for improved tyre life. These include:

- route planning and scheduling to reduce travel;
- tyre pressure maintenance;
- operating within tyre load parameters;
- vehicle maintenance including wheel alignment and balancing.

In year 1 (one) 1000 consumers will be surveyed to establish the number of kilometres travelled on a set of tyres. A campaign run through various media will promote the benefits of regular wheel balancing, wheel alignment and tyre pressure checks. If these three aspects are properly managed tyre life can be extended by as much as 100%.

In subsequent years, consumers will be re-surveyed to determine the reach and effectiveness of the campaign and provide feedback for continual improvement of the communication.

# 6.2. Re-Use

Casings can be used for retreading. Every retreaded tyre provides a second life to a new tyre.

Retreading is less common than it could be in South Africa, both because of the establishment costs of the relevant plant and because of consumer and dealer prejudice.

A comprehensive assessment of the retreading industry will be undertaken in the first year as a basis for devising a business plan, quality assurance standards (in collaboration with SABS) and a communication strategy to promote retreading across all classes of tyres. REDISA will in addition fund and support Research & Development at universities to adapt processes to local conditions.

Again, annual surveys and assessments will lead to continual refinement. The goal will be to achieve continual growth in the use of retreads in all tyre classes.

Note that whilst it will be in the ambit of REDISA to promote high-quality retreading and thereby increase re-use of tyres, REDISA will not subsidise retreading businesses directly.

## 6.3. Recycle

The Plan will promote and support the establishment of recycling facilities nationwide. The recycling facilities will be the main source of employment for the informal sector and previously disadvantaged individuals in both urban and rural areas. The collection of waste tyres to the depots and/or the tyre processors will be the main source of job creation and establishment of small businesses.

The recycling processors will be predominantly BBBEE entrepreneurs, operating where required in partnership or mentorship with more experienced businessmen. REDISA will assist with establishing these businesses, through training, financial support and mentoring.

Over time, the range of products recovered through the recycling process will be expanded to products such as oils, bricks and tiles. One of REDISA's functions will be to sponsor Research and Development at tertiary institutions, thereby both creating processes designed for South African conditions and building knowledge and expertise in the country.

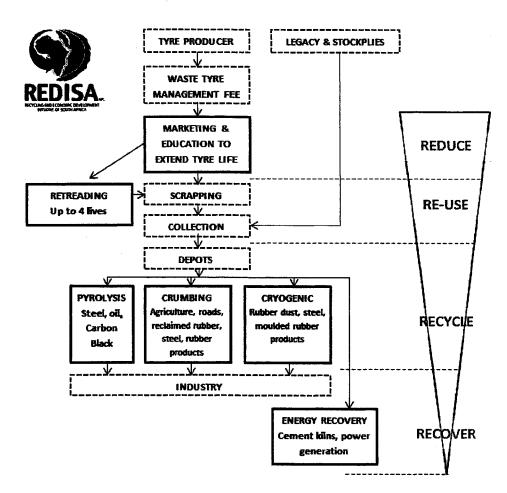
A critical aspect of the REDISA Plan is to manage the flow and supply of tyres to recycling operations to ensure sustainability of those operations. Many recycling processes require significant capital investment, which in turn requires assured long-term supply of tyres to enable them to recoup that investment. Furthermore, different processes have different requirements with respect to the type of tyres they can use.

Annual assessments will establish the tonnage of existing waste tyres recycled and form the success measure.

## 6.4. Waste Tyre Hierarchy Summary

The figure below shows the waste tyre hierarchy diagrammatically. The particular recycling processes shown are illustrative, and will evolve as the project develops.

Note that the option of last resort, disposal to landfill, is not show on the diagram. Disposal to landfill is undesirable and does not form part of the long-term waste management strategy.



# 7. Adjudication Process

The adjudication committee will comprise:

- 7.1 a certified auditor,
- 7.2 two members of the management company board,
- 7.3 two members of the REDISA board,
- 7.4 an accountant,

7.5 appropriate co-opted members

- not exceeding eight members in total.

Adjudications will require at least a two-thirds majority and will take into account:

- 7.6 BBBEE status of the contractor;
- 7.7 financial proposal;
- 7.8 ability to execute;
- 7.9 competencies;
- 7.10 size (preference will be given to smaller contractors);
- 7.11 area of operation (preference will be given to local contractors).

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The adjudication process will ensure that SMMEs are provided with support and assistance in presenting their proposals through the REDISA training and Corporate Social Responsibility (CSR) programs.

# 8. Identification of Waste Tyre Processors

Waste tyre processors are critical to the Plan, and there will be a need for a range of processing facilities of different types, with different capacities.

Transport costs will be the largest cost component in the Waste Tyre Management Plan, and can be expected to rise further. In areas where the concentration of waste tyre producers is low, a high-capacity process will not be able to get enough tyres unless the catchment area is large, leading to excessive transport costs. It will therefore be preferable to have low-capacity processors in such areas which are matched to the local availability of scrap tyres.

Potential participants will be invited to become processors and will be assisted by REDISA with the establishment of facilities. All interested parties are required to contact REDISA by visiting the REDISA website at <u>www.redisa.org.za</u>, and thereafter either registering with REDISA or contacting REDISA with the contact details provided on the website.

Applicants will make application to the board of REDISA and complete an accreditation process (described further below).

# 8.1. Contract Award Process

An open award process will call for applications leading to contracts whereby REDISA will supply, and the processor will accept, a specified annual tonnage of waste tyres. Both the number of contracts advertised, and the scope of operations of each contract, will be managed by REDISA taking into consideration:

- 8.1.1 supply and demand within each grade of tyre waste;
- 8.1.2 supporting existing and smaller waste tyre processors;
- 8.1.3 job creation and establishment of BBBEE enterprises;
- 8.1.4 environmental impact of the process with particular regard to emissions and the quality and usability of the output product(s);
- 8.1.5 evaluation of the opportunities for re-use, recycling or energy conversion to maximise the total benefit to the country.

In particular, waste tyre processors will be evaluated against the provisions of NEMA, and specifically NEMA section 4(2)(b) with regard to selection of BEP and BPEO, and of AQA.

The centralised computer system will be a key element in managing the allocation and distribution of tenders.

Tender and adjudication processes will require declarations of tonnage and types of tyres received, specific treatment processes, the length of contracts, projected operational cost and a declaration of existing licenses/exemptions/permits to operate.

To encourage SMMEs, contracts valued at less than R50 000 p.m. will be adjudicated without a formal tender process.

## 8.2. Appointments

- 8.2.1 Appointments will remain valid for a period of 5 years subject to meeting performance criteria and compliance with regulations.
- 8.2.2 All appointees will be subject to review at any time.

- 8.2.3 All appointees will be bound to the REDISA Plan
- 8.2.4 Registrations will be reviewed and renewed initially annually, thereafter periodically.
- 8.2.5 Existing contracts awarded before the inception of the Pian will be phased out and put out to tender as and when applicable.

Successful applicants will be confirmed and accordingly notified by the Board of REDISA.

## 8.3. Declarations

Waste tyre processors will amongst other mandatory requirements declare:

- 8.3.1 tonnage of tyres received from transporters;
- 8.3.2 details of transporters used;
- 8.3.3 end products (where applicable);
- 8.3.4 stockpiles;
- 8.3.5 employment levels and jobs created;
- 8.3.6 compliance to the Waste Tyre Regulations;
- 8.3.7 compliance to Safety and Compliance as per the OHS Act.

## 8.4. Payments

Appointed processors will receive waste tyres delivered to them. Where appropriate, further subsidies may be paid at a rate and for a period to be agreed in each case.

The biggest inhibitor of new businesses is cash flow. Where subsidies are to be paid, REDISA will put in place processes and controls to permit rapid payment of the processors to support their businesses.

REDISA will pay promptly on confirmation of stage completion for tonnage of tyres processed.

# 9. **Registration of Tyre Transporters**

Equitable allocation of required transport services to previously disadvantaged communities must be ensured. Potential transporters will be assisted to register with the waste management officer in the municipality or province as required by law, complete the predetermined accreditation card and sign the relevant contract. Existing transporters will be included subject to compliance with accreditation requirements.

All interested parties are required to contact REDISA by visiting the REDISA website at <u>www.redisa.org.za</u>, and thereafter either registering with REDISA or contacting REDISA with the contact details provided on the website.

The National Centralised Computer System will be key to the efficient management of the transporter network. It will:

- optimise routes;
- monitor collections and deliveries and provide backup for failings such as breakdowns, illnesses and no-shows;
- manage the flow of tyres to meet required supply levels for recycling operations and avoid over-supply.

Preference will be given to owner-drivers who live in the areas where transport is needed.

# 9.1. Contract Award Process

In general, tender processes tend to exclude the smaller and more informal businesses, and care must be taken to avoid shutting out the very people the REDISA Plan is aiming to empower. Where possible, existing operators in the area will be appointed and supported. A liaison team, working in and with municipalities, which will be formed to ensure compliance with the WTM process, will also assist with this task.

Where appropriate, and where it will not exclude SMMEs, a tender process will be introduced to ensure free competition. Preference will be given to existing and/or smaller waste tyre transporters, and for contracts valued at under R50 000 p.m. award will be via the adjudication committee.

Tenders will require declarations of tonnage of tyres collected, the length of contracts, projection of operational costs, and a declaration of existing licences/exemptions/permits to operate in this process.

# 9.2. Appointment

Appointments and contracts will remain valid for a period of up to 5 years.

Appointments will:

- 9.2.1 be subject to review at any time;
- 9.2.2 be contractually bound to REDISA;
- 9.2.3 have allocated collection sites (which allocations may change from time to time as operationally needed).

## 9.3. Review Process

Depots, collection points and Processors will continually evaluate transporter performance via the NCCS. Transporter performance information will be monitored by the Management Company. Training session attendance will also be noted on the NCCS.

## 9.4. Non-Compliance by Transporter

A transporter not compliant with his contract, in breach of the code of conduct or with a constantly low score on performance evaluations, will be called to account by the Management Company and given two weeks to rectify the situation. Failure to rectify will result in suspension until the situation is rectified. Suspension will be recorded on the NCCS.

## 9.5. Declarations

Waste tyre transporters will amongst other mandatory requirements report on:

- 9.5.1 existing jobs and jobs created;
- 9.5.2 compliance to the Waste Tyre Regulations;
- 9.5.3 compliance to Safety and Compliance as per the OHS Act;
- 9.5.4 transportation of all categories of tyres.

## 9.6. Duties of Tyre Transporters

The duties of the waste tyre transporters will include:

9.6.1 collection of waste tyres from tyre dealers, the veldt and other public spaces, and, with the permission of landowners/landlords, tyres dumped on a site controlled by such landowner/landlord;

9.6.2 the transportation of waste tyres to approved interim waste tyre storage and recycling sites.

Transporters will only be permitted to deliver authorised quantities of tyres to interim waste tyre storage sites and recycling sites.

Waste tyre transporters must:

- 9.6.1 provide their own suitable vehicles and be responsible for all insurance and licensing of the vehicles;
- 9.6.2 load and offload their waste tyres in a manner that is approved by the managers of the collection and destination sites;
- 9.6.3 complete documentation as required by the Plan to verify the mass of tyres loaded and delivered to the approved destination (this is a prime requirement for the national audit process and a condition precedent for payment, and will be largely automated by the NCCS);
- 9.6.4 have a current account with a South African Bank into which all payments can be electronically transferred (in the interests of security, transparency and sound audit practice, no cash payments will be made);
- 9.6.5 where the size of the business requires it, be registered with SARS and abide by labour and other applicable legislation.

Transporters will receive training in topics including:

- record-keeping of collections and deliveries of waste to processors or licensed waste tyre storage sites to ensure that waste is delivered to legal sites or processors;
- compliance with the relevant controls;
- identification of roadworthy versus unsafe tyres;
- basic financial and business management;
- vehicle management.

Prospective waste tyre transporters may approach REDISA for financial and administrative support to establish their businesses.

Accredited transporters will be listed on the NCCS and their names made available to all interested parties.

## 9.7. Payments

REDISA will pay the transporter in accordance with their contract on a per kilogram basis taking into account distance travelled. No payments will be made for unauthorised deliveries and/or collections. Payment will be by way of electronic fund transfer into bank accounts. Transporters will be responsible for all their expenses.

The system will be centrally managed through the NCCS to ensure payments are expedited: as in the case of waste tyre processors, one of REDISA's functions is to ensure prompt payment to small businesses whose cash flow is often their biggest problem.

# **10.** Unregistered Tyre Transporters

There will be large numbers of unregistered tyre transporters who will not be visible to the formal systems. These are the individuals with trolleys and wheelbarrows.

It is anticipated that these very informal participants will collect waste tyres and feed them into the owner-drivers. These informal participants will also be permitted to deliver directly to depots subject to:

- collectors must be able to accept electronic payment into an account or a mobile phonebased payments system;
- individual collectors will have a quota limiting the monthly weight of tyres they can deliver. Quotas can be adapted as needs become apparent and the level of response is seen.

It will be difficult to quantify the numbers of these unregistered transporters, and no attempt has been made to count them in the forecasts of jobs created, but it is believed this will be a significant spin-off for the very poor since waste tyres will become a tradable commodity.

# 11. Waste Tyre Storage Sites

REDISA has provisionally identified 150 cities and towns where waste tyre storage sites (depots) will be required (see Annexure B for names and a map).

The sites will be spread over the metropoles and gradually expanded country wide. Depots will be identified via a detailed assessment of where waste tyres arise, transport routes, and the location of any existing Processors, amongst other considerations. Where depots are established by REDISA, contracts for the management of the depots will be awarded through an adjudication process. Contracts for the establishment of depots by third parties will be awarded by tender and may in some cases be included in tenders for waste processing operations.

Sites will vary in size dependent on the concentration of consumers. Some of the larger depots will not only store tyres but also pre-process in an effort to reduce transport costs. These depots will be run as businesses and the full tender process will be applicable.

Different kinds of waste sites will be created:

- a transfer site where transporters deliver to an interim site; or
- a tyre processing site where waste is prepared for recycling; or
- a Recycling site; or
- specialist sites for the recycling of the very large earthmover/mining/construction waste tyres; or
- any combination of the above.

The sites will also be open to individuals who wish to dispose of their waste tyres in an environmentally friendly manner.

All interested parties are required to contact REDISA by visiting the REDISA website at <u>www.redisa.org.za</u>, and thereafter either registering with REDISA or contacting REDISA with the contact details provided on the website.

All waste tyre storage sites must be registered with the provincial waste authority or any other legislative authority as may be applicable from time to time. Waste tyre storage sites must comply with the Waste Tyre Regulations and must supply all information as required for the NCCS.

# 11.1. Adjudication and Tender Processes for Waste Tyre Storage Sites

A process that fosters both free competition and local participation by BBBEE businesses will be created for depots established by third parties. Contracts will be advertised dependent on supply and demand.



Applications will require declarations of tonnage of tyres to be received, specific treatment processes, capital equipment, the length of contracts, projection of operational costs, and declaration of existing licenses/exemptions/permits to operate in this process.

All sites will be required to be registered with the Plan and be compliant with an accreditation card as detailed below.

A process will be in place to review registrations, initially on a yearly basis and thereafter periodically.

## **11.2.** Appointment

Successful applicants will be confirmed and accordingly appointed by REDISA. Contracts awarded to parties not in possession of a permit, license or exemption will be subject to the conditional provision that the permit, license or exemption is obtained. Should the permit, license or exemption not be obtained in the period provided for, the contract will be cancelled and the waste tyres awarded in terms of the contract will be once again offered on tender. Contracts will be awarded for periods of 5 years.

## 11.3. Non-Compliance

Due processes for monitoring compliance in a fair and equitable manner will be created.

Upon determination of non-compliance, Waste Tyre Storage Sites will have 10 (ten) working days opportunity for self-resolution. If no resolution takes place, the REDISA Board must be made aware of such non-resolution within five working days. The Board will report this to the provincial authority, (or to the appropriate authority as may be required from time to time) and where appropriate also to the DEA, and institute action as deemed fit and as defined in the contractual agreement.

# 12. Industry Standards

The industry standards embodied in the Environmental Control legislation and by Government, will apply to all the services in the Plan and as per the accreditation cards detailed below. The standards will be laid out in the contractual agreements for the various processes.

The Management Company will employ a compliance department of suitably trained specialists to assist all contracted parties to comply with legislation and best practices, assist with implementation, and to monitor continued compliance. Monitoring will take place via regular inspections from the Management Company. Inspections will be conducted at predetermined times and at the registered sites.

For the purposes of Waste Tyre Regulation 9(g), the following industry standards will apply:

12.1 Waste tyre transporters:

12.1.1 Compliance with environmental laws;

12.1.2 Compliance with the general duty of care as imposed by the Waste Act;

12.1.3 Where applicable, possession of a waste management license.

12.2 Waste tyre storage sites:

12.2.1 Compliance with environmental laws;

12.2.2 Compliance with the general duty of care as imposed by the Waste Act and National Water Act, 36 of 1998;

12.2.3 Where applicable, possession of a waste management license.

12.3 Waste processors:

12.3.1 Compliance with environmental laws;

12.3.2 Compliance with the general duty of care as imposed by the Waste Act and National Water Act, 36 of 1998;

12.3.3 Compliance with provincial and municipal legislation;

12.3.4 Where applicable, possession of a waste management license;

12.3.5 Where applicable, compliance with the National Policy on Thermal Treatment of General and Hazardous Waste incorporating BEP and BPEO.

# 13. Accreditation Cards

# 13.1. Waste Transporter Accreditation Card

| Minimum 51% Black ownership                                       | y/n |     |
|---|-----|-----|
| Members of previously disadvantaged communities                   |     | y/n |
| Sign a contract   |     | y/n |
| Transporter must reside in operational areas                      |     | y/n |
| Compliance to a Code of Conduct and Ethical Trading Practices     |     | y/n |
| Verifiable Bank Account   |     | y/n |
| Commitment to ongoing training & skills development               |     | y/n |
| Adherence to existing Government Legislation includes South       |     |     |
| African driver's license, vehicle license and be in possession of |     |     |
| a PDP   |     | y/n |
| A commitment to service the entire geographical areas             |     |     |
| as specified in their applications                                |     | y/n |
| Appropriate insurance   |     | y/n |
| Compliant with environmental laws                                 |     | y/n |
|   |     |     |

# 13.2. Waste Tyre Storage Site Accreditation Card

| a constant de la const |  |
|--|--|
| Fire and Safety compliance certificate y/n   |  |
| Occupational Health and Safety certification y/n   |  |
| Registration with waste control legislation y/n  |  |
| Adherence to a Code of Conduct and Ethical Trading y/n   |  |
| Job Creation projections   |  |
| Projection on the quantity of tyres the site can process   |  |
| Commitment to ongoing training & skills development y/n  |  |
| Sustainable Business Plan y/n  |  |
| Will the tyres be processed? (100% for processing to 0% for  |  |
| Non-processing)  |  |
| Weigh Bridge y/n   |  |

| Accounting practices in line with audit requirements            |     |
|---|-----|
| and linked to the NCCS  | y/n |
| Strategic Site location close to existing railways and existing |     |
| Processors (Rating benefits for sites close to railways         |     |
| and Processors)   |     |
| Sign a contract   | y/n |
| Appropriate insurance   | y/n |
| Compliant with environmental laws                               | y/n |
|   |     |

# 13.3. Waste Processor Accreditation Card

| Compliance to existing environmental laws<br>Minimum 51% Black ownership | y/n      | y/n |
|--|----------|-----|
| Sign a contract  | <i>n</i> | y/n |
| Weighbridge  |          | y/n |
| Waste operators must register with the relevant provincial               |          |     |
| authority  |          | y/n |
| A Business Plan showing sustainability                                   |          | y/n |
| Environmentally sound process that does not produce                      |          |     |
| a secondary environmental problem  |          | y/n |
| Fire and Safety compliance certification                                 |          | y/n |
| Projection on value to the SA economy via export or reduction            |          |     |
| in import of raw materials. This will be measured against other          |          |     |
| processes.   |          |     |
| Job Creation numbers   |          |     |
| Volume of tyres processed  |          |     |
| Sited appropriately to contain transport costs                           |          | y/n |
| Compliance to a Code of Conduct and Ethical Trading Practices            |          | y/n |
| Commitment to ongoing skills training and mentoring                      |          | y/n |
| Occupational Health and Safety certification                             |          | y/n |
| Accounting practices in line with audit requirements                     |          |     |
| and linked to the NCCS   |          | y/n |
| Appropriate insurance  |          | y/n |
|  |          |     |

The storage of waste tyres by dealers and at all sites must comply strictly with the Waste Tyre Regulations.

The recycling output will be reported in a format that suits the National Environmental Statistical purpose, management and the NCCS. It will be the ultimate source of information that will measure the success of the entire waste tyre management process.

#### 14. **Recording of Waste Tyre Processing**

The NCCS will provide the primary audit trail, supported where applicable by a duplicate hard copy paper trail. REDISA will provide detailed annual reports showing:

- tonnage of waste tyres received & processed; ٠
- material composition breakdown; •
- funds collected and expended. .

The audit trails will cover the requirements of the National Waste Information System as well as of the relevant local authorities in the area where the activities take place. In the design of

the NCCS, input from all relevant role players, including DEA, will be considered. The system will meet the requirements of recording payments due to service providers and also claims to be lodged with the Management Company.

The standard unit measure applied, which will simplify the process throughout, will be kilograms of tyres.

All Waste Tyre Management Fees collected from subscribers will be recorded.

Kilograms delivered to depots and payments therefore will be kept: i.e. records of payments to the transporter and the tonnage received by each depot. The depots will have to show by kilograms the mass of waste received and disposed of, creating a simple balancing equation. Anomalies will have to be accounted for.

This information will be recorded on the NCCS.

The following minimum information on waste tyres will be recorded daily on the NCCS:

- Collection of each load
  - o Name, address and Registration Number of transporter
  - o Name, address and registration number of the collection point
  - Mass and/or categories of Tyres loaded
  - o Vehicle used
  - o Agreed Destination
  - Date and Time Loaded
  - Receipt by Storage Site / Depot
    - o Name of processor
    - o Received from Transporter
    - Mass of Tyres
    - Vehicle used
    - Source Dealer or Legacy or other Stockpile (specify)
    - o Date and Time received
    - Date & time despatched
    - Registration number of despatch transporter
    - Product description outgoing
    - o Details of destination
    - o Stockholding
- Processor
  - o Date & time
  - o Received from transporter
  - o Origin
  - Type of product received
  - Stockholding by output and input product (monthly)
  - Output product delivered

The NCCS will be designed to capture the above information start to end. The system will also identify collection points and legacy sites by way of GPS locations and support site and route optimisation.

This centralised computer system will identify anomalies and variances that will trigger investigations. REDISA will provide an annual audited report containing the above information to DEA.

# **15.** Implementation Target Dates and Timeframe

All dates will be calculated from the date on which the REDISA Waste Tyre Management Plan is published in the Government Gazette as approved by the Minister of Environmental Affairs.

Invoicing of Waste Tyre Management Fees will take place no later than 3 months after the date of publication.

Waste tyre collection will begin no later than 10 months after the date of publication and will include tyres falling into categories 1, 2, 3 and 5.

Waste tyre collection for tyres falling into categories 4, 6, 7, 8 and 9 will begin no later than 18 months after the date of publication. This is as a result of the need to establish shredding plants big enough to handle the tyres falling into these categories.

For the purposes of this IIWTMP solid tyres are included in category 6.

- Solid tyres present the same waste disposal challenge as pneumatic tyres and require resources and effort commensurate with their mass;
- they are in some applications competitive to pneumatic tyres and excluding them from the levy would create unfair competition; and
- they will often be commingled with pneumatic tyres and it would be impractical to ensure they are segregated during the collection, transportation or recycling processes.

The above timescales indicate when collections will start; nation-wide collections will be implemented as a phased approach. All categories of tyres manufactured or imported into South Africa are required to become part of the Plan and will be collected by no later than 5 years after the date of publication.

# 15.1. Waste Reduction Targets

The following are the targets for waste reduction:

- Within 12 months, processing 30 000 tons/year of waste tyres using existing waste tyre processors.
- Within 24 months, processing of 90 000 tons/year of waste tyres.
- Within 36 months, processing of 150 000 tons/year of waste tyres.
- Within 60 months, processing of 400 000 tons/year waste tyres arising.

This will be subject to industry participants being compliant to the scorecard criteria and the timeous processing of EIA applications.

Note that the tonnages to be processed will include an increasing proportion of historical tyres to approximately 25% by year 5.

Refer to the section Job Creation below for job creation timeframes.

# 16. Estimated Costs

The amount of the Waste Tyre Management Fee has been estimated based on a "steadystate" amount needed to operate the Plan, i.e. once the systems and infrastructure are in place.

In the initial years of operation, there will be over-recovery of operating costs from the Waste Tyre Management Fee as the number of depots, transporters and Processors will be less than the targeted final numbers. The over-recovery will be accumulated as provisions to be used to fund establishment and set-up costs.

First year operational costs, establishment costs, including an initial national marketing campaign, and provision for future establishment costs are estimated to be approximately R624 million excluding VAT. The costs thereafter will be based on actual costs in year one and projected fluctuating variable costs, CPIX and all other influencing factors.

The Plan will be financed through REDISA, established specifically for the purpose of financing the entire operation from collection to recycling of waste tyres on a national basis. REDISA will obtain its funds primarily from the levying of Waste Tyre Management Fees from subscribers of R 2.30 + VAT per kg of manufactured and/or imported tyres and casings.

REDISA will undertake the determination, imposition, collection, management, administration of and disbursements from levies paid into the fund by subscribers. The Fund will also promote and support, and, to the extent that the private sector is unable to assist, undertake the necessary actions to ensure the environmentally acceptable recycling of waste tyres.

Cost estimates will be reviewed and updated in light of operational experience.

# 17. Waste Tyre Management Fees

## 17.1. Payments

The Waste Tyre Management Fee levied on the subscribers will be calculated to recover the cost of the waste tyre management process. A Waste Tyre Management Fee will be levied by REDISA on all tyres produced in South Africa or imported into South Africa directly or in products that contain tyres. Subscribers will have to produce monthly actual statistics on tyres produced and/or imported.

Fees levied will be per kg. However, to minimise the administrative burden, given that tyre weights within a given size may vary from tyre to tyre as well as from brand to brand, standardised weights by tyre size and type and will be determined as described in the next section.

Payment terms for subscribers who are regular importers or manufacturers and who are subscribed to the Plan will be 90 days. Other Producers and ad hoc importers will be required to pay the levies prior to clearance of imports or shipment of manufactured tyres. Payments will be by electronic transfer into REDISA's bank account.

The funding will be specifically coordinated by REDISA.

Sensitive competitive issues will be confidentially controlled by the management company.

The cost determination factors will include:

- NCCS
- Advertising and marketing
- Collection & transport costs of both waste tyres and legacy tyres to depots
- Depots/storage handling, pre-preparation ahead of delivery
- Establishment fees for processors/recyclers
- Administration and Management Company costs
- Auditing and accounting costs
- Social responsibility campaigns
- Research & Development
- Training

The Rand per kilogram costs are calculated taking the above variables into consideration. The contribution of each subscriber to the Plan will be in direct proportion to the weight of tyres and/or casings imported and/or manufactured.

The Waste Tyre Management Fee will be reviewed annually and accordingly notified to all subscribers, and is subject to change depending on actual costs and numbers of tyres manufactured and imported. REDISA will strive at all times to minimise the Fee, whilst still meeting its mandate. REDISA's objective will be to contain the levy amount in real terms to be equal to or less than the initial amount.

Importer's liability will occur at the time of customs clearance, and for local manufacturers at the time of manufacture. Waste Tyre Management Fees must also be paid for scrap tyres produced and not sold by manufacturers. The principle is that <u>all tyres</u> that must be disposed of in South Africa must be subject to payment of the Waste Tyre Management Fee.

The levy liability start date for tyres in bonded store will commence 60 days after the general levy liability start date.

Credits will be awarded for all exports of new tyres.

# **17.2. Standardised Tyre Weights**

Tyre producers must submit at least annually, within 30 days of the effective date and its anniversaries, tables of the nominal weights of their tyres by line item. REDISA will collate the data from all Producers and generate tables of standardised weights by tyre size.

Weights will be calculated based on the average across all Producers' data for each tyre size and type.

Alternative methods of calculation may be developed in consultation with industry should circumstances require it.

## **17.3. Local Manufacturer Rejects**

Local manufacturers have a certain number of reject tyres that they currently pay transporters to collect. Until such time as REDISA is able to collect those tyres through its transporter network the cost of collection of rejects puts local manufacturers at a competitive disadvantage against importers. Local manufacturers will therefore be permitted to claim a rebate of R0.88/kg excluding VAT (to be reviewed annually) against the levy paid for reject tyres until REDISA is able to collect them.

# **18.** Building Awareness

REDISA will actively promote awareness in relation to the management of waste tyres in various advertising media (including national and regional media), in trade monthly magazines and monthly newsletters, and at national and regional meetings and roadshows.

Consumer awareness programs giving detail of the benefits of recycling of waste tyres via tyre dealer outlets nationally will be rolled out. Those benefits include minimising health risks such as mosquito and vermin breeding, reducing the risk of smoke from tyre burning and the associated respiratory ailments.

Programmes and competitions will be run at colleges, schools and learning centres, also within communities, churches and similar organisations, with the aim of instilling in youths and adolescents the environmental conservation message, which is critical for efficient and effective long term waste management.

The parties to the Plan which act as the interface between tyres and the consumer will also actively raise awareness of the management of waste tyres.

# **19.** Social Responsibility

The REDISA Plan has as a primary focus the creation of business and employment opportunities for previously disadvantaged communities.

Specifically, the REDISA Plan will avoid criminalising current waste tyre collectors, who are presently operating outside the law, by assisting them to enter the industry as respected participants. This will be achieved by REDISA's aim of granting loans, training and mentorship to entrepreneurs in order to develop them as independent businessmen.

The previously disadvantaged, in terms of government Black Economic Empowerment and other policies, will be favoured for the business opportunities created by the Plan whilst not precluding any other person from participating either individually or in partnership with previously disadvantaged people.

The role of Veterans Organisations, women's and youth leagues in identifying likely candidates from their own ranks and that of other civic groupings is crucial.

REDISA believes these actions will generate many profitable downstream industries such as moulded rubber products, chemicals and oil refinement, and service export markets with these derived products.

By attaching a Rand value to waste tyres when delivered to a depot or Processor, REDISA will encourage people to refrain from burning tyres and rather to deliver to depots for a cash value.

There will be provision in the budget for annual contributions to social upliftment projects.

# 20. Integration of Previously Disadvantaged Individuals

The Plan centres on waste reduction by way of creating opportunity for the previously disadvantaged.

The accreditation cards mentioned already have taken into account BEE credentials and job opportunities for the previously disadvantaged. All relevant role players will be compliant and be tasked with identifying and mentoring black entrepreneurs in managing their businesses.

Transportation from Depots to Processors will be done via the owner-driver concept.

Processors will also be BEE compliant.

The Plan actively promotes and will enforce this as a priority concern.

# 21. Job Creation

Attaching a value per kilogram to waste tyre transportation provides small entrepreneurs and the previously disadvantaged an opportunity to earn income by delivering tyres to the 150 depots throughout South Africa. REDISA aims to specifically identify these smaller operators, provide the relevant training and create business opportunities by awarding them specific collection points, thereby ensuring sustainability.

The regulation of the transporters will enable them to have a stable base income to which they can add – in a regulated manner – additional income streams, such as resale of part-used tyres that still have working life.

Additional income opportunities will be created by the need for transportation of Processors' output products (which will be paid for by the Processors or their customers), and the opportunities that the transporters will have of using their return trips profitably instead of travelling empty.

The training and education programme is essential to assist the transporters in exploiting these additional opportunities. Training for transporters is a compulsory component of the REDISA Plan.

| Description               | Number of opportunities | Jobs created |
|---------------------------|-------------------------|--------------|
| 150 depots                | 150                     | 1800         |
| Shredding businesses      | 3                       | 30           |
| Potential of 50 different |                         |              |
| recycling operations      | 50                      | 1000         |
| Small transporters        | 4000                    | 7000         |
| <b>REDISA Head office</b> |                         | 200          |
| Total                     |                         | 10'030       |

The Plan can sustainably create up to 10 000 jobs, as described below:

Notes:

| 150 depots are set up                              |       |
|--|-------|
| Each depot conservatively averages 40 transporters |       |
| This equates to 6000 owner drivers                 |       |
| Add at least one assistant per owner driver =      | 12000 |
| Approximately 12 staff per depot =                 | 1800  |
| Management Company employees=                      | 200   |
| 50 Processors employing at least 20 staff =        | 1000  |

This conservatively totals 15000 jobs, from which subtract the currently employed, estimated at approximately 5000, effectively creating 10000 new jobs. Every collector, Processor and depot will be registered with REDISA. Part of their reporting will request employee data to verify the projections on jobs created.

# 21.1. Timeframes

The estimated rate of job creation is:

|             | ea.  | YEAR 1 |     | YEAR 2 |          | YEAR 3 |          | YEAR 4   |          | YEAR 5   |      | TOTAL    |           |
|-------------|------|--------|-----|--------|----------|--------|----------|----------|----------|----------|------|----------|-----------|
| Head office | 200  | 1      | 200 |        | 1        | 1      |          |          |          |          | T    | 1        | 200       |
| Depot       | 12   | 3      | 36  | 27     | 324      | 40     | 480      | 40       | 480      | 40       | 480  | 150      | 1800      |
| Processor   | 20   | 2      | 40  | 8      | 160      | 12     | 240      | 14       | 280      | 14       | 280  | 50       | 1000      |
| Transporter | 1.75 | 300    | 525 | 600    | 105<br>0 | 800    | 140<br>0 | 120<br>0 | 210<br>0 | 110<br>0 | 1925 | 400<br>0 | 7000      |
| Total Jobs  |      |        | 801 |        | 153<br>4 |        | 212<br>0 |          | 286<br>0 | 1        | 2685 | 1        | 1000<br>0 |

Note that the above figures exclude any estimate of numbers of informal collectors.

# 22. Training

Mandatory training at no cost to trainees will be provided on a quarterly basis to all drivers and their crews, accounting and management staff at depots, tyre shops and all other contractual role players. Undergoing regular training will be a necessary component of maintaining accreditation.

This is an on-going endeavour in the spirit of educating the previously disadvantaged. 1% (one per-cent) of all monies collected will be allocated to training.

# 23. Consumer Education and Industry Training

It is clear to the relevant role players that the consumer is the owner of the largest quantity of waste tyres in South Africa.

The marketing campaign(s) will amongst other responsibilities promote via the various communication media the advantages of recycling, keeping one's environment clean, and effective tyre management tips to extend tyre life. 2% (two per cent) of all funds collected will be allocated to market the Plan.

The Plan provides for on-going monitoring of job creation in the various processes.

The fund will establish a full-time training committee to deal with training and skills development matters throughout the cycle of waste tyre management from the collector to the drivers to the small business owner to the depots to the Processors.

The approach of REDISA is to develop independent businessmen that will compete in local markets and international export markets.

Supporting the creation of well-rounded astute businessmen and women is the cornerstone of a successful economy. The Plan will contribute to this goal.

Continued mentorship by relevant role players will take place to further reinforce the development of successful entrepreneurs.

# 24. Auditing and Reporting

Auditing will be done via the NCCS which will keep accurate records on logistics, support, and accounting of all waste tyre movement throughout the process. These reports, generated at various frequencies, will provide information for the Management Company to audit at any time. The management of the Plan will be REDISA's responsibility.

The NCCS will identify collection points and legacy sites by way of GPS locations and provide decision support systems to optimise routes and waste tyre site developments. This system will identify anomalies and variances that will trigger investigations as and when needed.

The Plan will be audited in terms of all existing legal and IFRS requirements, and will include:

- 24.1 compliance to the approved IIWTMP and conditions of approval;
- 24.2 compliance with waste legislation and the Waste Tyre Regulations;

24.3 management of legacy stockpiles and reduction of the carbon footprint of waste tyres;

- 24.4 financial reports;
- 24.5 the extent of the independence of the REDISA board.

All movement of waste tyres, from import and/or manufacture of new tyres and casings to final recycling or other disposal, will be documented and mass-flow balanced and reconciled with levies paid to REDISA:

mass of tyres delivered to the depots; mass of tyres processed in the depots; mass of tyres delivered to Processors; mass of tyres processed by Processors; mass of finished products.

This ensures uniformity, ease of reporting and transparency.

REDISA will further provide on an annual basis:

24.6 national aggregated number and tons of tyres put onto the market;

24.7 national aggregated figures for the number and tons of tyres collected monthly;

24.8 national aggregated number and tons of tyres used for recycling (also as % of total);

24.9 national aggregated number and tons of tyres used for energy recovery;

24.10 new jobs created in the transport sector due to the implementation of the IIWTMP;

24.11 new jobs created in the processing sector due to the implementation of the IIWTMP; 24.12 number of new businesses established;

24.13 spend on Research & Development;

24.14 spend on training.

The operations of all Processors will also, at their cost, be audited in terms of the Companies Act and other applicable legislation.

The reporting on the operations of the Management Company will be controlled by REDISA.

Expenses will be audited by way of rand/kilogram as per the example illustration in the following section.

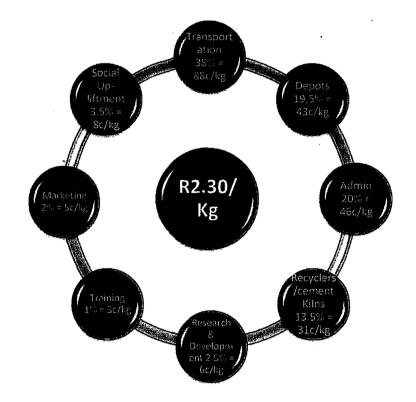
# 25. Initial Cost Allocations

Initial cost allocations will be allocated as per diagram below. It should be noted that the cost breakdown supplied in the figure below is a forecast average for the project as a whole, and specifically that the amount allocated to Processors/Cement kilns will vary on a case-by-case basis.

Head Office functions covered by the administration component of the fee will include:

- 25.1 general management, administration, accounts, IT, HR;
- 25.2 project management to assist with business plans and project management for depot and Processor establishment;
- 25.3 legal and contracts;
- 25.4 marketing to drive public awareness;
- 25.5 environment specialists to assist and advise with EIAs and compliance required for depots and Processors;
- 25.6 training to develop "train the trainers" programmes and manage outsourced training for transporters;
- 25.7 Processor division to work with Processors and would-be Processors;
- 25.8 depot division to work with and manage REDISA's interaction with depots;
- 25.9 transporter division to work with, support and manage the transporters;

- 25.10 compliance team monitor compliance and identify areas where special training and education is needed, and enforcement if needed;
- 25.11 stockpile abatement division team focused on managing stockpile abatement ;
- 25.12 R&D division to work with and co-ordinate efforts between outside organisations and tertiary education institutions on the development of recycling technologies.



## 25.1. Annual Review

The Waste Tyre Management Fee will be reviewed annually based on operational experience and in consultation with relevant consumer bodies.

An annual report will be published and made available to all stakeholders and the public in general detailing progress of the Plan and cost breakdowns on a per-kilogram basis.

# 26. External Auditors

REDISA will appoint external auditors for a period of 5 years.

# 26.1. Items to be audited

## 26.1.1. Subscribers

A detailed audit programme will be developed in consultation with industry to address the following:

- 26.1.1.1 ensuring that all manufacturers and importers in South Africa are paying the same Waste Tyre Management Fee and are part of the Plan;
- 26.1.1.2 all documentation supporting the import and manufacture of tyres;
- 26.1.1.3 invoicing and payment of Waste Tyre Management Fees.

## 26.1.2. Transporters

A detailed reconciliation of payments to transporters against collections and deliveries will be performed, covering inter alia:

- 26.1.2.1 all documentation pertaining to the collection and delivery of waste tyres or processed waste tyres;
- 26.1.2.2 all documentation pertaining to the invoicing for the transportation and the payment.

## 26.1.3. Waste Tyre Depots

A detailed audit plan will be formulated in compliance with the Waste Tyre Regulations to audit amongst other points the following:

- 26.1.3.1 all documentation supporting waste tyres received, waste tyres sent out;
- 26.1.3.2 processes are in accordance with the REDISA contract;
- 26.1.3.3 waste tyre inventory estimations are correct;
- 26.1.3.4 the appropriate insurance policies are in place and the rules of the policy being adhered to;
- 26.1.3.5 the depot operates with all permits and licences.

# 26.1.4. Waste Tyre Processors

A detailed audit plan will be formulated in compliance with the Waste Tyre Regulations to audit amongst other points the following:

- 26.1.4.1 all waste tyres received;
- 26.1.4.2 products produced;
- 26.1.4.3 processors are in accordance with REDISA contract;
- 26.1.4.4 waste tyre processors inventory estimations are correct;
- 26.1.4.5 processor operates with all permits and licences.

## 26.1.5. External Management Company

A detailed audit plan will be formulated in compliance with the Waste Tyre Regulations to audit amongst other points the following:

- 26.1.5.1 managers of REDISA within accepted accounting standards;
- 26.1.5.2 the compliance with the management contract;
- 26.1.5.3 the handling of all information confidentially;
- 26.1.5.4 the supply of monthly management accounts;
- 26.1.5.5 the supply of annual reports to the Department of Environmental Affairs.

## 26.1.6. Nationalised Centralised Computer System

A detailed audit plan will be formulated in compliance with the Waste Tyre Regulations to audit amongst other points the following:

- 26.1.6.1 Evaluate processes 26.1.6.2 Audit information 26.1.6.3 Audit input procedures
- 26.1.6.4 Audit security

## 26.1.7. Adjudication Committee

The external auditing company will audit the governance structures and compliance to good corporate governance.

The adjudication committee will ensure that preferences are given to the previously disadvantaged and localised businesses.

# 27. Non Compliance by Contracted Party

Should the external auditing company find any person or business to be in breach of his or its obligation to REDISA or to the DEA, it will bring these findings to the attention of the REDISA management as well as the party in breach within 48 hours. After being informed by the auditors or Management Company of any breach, REDISA will give the offending party 14 days written notice to rectify the breach. Should the offending party fail to rectify the breach within the time stipulated, then REDISA will inform the Minister of the DEA and will give the party in breach 30 days' notice of its intention to cancel any contract(s). In addition REDISA may find other remedies available to it by law.

# 28. External Management Company

REDISA will outsource the management of its operations. This method of operation was chosen to ensure confidentiality through the separation of functions. It is of vital importance to the competitiveness of the entire industry.

The external management company will be appointed for a period of 5 years. This term is necessary to ensure a high level of skill and continuity.

## 28.1. Responsibilities

The Management Company will:

- 28.1.1 manage REDISA's financial affairs;
- 28.1.2 monitor compliance;
- 28.1.3 supply consolidated management accounts and reporting;
- 28.1.4 manage all REDISA's operational issues;
- 28.1.5 implement and manage the National Centralised Computer System;
- 28.1.6 report to DEAT on an annual basis on all aspects of the Plan.

## 28.2. Compliance Monitoring

Failure to abide by the terms of the obligations of a subscriber towards REDISA will result in non-compliance, and this will include but not be limited to, inter alia, in the circumstances set out below:

- failure to provide monthly declarations within 2 working days of due date;
- failure to declare fully all tyres manufactured, imported or exported;
- failure to pay Waste Tyre Management Fees by due date.

The Management Company will report any actual or suspected non-compliance to REDISA, within 2 working days of such event, whereupon REDISA will:

28.2.1 Instruct the Management Company to resolve the matter telephonically with the subscriber; or

- 28.2.2 Instruct the external auditors to arrange an audit of the subscriber. Audit costs will be paid by the subscriber if non-compliance is established; or
- 28.2.3 If non-compliance is established and not rectified within 14 days of written notice being served on the subscriber, give the subscriber 60 days' notice of de-registration and report the non-compliance to the DEA and SARS. SARS lists any requirements for import of items under specific tariff headings. REDISA will work with SARS to have a certificate of compliance issued by REDISA as a requirement for import clearance in the relevant tariff headings.

# **29. Best Environmental Practice**

The Plan will follow the dictates of Environmental Management legislation which details the accepted and approved practices, and specifically NEMA. REDISA will be working very closely with environmental bodies and DEA to ensure consistent and on-going improvement to the waste tyre industry.

The Research and Development department, under the auspices of REDISA, will also be active in providing other processes applicable to our environment. REDISA will appoint a panel of experts whose sole responsibility will be to supervise and control activity within Research and Development.

REDISA will support the relevant authorities in their quest to ensure that the legal practices are followed.

In order to ensure compliance with best environmental practises in respect of waste tyre management in compliance with Waste Tyre Regulation 9(q), REDISA will constantly monitor the performance of all parties involved in the waste tyre management activities to ensure that any sub-standard environmental practices are identified and addressed.

# **30.** Historical Waste Tyre Stockpiles

Historical stockpiles are stockpiles that have been registered and are known. Stockpile owners must subscribe to a plan or make direct arrangements with a waste tyre processor. REDISA will have no obligation to transport tyres for, or in any way subsidise, agreements made directly between stockpile owners and waste tyre processors.

Stockpile owners who subscribe to the REDISA plan must provide information as detailed below.

All historical waste tyre stockpiles will be reported on and identified by:

- 30.1 categories of waste tyres;
- 30.2 details of the stockpile owner;
- 30.3 registration number with DEA if applicable;
- 30.4 physical address of the stockpile/ GPS Co-ordinates;
- 30.5 estimation of the number of tyres per stockpile.

This report will be produced annually.

If ownership cannot be established those historical waste tyre stockpiles details still will be captured.

All historical waste tyre stockpiles will be registered with the DEA.



Existing stockpile owners (in terms of part 3, section 8 (3) of the Waste Tyre Regulation) are responsible for the preparation and funding of abatement plans, and must comply with all aspects of the legislation and the Plan. Their waste tyre responsibility still exists and through negotiation with REDISA, REDISA will provide these stockpile owners with environmentally friendly options to be used by them to deal with such tyres.

Transfers from privately owned historical waste tyre stockpiles will not qualify for any payment by REDISA.

# 31. Legacy Waste Tyres and Historical Waste Tyres

Legacy waste tyres refers to tyres that are currently usable tyres, generally on vehicles, that will become waste tyres. No Waste Tyre Management Fee has been levied for these tyres, but they will need to be addressed at some time in the future.

Historical waste tyres are tyres that are already waste tyres but are not part of a registered stockpile.

REDISA will as soon as it starts collecting waste tyres also collect legacy waste tyres and historical waste tyres. It will be impossible to differentiate between tyres which were imported or manufactured and paid for after 'the Date' and 'Legacy Waste Tyres' and 'Historical Waste Tyres'.

REDISA will control this process through its NCCS. Transporters will only be paid for tyres which they have been authorised to collect. Depots and Processors will not be allowed to accept tyres which have not been specifically authorised by REDISA through the NCCS.

# 32. The Abatement of Historical Waste Tyre Stockpiles

REDISA will concentrate first on avoiding that new waste tyre stock piles are being created and will deal with legacy waste tyres and historical waste tyres as soon as it starts collecting waste tyres.

Funding for addressing historical waste will come from two sources:

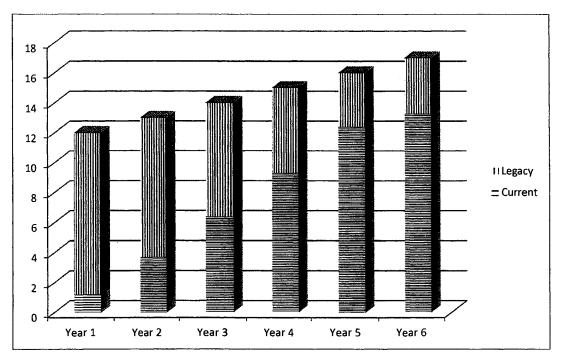
1. Not all tyres sold will ever be returned for recycling. A certain natural attrition rate can be expected, estimated to be about 10%.

2. Tyres (passenger and truck) lose approximately 15% of their mass by the time they become waste tyres.

These two factors mean that approximately 25% of the mass of tyres for which levies are collected will never be processed, yielding an excess which will be applied to funding the processing of historical and legacy tyres.

The first 2 years of the Plan will be spent to build capacity with waste tyre processes. As soon as sufficient capacity is available, and in any case within 12 months of the Date, REDISA will allocate a portion of this capacity towards the abatement of historical waste tyre stockpiles.

The illustration below shows a reducing factor graph illustrating how REDISA envisages getting rid of the legacy tyres and stockpiles within this Plan.



Total Number of tyres paid for in five years is 87 Million Tyres Actual tyres collected and paid for is 46.3 Million. Total paid for still in circulation is 40.7 Million Tyres

### 33. General Waste

REDISA will not be responsible for the collection or disposal of General Waste or tyre remnants. Where REDISA at its discretion does collect or dispose of general waste or tyre remnants, it may levy a charge.

### 34. Tyre Dealer Responsibility

In terms of Waste Tyre Regulation 2008, part 3, section 7(3) all tyre dealers must deal with waste tyres as prescribed by the IIWTMP to which the producer of the tyres they deal in has subscribed.

Tyre Dealers dealing in tyres from a Tyre Producer subscribed to the plan (affected Tyre Dealers) are required to complete all relevant information on the NCCS. They can only release waste tyres to registered waste tyre transporters. Specifically, they may not register as waste tyre transporters themselves, though they will be permitted to deliver tyres directly without payment.

Affected Tyre Dealers must register with the Management Company. They must then accordingly display (in their respective reception areas or other areas visible to the public as the case may be) the predetermined Code of Conduct, bearing a registration number and statement of compliance to the process. The Code of Conduct will also provide details of REDISA in the event of disputes or as a point of contact.

Affected Tyre Dealers must release all waste tyres to registered transport contractors only; source or brands of tyres may not limit collection and recycling.

Affected Tyre Dealers must categorise tyres by general type prior to collection and ensure that a supervisor signs the relevant collection notes.

Re-grooved tyres are always waste tyres. They must be mutilated by anybody having them in their possession in accordance with Waste Tyre Regulation 2008, part 3, section 7(2).

Non-Compliance will result in non-collection of waste tyres.

### 35. Confidentiality

All role players' information will remain confidential with regard to contact information, finances, quantities collected and delivered, sizes of tyres and any other competitive information. The external accounting and Management Company appointment will be for a period of 5 years. The Management Company's responsibility and direct reporting line will be to REDISA, and will include the provision of all relevant operating and financial information on a monthly basis.

The mass-based approach to levying the Waste Tyre Management Fee means that information can be rapidly anonymised in the system to minimise the number of people with access to commercially sensitive data.

Access to the sensitive data will be limited and controlled by the National Centralised Computer System in the same manner as companies protect sensitive financial data, with access limited to senior personnel with a need to know. All personnel will sign strict confidentiality agreements as part of their employment contracts.

### 36. Disclaimer

REDISA will not be liable for any consequential, direct or indirect losses and/or damages of whatever nature that might occur to any subscriber, transporter, tyre dealer, waste tyre processor or any other person who has enrolled in the REDISA Plan that arise in connection with the implementation of the REDISA Waste Management Plan.

# 37. Annexure A: Confirmed Subscribers

Tyre producers and others signed up already with the REDISA Plan

| Tyre producers and o                             | theis signed up an ea     | ady with the REDISA Plan  |   |
|--|---------------------------|---|---|
| Michelin Tyre Company<br>South Africa            | N/A                       | Tyre & Retreadable Casing<br>Manufacturer & Importers                               | Bryan Havemann                                |
| Accordian Investments<br>(Pty) Ltd               | Tata                      | Tyre & Retreadable Casing<br>Manufacturers & Importers                              | Larry Da Costa                                |
| Adendorff Machinery Mart                         | N/A                       | Tyre & Retreadable Casing<br>Manufacturers & Importers                              | Narina Harinath                               |
| Alliance Tire Africa (Pty)<br>Ltd                | N/A                       | Tyre & Retreadable Casing<br>Manufacturers & Importers                              | PJ Swart                                      |
| Amalgamated Automobile<br>Distributors (Pty) Ltd | N/A                       | Tyre & Retreadable Casing<br>Manufacturers & Importers                              | Johan Smith                                   |
| Bearcat Tire CC                                  | N/A                       | Tyre & Retreadable Casing<br>Manufacturers & Importers                              | PR Knight                                     |
| Blue Star Tyres CC                               |                           | Tyre & Retreadable Casing<br>Manufacturers & Importers                              | D Wilson                                      |
| Boundless Trade 154 (Pty)                        | N/A                       | Tyre & Retreadable Casing   | Stanley Kleb                                  |
| Ltd  | N/A                       | Manufacturers & Importers   |   |
| Brietta Trading (Pty) Ltd                        | Mitsubishi                | Tyre & Retreadable Casing<br>Manufacturers & Importers                              | Steven Terblans                               |
| Dawhi Import & Export CC                         | Dawhi Rubber<br>Recycling | Tyre & Retreadable Casing<br>Manufacturers & Importers                              | Maggie Wang                                   |
| Dudhia Tyre<br>Manufacturers                     | N/A                       | Tyre & Retreadable Casing<br>Manufacturers & Importers                              | Irshad Dudhia                                 |
| Ebenazer - 53 Projects                           | N/A                       | Tyre & Retreadable Casing<br>Manufacturers & Importers                              | Abednego B<br>Vilane                          |
| Evergold Trading CC                              |                           | Tyre & Retreadable Casing<br>Manufacturers & Importers                              | Zhaoyu Jin                                    |
|  | N/A                       |   |   |
| Hendrick Mashonisa<br>Nuele                      | N/A                       | Tyre & Retreadable Casing<br>Manufacturers & Importers                              | HM Nuele                                      |
| Imperial Daihatsu (Pty) Ltd                      | N/A                       | Tyre & Retreadable Casing<br>Manufacturers & Importers                              | Johan Ackerman                                |
| Jeaneth Prisscah Machi                           | N/A                       | Tyre & Retreadable Casing<br>Manufacturers & Importers                              | Jeaneth Prisscah<br>Machi                     |
| Kia Motors SA                                    | N/A                       | Tyre & Retreadable Casing<br>Manufacturers & Importers                              | Kevin Wise                                    |
| Kinglory Import & Export<br>CC                   | N/A                       | Tyre & Retreadable Casing<br>Manufacturers & Importers                              | Zhaoyu Jin                                    |
| LKM Investments<br>MAN Truck and Bus (SA)        | N/A                       | Tyre & Retreadable Casing<br>Manufacturers & Importers<br>Tyre & Retreadable Casing | Moramorake<br>Franz Lipheko<br>Cheryl Viljoen |
| (Pty) Ltd  | N/A                       | Manufacturers & Importers   |   |
| Mazzy Hlds Limited<br>Mhlaba CC                  | N/A                       | Tyre & Retreadable Casing<br>Manufacturers & Importers<br>Tyre & Retreadable Casing | Buti V Mazibuko<br>Gary Mahlangu              |
| Motomia (Pty) Ltd                                | N/A                       | Manufacturers & Importers<br>Tyre & Retreadable Casing                              | Peter Stansby                                 |
|  | N/A                       | Manufacturers & Importers   |   |
| Natric Motors                                    | N/A                       | Tyre & Retreadable Casing<br>Manufacturers & Importers                              | Imraan Minty                                  |



| Pearl Automotive<br>Petquip CC  | Exclusive<br>N/A | Tyre & Retreadable Casing<br>Manufacturers & Importers<br>Tyre & Retreadable Casing<br>Manufacturers & Importers | Neil Jensen<br>Peter John<br>Naude           |
|---|------------------|--|--|
| Poobalan Ramsamy<br>Chetty<br>SA Tyre Distributors                      | N/A              | Tyre & Retreadable Casing<br>Manufacturers & Importers<br>Tyre & Retreadable Casing<br>Manufacturers & Importers | Collin<br>Tony Carter                        |
| Selby Moropa Phosa<br>Sharman & Campbell (Pty)<br>Ltd                   | N/A              | Tyre & Retreadable Casing<br>Manufacturers & Importers<br>Tyre & Retreadable Casing<br>Manufacturers & Importers | Selby Moropa<br>Phosa<br>Denise Osborne      |
| Soreal Auto Parts   | N/A<br>N/A       | Tyre & Retreadable Casing<br>Manufacturers & Importers   | Tariq  |
| Speddick Industrial Tyres<br>CC<br>Speddick Motorcycle<br>Tyres (SA) CC | N/A              | Tyre & Retreadable Casing<br>Manufacturers & Importers<br>Tyre & Retreadable Casing<br>Manufacturers & Importers | Peter John<br>Naude<br>Brett<br>Chettleburgh |
| Sunday Mashinini  | N/A<br>N/A       | Tyre & Retreadable Casing<br>Manufacturers & Importers   | Sunday Mashinini                             |
| Talent Market   | N/A              | Tyre & Retreadable Casing<br>Manufacturers & Importers   | Harry Mabaso                                 |
| Tonway Tyres (Pty) Ltd  | N/A              | Tyre & Retreadable Casing<br>Manufacturers & Importers   | AR Kalis                                     |
| Traveller Sales &<br>Installations<br>Tubestone (Pty) Ltd               | Tyre Den         | Tyre & Retreadable Casing<br>Manufacturers & Importers<br>Tyre & Retreadable Casing<br>Manufacturers & Importers | DG Keiller<br>Pieter Kruger                  |
| Twin Dragons Automotive<br>(Pty) Ltd                                    | N/A<br>N/A       | Tyre & Retreadable Casing<br>Manufacturers & Importers   | Johan Ackerman                               |
| X-treme Wheelz  | N/A              | Tyre & Retreadable Casing<br>Manufacturers & Importers   | Ricardo January                              |
| Xtreme Rubber Industry<br>CC  | N/A              | Tyre & Retreadable Casing<br>Manufacturers & Importers   | Jay Lu                                       |
| Wilson's Tyres & Truck<br>Parts   |                  | Waste Tyre Processors<br>Tyre Dealers<br>Tyre & Retreadable Casing<br>Manufacturers & Importers                  | James Edward<br>Wilson                       |
| Sipho Samson Mbethe   | N/A              | Tyre Dealers<br>AND<br>Tyre & Retreadable Casing   | Sipho Samson<br>Mbethe                       |
|   | N/A              | Manufacturers & Importers<br>Tyre Dealers<br>AND   |  |
| TTR Distributors  | The Tyre Rack    | Tyre & Retreadable Casing<br>Manufacturers & Importers   | T Seymour                                    |

A further 251 organisations are subscribed as Waste Tyre Processors (148), Tyre Dealers (79), Depots (5), Transporters (5) and unspecified (14).

**Richard's Bay** 

Riversdale

Robertson

Rustenburg

Saint Lucia

Saldanha

Sasolburg

Sebokeng

Secunda

Somerset

Somerset East

Somerset West

Soshanguve

Springbok

Standerton

Stellenbosch

Stutterheim Sutherland

Swellendam

Thabazimbi

Touwsrivier

Tongaat

Tzaneen

Ulundi

Uitenhage

Upington

Vaalwater

Virginia

Vrede

Volksrust

Vryburg

Vryheid

Warden

Welkom

Williston

Witbank

Worcester

Zeerust

Warrenton

White River

Wolmaransstad

Vredenburg

Ventersdorp

Victoria West

Thohoyandou

Soweto

Springs

Strand

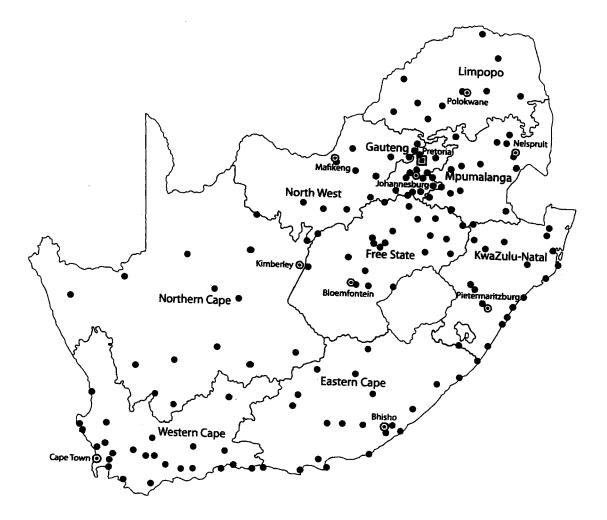
Schweizer-Reneke

Sabie

# 38. Annexure B: Waste Tyre Depots (Provisional)

| 1  | Aliwal North         | 51             | Knysna           | 101 |
|----|----------------------|----------------|------------------|-----|
| 2  | Amanzimtoti          | 52             | Kokstad          | 102 |
| 3  | Atlantis Town Centre | 53             | Kroonstad        | 103 |
| 4  | Balfour              | 54             | Kuruman          | 104 |
| 5  | Barberton            | 55             | Kwadukuza        | 105 |
| 6  | Beaufort West        | 56             | Ladismith        | 106 |
| 7  | Bedford              | 57             | Ladybrand        | 107 |
| 8  | Bela-Bela            | 58             | Lamberts Bay     | 108 |
| 9  | Belfast              | 59             | Leandra          | 109 |
| 10 | Bethal               | 60             | Lephalale        | 110 |
| 11 | Bethlehem            | 61             | Lichtenburg      | 111 |
| 12 | Bloemfontein         | 62             | Lydenburg        | 112 |
| 13 | Botshabelo           | 63             | Mafikeng         | 113 |
| 14 | Bredasdorp           | 64             | Malmesbury       | 114 |
| 15 | Brits                | 65             | Marble Hall      | 115 |
| 16 | Bultfontein          | 66             | Marydale         | 116 |
| 17 | Butterworth          | 67             | Mbombela         | 117 |
| 18 | Caledon              | 68             | Middelburg EC    | 118 |
| 19 | Calvinia             | 69             | Middelburg MP    | 119 |
| 20 | Carletonville        | 70             | Mkuze            | 120 |
| 21 | Carnarvon            | 71             | Modimolle        | 121 |
| 22 | Christiana           | 72             | Mokopane         | 122 |
| 23 | Cleveland            | 73             | Molteno          | 123 |
| 24 | Cutlinan             | 74             | Montagu          | 124 |
| 25 | De Aar               | 75             | Mooi River       | 125 |
| 26 | Dundee               | 76             | Mossel Bay       | 126 |
| 27 | Durban               | 77             | Mthatha          | 127 |
| 28 | East London          | 78             | Musina           | 128 |
| 29 | Ermelo               | 79             | Newcastie        | 129 |
| 30 | Estcourt             | 80             | Odendaalsrus     | 130 |
| 31 | Fort Beaufort        | 81             | Oudtshoorn       | 131 |
| 32 | Frankfort            | 82             | Paari            | 132 |
| 33 | Ga-Rankuwa           | 83             | Phalaborwa       | 133 |
| 34 | George               | 84             | Piet Retief      | 134 |
| 35 | Graaff-Reinet        | 85             | Pietermaritzburg | 135 |
| 36 | Graskop              | 86             | Piketberg        | 136 |
| 37 | Hanover              | 87             | Plettenberg Bay  | 137 |
| 38 | Harrismith           | 88             | Pofadder         | 138 |
| 39 | Heidelberg GP        | 89             | Polokwane        | 139 |
| 40 | Heidelberg WC        | 90             | Port Alfred      | 140 |
| 41 | Heilbron             | 91             | Port Edward      | 141 |
| 42 | Hennenman            | 92             | Port Elizabeth   | 142 |
| 43 | Hermanus             | 93             | Port Saint Johns | 143 |
| 44 | Hluhluwe             | 94             | Port Shepstone   | 144 |
| 45 | Howick               | 95             | Postmasburg      | 145 |
| 46 | Jeffreys Bay         | 96             | Potchefstroom    | 146 |
| 47 | Jozini               | 97             | Pretoria         | 147 |
| 48 | Kimberley            | 98             | Prieska          | 148 |
| 49 | King Williams Town   | 9 <del>9</del> | Queenstown       | 149 |
| 50 | Klerksdorp           | <b>10</b> 0    | Reitz            | 150 |
|    |                      |                |                  |     |

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## 39. Annexure C: Roll-Out Plan

#### Roll-out plan for the 150 depots and 200 new businesses to be created

REDISA has supplied Black business organisations with a provisional list of 150 locations of depots to be established throughout South Africa. Their members, who are usually influential business people in their community, will then identify appropriate business partners within the Plan. This roll-out will be performed in cooperation with those organisations and all our other partners, to ensure that all the different aspects of the Plan will be reviewed by the correct people.

The primary sections of the Plan are as follows:

|    | Description                | number of opportunities | Jobs created |
|----|----------------------------|-------------------------|--------------|
|    | 150 doc etc                | 150                     | 1900         |
| 1. | 150 depots                 | 150                     | 1800         |
| 2. | Shredding businesses       | 3                       | 30           |
| 3. | Potential of 200 different |                         |              |
|    | recycling operations       | 50                      | 1000         |
| 4. | Small transporters         | 4000                    | 7000         |
| 5. | REDISA Head office         |                         | 100          |
|    | Total                      |                         | 9.930        |

We are in the process of creating a distribution pack, which will be distributed via Black business organisations.

Obviously REDISA will not be able to deal with all of these opportunities at the same time and will seek the assistance of existing government organisations to create business plans and help all these entrepreneurs.

We estimate that this project will be completed five years after the Plan's inception date.

## 40. Annexure D: Calculation of Initial Tyre Levy

The REDISA project will be unique and unprecedented, but a baseline for setting a levy had to be established by some means. We chose to do this by basing the levy calculation on the "line of least resistance", which would be to send all tyres to the cement kilns.

The current cost of transporting tyres locally within Gauteng is R6/tyre (passenger tyre), or approximately R600/ton of rubber. A national plan, covering the whole country and therefore with longer distances involved, will incur higher transport costs on average: we took R800/ton as a base.

We then arrive at the following costs (using passenger tyres as a case in point, approximately 100 per ton):

|                              | Per ton    | Per tyre |
|------------------------------|------------|----------|
| Average for longer distances | R 800.00   | R 8.00   |
| Allowance for depot handling | R 200.00   | R 2.00   |
| Cement kiln disposal         | R 900.00   | R 9.00   |
| Admin & overheads            | R 380.00   | 20%      |
| Total                        | R 2 280.00 |          |

In general, a cement kiln would also be a depot, resulting in a total cost (subsidy paid to the cement kiln) of R1100/ton. This is in line with the figures from the cement industry.

The calculation above resulted in a baseline working figure of R2.30/kg (excluding VAT).

The estimate for administrative and overhead costs could be reduced if the emphasis in the REDISA Plan on socio-economic objectives were removed, but as can be seen it would not make a significant difference to the total cost. On the other hand, scaling back the socio-economic goals would impoverish the scheme significantly.

| 41. Annexure E: Anecleu Tarin Coues |             |                     |  |  |  |
|-------------------------------------|-------------|---------------------|--|--|--|
|                                     | Tariff item | Sub-heading         |  |  |  |
| Tractors                            | 87.01       | 8701.10             | pedestrian controlled tractors         |  |  |
|                                     |             | 8701.20             | road tractors for semi-trailers        |  |  |
|                                     |             | 8701.20.10          | mass<=1600kg                           |  |  |
|                                     |             | 8701.20.20          | mass>1600kg                            |  |  |
|                                     |             | 8701.30             | track-laying tractors                  |  |  |
|                                     |             | 8701.90             | other                                  |  |  |
|                                     | *           | 8701.90.10          | 2-wheeled tractors >2000cc             |  |  |
|                                     |             | 8701.90.90          | other                                  |  |  |
| Vehicies 10+ persons                | 87.02       | 8702.10             | compression ignition                   |  |  |
|                                     |             | 8702.10.10          |  |  |  |
|                                     | A           | 8702.10.81          |  |  |  |
|                                     |             | 8702.10.85          |  |  |  |
|                                     |             | 8702.10.87          |  |  |  |
|                                     |             | 8702.10.90          |  |  |  |
|                                     |             | 8702.90             | other                                  |  |  |
|                                     |             | 8702.90.81          |  |  |  |
|                                     |             | 8702.90.85          |  |  |  |
|                                     |             | 8702.90.87          |  |  |  |
|                                     |             | 8702.90.90          | · ·                                    |  |  |
| Cars                                | 87.03       | 8703.10             | snow, golf cars, etc                   |  |  |
|                                     |             | 8703.2              | other, spark-ignition                  |  |  |
|                                     |             | 8703.21             | <1000cc                                |  |  |
|                                     |             | 8703.2 <b>1</b> .23 | open frame, <=250cc,<=250kg            |  |  |
|                                     |             | 8703.21.25          | hearses                                |  |  |
|                                     |             | 8703.21.27          | ambulances                             |  |  |
|                                     |             | 8703.21.60          | with handlebars and hand controls      |  |  |
|                                     |             | 8703.21.70          | 6/8 wheel, chain driven, gearbox, diff |  |  |
|                                     |             | 8703.21.90          | other                                  |  |  |
|                                     |             | 8703.22             | >1000cc & <=1500cc                     |  |  |
|                                     |             | 8703.22.25          | hearses                                |  |  |
|                                     |             | 8703.22.27          | ambulances                             |  |  |
|                                     |             | 8703.22.90          | other                                  |  |  |
|                                     |             | 8703.23             | >1500cc & <= 3000cc                    |  |  |
|                                     |             | 8703.23.25          | hearses                                |  |  |
|                                     |             | 8703.23.27          | ambulances                             |  |  |
|                                     |             | 8703.23.90          | other                                  |  |  |
|                                     |             | 8703.24             | >3000cc                                |  |  |
|                                     |             | 8703.24.25          | hearses                                |  |  |
|                                     |             | 8703.24.27          | ambulances                             |  |  |
|                                     |             | 8703.24.90          | other                                  |  |  |
|                                     |             | 8703.3              | diesel                                 |  |  |
|                                     |             | 8703.31             | <=1500cc                               |  |  |
|                                     |             | 8703.31.25          | hearses                                |  |  |
|                                     |             |                     |  |  |  |

# 41. Annexure E: Affected Tariff Codes

**Goods vehicles** 

| 8703.31.27 | ambulances   |
|------------|--|
| 8703.31.70 | <-600kg (excl. hearses)  |
| 8703.31.80 | 6/8 wheel, chain driven, gearbox, diff, <=1000c                    |
| 8703.31.90 | other  |
| 8703.32    | >1500cc & <=2500cc   |
| 8703.32.25 | hearses  |
| 8703.32.27 | ambulances   |
| 8703.32.90 | other  |
| 8703.33    | >2500cc  |
| 8703.33.25 | hearses  |
| 8703.33.27 | ambulances   |
| 8703.33.90 | other  |
| 8703.90    | other  |
| 8703.90.25 | hearses  |
| 8703.90.27 | ambulances   |
| 8703.90.90 | other  |
| 8704.10    | off-road dumpers   |
| 8704.10.25 | GVM<=50t   |
| 8704.10.90 | other  |
| 8704.2     | other, diesel  |
| 8704.21    | GVM<=5t  |
| 8704.21.10 | shutle cars, mines   |
| 8704.21.40 | off-road logging   |
| 8704.21.70 | other <=600kg  |
| 8704.21.81 | other, double-cab, GVM<=3500kg                                     |
| 8704.21.83 | other, GVM<3500kg  |
| 8704.21.90 | other  |
| 8704.22    | GVM>5t & <=20t   |
| 8704.22.10 | shutle cars, mines   |
| 8704.22.20 | off-road logging   |
| 8704.22.90 | other  |
| 8704.23    | GVM>20t  |
| 8704.23.10 | shutle cars, mines   |
| 8704.23.20 | off-road logging   |
| 8704.23.90 | other  |
| 8704.3     | other, spark-ignition  |
| 8704.31    | GVM<-3t  |
| 8704.31.30 | off-road logging<br>3-wheel motorcyle type < 550cc, differential & |
| 8704.31.50 | reverse  |
| 8704.31.70 | other excl30 & .50, <=600kg  |
| 8704.31.81 | other, double-cab, GVM<=3500kg                                     |
| 8704.31.83 | other, GVM<3500kg  |
| 8704.31.90 | other  |
| 8704.32    | GVM>5t   |
|            |  |

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|                                     |       | 8704.32.10 | off-road logging                    |
|-------------------------------------|-------|------------|-------------------------------------|
|                                     |       | 8704.32.90 | other                               |
|                                     |       | 8704.90    | other                               |
|                                     |       | 8704.90.05 | golf carts, pedestrian type         |
|                                     |       | 8704.90.30 | off-road logging                    |
|                                     |       | 8704.90.81 | other, double-cab, GVM<=3500kg      |
|                                     |       | 8704.90.83 | other, GVM<3500kg                   |
|                                     |       | 8704.90.90 | other                               |
| Special purpose                     | 87.05 | 8705.10    | crane lorries                       |
|                                     |       | 8705.20    | mobile drilling derricks            |
|                                     |       | 8705.30    | fire fighting vehicles              |
|                                     |       | 8705.40    | concrete mixer lorries              |
|                                     |       | 8705.90    | other                               |
| Chassis for vehicles 87.01 to 87.05 | 87.06 | 8706.00.05 | <=1600kg or GVM<=3500kg for 8704.10 |
|                                     |       | 8706.00.15 | other <=1600kg or GVM<=3500kg       |
|                                     |       | 8706.00.20 | other                               |
| Works trucks, tractors              | 87.09 | 8709.1     | vehicles                            |
|                                     |       | 8709.11    | electrical                          |
|                                     |       | 8709.19    | other                               |
| Tanks & other armoured fighting     |       |            |                                     |
| vehicles                            | 87.10 | 8710.00    |                                     |
| Motorcycles                         | 87.11 | 8711.10    | <=50cc                              |
|                                     |       | 8711.20    | >50cc & <=250cc                     |
|                                     |       | 8711.20.10 | <200cc                              |
|                                     |       | 8711.20.90 | other                               |
|                                     |       | 8711.30    | >250cc & <=500cc                    |
|                                     |       | 8711.40    | >500cc & <=800cc                    |
|                                     |       | 8711.50    | >800cc                              |
|                                     |       | 8711.90    | other                               |
|                                     |       | 8711.90.10 | sidecars                            |
|                                     |       | 8711.90.20 | other >-200cc & <800cc              |
|                                     |       | 8711.90.30 | other >800cc                        |
|                                     |       | 8711.90.90 | other                               |
| Balloons, gliders non-powered       |       |            |                                     |
| aircraft                            | 88.01 | 8801.00    |                                     |
| Other aircraft                      | 88.02 | 8802.1     | helicopters                         |
|                                     |       | 8802.11    | <=2000kg                            |
|                                     |       | 8802.12    | >2000kg                             |
|                                     |       | 8802.20    | aircraft <=2000kg                   |
|                                     |       | 8802.30    | aircraft >2000kg & <=15000kg        |
|                                     |       | 8802.40    | aircraft>15000kg                    |
| Parts of 88.01 & 88.02              | 88.03 | 8803.20    | undercarriages or parts thereof     |
| New Pneumatic Tyres, of rubber      | 40.11 | 4011.10    | motor cars                          |
|                                     |       | 4011.20    | buses & lorries                     |
|                                     |       | 4011.20.15 | load index <=121                    |

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|                                      |       |       | 4011.20.25  | load index>121                                  |
|--------------------------------------|-------|-------|-------------|---|
|                                      |       |       | 4011.30     | aircraft  |
|                                      |       |       | 4011.40     | motorcycles                                     |
|                                      |       |       | 4011.50     | bicycles  |
|                                      |       |       | 4011.6      | herringbone or similar tread                    |
|                                      |       |       | 4011.61     | agricultural or forestry                        |
|                                      |       |       | 4011.61.10  | rim<91cm  |
|                                      |       |       | 4011.61.20  | rim >= 91cm                                     |
|                                      |       |       | 4011.62     | construction or industrial handling rim <= 61cm |
|                                      |       |       | 4011.63     | construction or industrial handling rim > 61cm  |
|                                      |       |       | 4011.63.10  | rim<91cm  |
|                                      |       |       | 4011.63.20  | rim>=91cm                                       |
|                                      |       |       | 4011.69     | other   |
|                                      |       |       | 4011.69.10  | rim<91cm  |
|                                      |       |       | 4011.639.20 | rim>=91cm                                       |
|                                      |       |       | 4011.9      | other   |
| Retreaded or used pneumatic;         |       |       |             |   |
| solid or cushion, tyre treads & tyre |       |       |             |   |
| flaps                                |       |       | 4011.92     | agricultural or forestry                        |
|                                      |       |       | 4011.92.10  | rim<91cm  |
|                                      |       |       | 4011.92.20  | rim>=91cm                                       |
|                                      |       |       | 4011.93     | construction or industrial handling rim<=61cm   |
|                                      |       |       | 4011.94     | construction or industrial handling rim>61cm    |
|                                      |       |       | 4011.94.10  | rim<91cm  |
|                                      |       |       | 4011.94.20  | rim>=91cm                                       |
|                                      |       |       | 4011.99     | other   |
|                                      |       |       | 4011.99.10  | rim<91cm, excluding wheelchairs                 |
|                                      |       |       | 4011.99.90  | other   |
|                                      | 40.12 |       | 4012.1      | retreaded                                       |
|                                      |       |       | 4012.11     | motor cars                                      |
|                                      |       |       | 4012.12     | buses & lorries                                 |
|                                      |       |       | 4012.13     | aircraft  |
|                                      |       |       | 4012.19     | other   |
|                                      |       |       | 4012.20     | used pneumatic                                  |
|                                      |       |       | 4012.20.10  | motor cars                                      |
|                                      |       |       | 4012.20.20  | buses & lorries                                 |
|                                      |       |       | 4012.20.90  | other   |
|                                      |       | 00.01 | 4012.90     | other   |
| Original equipment components        |       | 98.01 |             |   |
|                                      |       |       |             |   |