

# Government Gazette Staatskoerant

REPUBLIC OF SOUTH AFRICA  
REPUBLIEK VAN SUID-AFRIKA

Vol. 557

Pretoria, 28 November 2011

**No. 34796**

**IMPORTANT NOTICE**

The Government Printing Works will not be held responsible for faxed documents not received due to errors on the fax machine or faxes received which are unclear or incomplete. Please be advised that an "OK" slip, received from a fax machine, will not be accepted as proof that documents were received by the GPW for printing. If documents are faxed to the GPW it will be the sender's responsibility to phone and confirm that the documents were received in good order.

Furthermore the Government Printing Works will also not be held responsible for cancellations and amendments which have not been done on original documents received from clients.

---

**CONTENTS • INHOUD***No.**Page  
No.      Gazette  
            No.***GOVERNMENT NOTICE****Environmental Affairs, Department of***Government Notice*

- |     |  |   |       |
|-----|--|---|-------|
| 983 | National Environmental Management: Waste Act (59/2008): Notice of approval of an Integrated Industry Waste Tyre Management Plan for the Recycling and Economic Development Initiative of South Africa (REDISA) ..... | 3 | 34796 |
|-----|--|---|-------|
-

---

## GOVERNMENT NOTICE

---

### DEPARTMENT OF ENVIRONMENTAL AFFAIRS

No. 983

28 November 2011

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

#### NOTICE OF APPROVAL OF AN INTEGRATED INDUSTRY WASTE TYRE MANAGEMENT PLAN FOR THE RECYCLING AND ECONOMIC DEVELOPMENT INITIATIVE OF SOUTH AFRICA (REDISA)

I, Bomo Edith Edna Molewa, Minister of Water and Environmental Affairs, hereby give notice in terms of section 32(6) of the National Environmental Management Act, 2008 (Act No. 59 of 2008) that the Integrated Industry Waste Management Plan (IIWMP) from the Recycling Economic Development Initiative of South Africa (REDISA) has been approved.

The implementation of the plan shall take effect on 1 December 2011 and shall apply uniformly in all provinces of the Republic of South Africa binding upon producers, transporters, dealers and processors of tyres.

**BOMO EDITH EDNA MOLEWA****MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS**



# REDISA

RECYCLING AND ECONOMIC DEVELOPMENT  
INITIATIVE OF SOUTH AFRICA

REDISA NPC Reg. No. 2010/022733/08

## 1. Contents

2. Introduction.....	5
2.1. Motivation for acceptance of the REDISA Plan .....	5
3. DEFINITIONS.....	10
4. Subscribers to the Plan.....	13
4.1. Consultation .....	13
5. Projected volumes.....	13
6. The Waste Tyre Hierarchy .....	14
6.1. Avoid.....	14
6.2. Re-Use .....	14
6.3. Recycle.....	15
6.4. Waste Tyre Hierarchy Summary.....	15
7. Adjudication Process .....	16
8. Identification of Waste Tyre Processors .....	17
8.1. Contract Award Process .....	17
8.2. Appointments.....	17
8.3. Declarations.....	17
8.4. Payments.....	18
9. Registration of Tyre Transporters .....	18
9.1. Contract Award Process .....	18
9.2. Appointment .....	19
9.3. Review Process.....	19
9.4. Non-Compliance by Transporter .....	19
9.5. Declarations.....	19
9.6. Duties of Tyre Transporters.....	19
9.7. Payments.....	20
10. Unregistered Tyre Transporters .....	20
11. Waste Storage Sites.....	20
11.1. Tender Process for Waste Storage Sites .....	21
11.2. Appointment .....	21
11.3. Non-Compliance .....	21
12. Industry Standards .....	22

13.	ACCREDITATION CARDS.....	22
a.	Waste Transporter Accreditation card .....	22
b.	Waste Tyre Storage Site Accreditation Card .....	22
c.	Waste Processor Accreditation Card .....	23
14.	Recording of Waste Tyre Processing .....	23
15.	Implementation Target Dates and Timeframe.....	25
16.	Estimated Costs .....	25
17.	WASTE TYRE MANAGEMENT FEES .....	26
a.	Payments .....	26
18.	Building Awareness .....	27
19.	Social Responsibility .....	27
20.	Integration of Previously Disadvantaged Individuals.....	27
21.	Job Creation.....	28
21.1.	Timeframes.....	29
22.	Training.....	29
23.	Consumer Education .....	29
24.	Auditing and Reporting .....	30
25.	Initial Cost Allocations .....	30
25.1.	Annual Review .....	31
26.	External Auditors.....	31
26.1.	Items to be audited .....	32
26.1.1.	Subscribers .....	32
26.1.2.	Transporters .....	32
26.1.3.	Waste Tyre Depots .....	32
26.1.4.	Waste Tyre Processors .....	32
26.1.5.	External Management Company.....	32
26.1.6.	Nationalised Centralised Computer System.....	32
26.1.7.	Adjudication Committee .....	33
27.	Non Compliance by Contracted Party .....	33
28.	External Management Company.....	33
28.1.	Responsibilities.....	33
28.2.	Compliance Monitoring.....	33
29.	Best Environmental Practice .....	34

---

30.	Historical Waste Tyre Stockpiles .....	34
31.	Legacy Waste Tyres and Historical Waste Tyres .....	35
32.	The Abatement of Historical Waste Tyre Stockpiles .....	35
33.	General Waste .....	36
34.	Tyre Dealer Responsibility .....	36
35.	Confidentiality .....	37
36.	Disclaimer .....	37
37.	Annexure A: Confirmed Subscribers .....	38
38.	Annexure B: Waste Tyre Depots (Provisional) .....	39
39.	Annexure C: Roll-Out Plan .....	41
40.	Annexure D: Calculation of Initial Tyre Levy .....	42

**REDISA INTEGRATED INDUSTRY WASTE TYRE MANAGEMENT PLAN**

(SUBMITTED IN TERMS OF REGULATION 9, OF THE WASTE TYRE REGULATIONS PUBLISHED IN  
GOVERNMENT GAZETTE NO. 31901 OF 13 FEBRUARY 2009)

## 2. Introduction

For purposes of the implementation of the plan, a Section 21 company has been registered bearing the name REDISA (Recycling and Economic Development Initiative South Africa), ("REDISA").

REDISA will have a Memorandum of Incorporation (Mol) governing its activities. An organisation controlling a project of this magnitude must have sustainability. A properly drafted Mol 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 Mol will be submitted within 90 days, and finalised no later than 12 months, after final gazetting of the plan. The Mol will need to:

- Ensure the independence of the REDISA Board.
- Mandate REDISA to ensure, within its powers, a strict separation between recyclers and subscribers (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.
- Define Environmental objectives.

The REDISA board members will be made up of:

- Two from the management company
- 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 Management 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 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 Management 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) waste tyre management 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 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 self-sustaining, 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 wide 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 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 BBEE.

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

### 3. DEFINITIONS

<b>"Accreditation Card"</b>	means measurable card for determination of compliance to various aspects as required for specific processes;
<b>"Adjudication Committee"</b>	means a committee formed to award contracts, with or without a tender process, as appropriate;
<b>"BBBEE"</b>	means the objectives set out in the Broad-Based Black Economic Empowerment Act 53 of 2003;
<b>"Code of Conduct"</b>	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;
<b>"Date"</b>	means the date on which the REDISA Plan is gazetted as approved by the Minister of Environmental Affairs;
<b>"De-bead"</b>	means removal of steel beads contained in pneumatic tyres;
<b>"DEA"</b>	means Department of Environmental Affairs;
<b>"GPS"</b>	means a global positioning system;
<b>"General Waste"</b>	means Waste that is not composed of substantially complete tyres;
<b>"Historical Waste Tyres"</b>	means tyres that are waste tyres at the Date but do not form part of a Historical Waste Tyre Stock Pile;
<b>"Historical Waste Tyre Stock Piles"</b>	means waste tyres which were collected before the Date and stockpiled anywhere in South Africa;
<b>"ITAC"</b>	means the International Trade Administration Commission of South Africa;
<b>"Legacy Waste Tyres"</b>	means tyres which were at the Date, fitted to motor vehicles and sold or imported or manufactured before the Date and are not legally waste tyres at the Date;
<b>"Metropolises"</b>	means specific areas identified within the republic of South Africa, where the concentration/consumption of tyres is high;
<b>"Management Company"</b>	means the company appointed by REDISA to handle all operational aspects of the plan;
<b>"NCCS"</b>	means the National Centralised Computer System;
<b>"OHS"</b>	means Occupational Health and Safety;
<b>"Processor"</b>	means any person or entity that is engaged in the commercial re-use, recycling or recovery of waste tyres;

<b>"Plan"</b>	means this Integrated Waste Tyre Management Plan, written and operated by REDISA, in terms of the Waste Tyre Regulations;																		
<b>"Recycle"</b>	means the separation and processing of waste tyres for further use as new products and resources;																		
<b>"REDISA"</b>	REDISA NPC (Registration Number 2010/022733/08);																		
<b>"Re-grooved tyres"</b>	means tyres whose original grooves have been re-cut and where this practice is not explicitly allowed by the manufacturer as evidenced by markings on the side wall of the tyre.																		
<b>"Relevant Role Players"</b>	means parties specifically involved in a sector of the industry;																		
<b>"Section 21 Company"</b>	means a not for profit company incorporated in terms of Section 21 of the Companies Act 61 of 1973 (as amended);																		
<b>"Storage Sites/Depots"</b>	means a site for waste tyre storage as defined in the waste tyre regulations;																		
<b>"Subscribers"</b>	means any tyre producer that registers with the REDISA Integrated Industry Waste Tyre Management Plan;																		
<b>"The Date"</b>	means the date on which the REDISA Waste Tyre Management Plan is gazetted as approved by the Minister of Environmental Affairs																		
<b>"The Plan "</b>	means the Integrated Waste Tyre Management Plan that is written by and will be implemented by a Section 21 Company, REDISA.																		
<b>"Tyre Categories"</b>	for ease of management tyres will be divided into nine different categories: <table data-bbox="619 1232 1356 1545"> <tr><td>1</td><td>Passenger Car Tyres</td></tr> <tr><td>2</td><td>Light commercial Tyres</td></tr> <tr><td>3</td><td>Heavy commercial Tyres</td></tr> <tr><td>4</td><td>Agricultural Tyres</td></tr> <tr><td>5</td><td>Motorcycle tyres</td></tr> <tr><td>6</td><td>Industrial Tyres</td></tr> <tr><td>7</td><td>Aircraft Tyres</td></tr> <tr><td>8</td><td>Earth moving Tyres</td></tr> <tr><td>9</td><td>Any other pneumatic Tyres</td></tr> </table>	1	Passenger Car Tyres	2	Light commercial Tyres	3	Heavy commercial Tyres	4	Agricultural Tyres	5	Motorcycle tyres	6	Industrial Tyres	7	Aircraft Tyres	8	Earth moving Tyres	9	Any other pneumatic Tyres
1	Passenger Car Tyres																		
2	Light commercial Tyres																		
3	Heavy commercial Tyres																		
4	Agricultural Tyres																		
5	Motorcycle tyres																		
6	Industrial Tyres																		
7	Aircraft Tyres																		
8	Earth moving Tyres																		
9	Any other pneumatic Tyres																		
<b>"Tyre Dealer"</b>	means a Person or entity that distributes or deals commercially in tyres;																		
<b>"Tyre Producers"</b>	means a person or institution engaged in the commercial manufacture or import of tyres and retreadable casings, and the import of vehicles fitted with tyres for distribution in South Africa;																		
<b>"Waste Tyre"</b>	means a new, used, retreaded or un-roadworthy tyre not suitable for retreading, repair or sale as a used tyre and not fit for the original intended purpose;																		

- “Waste Tyre Management”** means the collection and transportation, storage and pre-processing for delivery, the funding and operational activity involved in reducing waste tyres from the environment;
- “Waste Tyre Management Fee”** A means a non-commercial fee collected by REDISA from producers, importers and equipment importers of tyres for the effective management of waste tyres;
- “Waste Tyre Regulations”** means the Waste Tyre Regulations, 2009 promulgated in terms of the National Environmental Management: Waste Act (59/2008).



#### **4. Subscribers to the Plan**

Any tyre producer having received a registration number from DEA, in terms of part 3 of the Waste Tyre Regulation must become a subscriber to the plan for as long as the REDISA Plan is the only Integrated Industry Waste Tyre Management Plan approved by the Minister.

In order for the proper operation of the Plan, all subscribers will have to sign an agreement to govern the relationship between REDISA and the subscriber. A copy of this can be seen on REDISA's web-site: [www.redisa.org.za](http://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 in accordance with regulation 10 with all role players, concentrating in particular on the informal sector, which at present deal with the waste tyres in South Africa. 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 Act requires 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
- Products which reduce imports
- Processes which create recycled products for export or 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 of even high-performance tyres is common practice in Europe, but seldom if ever done 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.

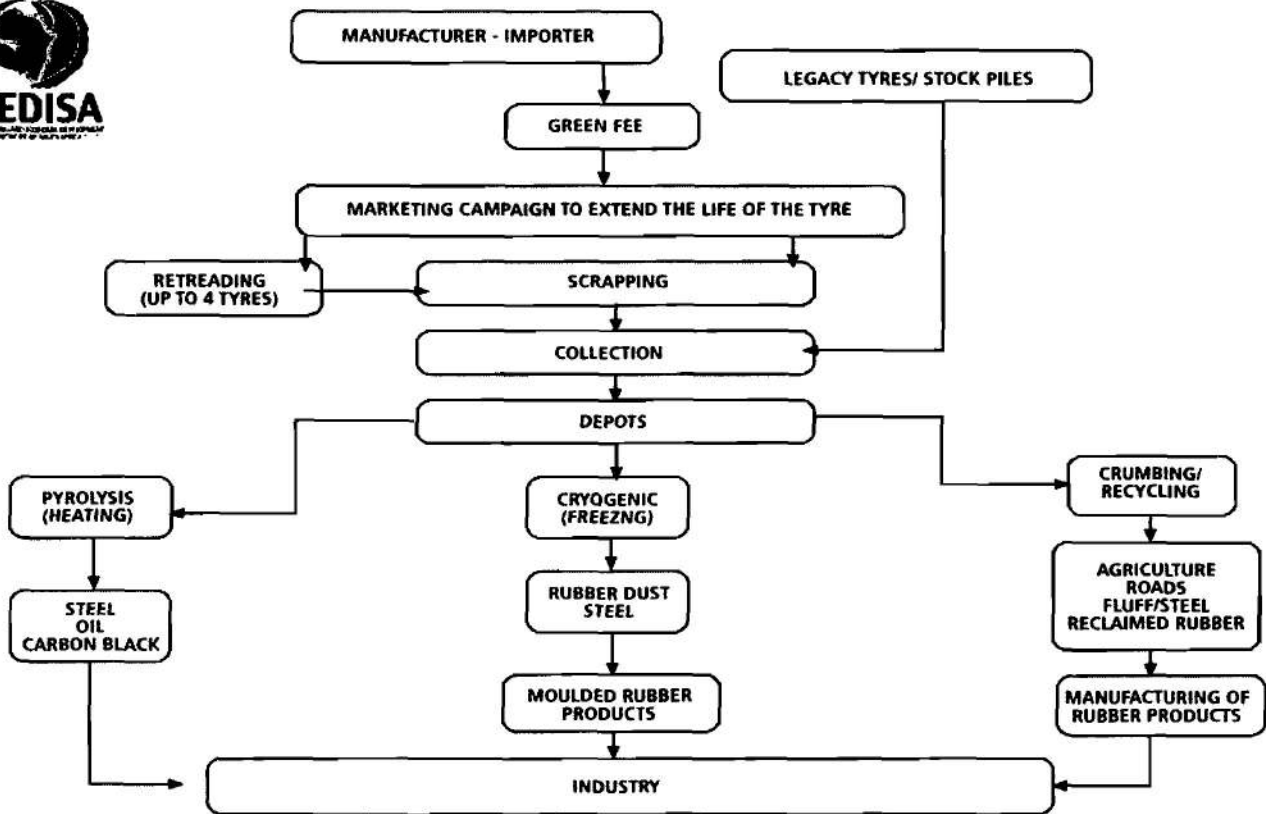
Over time, the range of products recovered through the recycling process will be expanded to products such as oils, bricks and tiles. One of REDISA's functions will be to sponsor Research and Development at tertiary institutions, thereby both creating processes designed for South African conditions and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



## 7. Adjudication Process

The adjudication committee will comprise:

- a certified auditor,
  - two members of the management company board,
  - two members of the REDISA board,
  - an accountant,
  - appropriate co-opted members
- not exceeding eight members in total.

Adjudications will be required to be unanimous and will take into account:

- BBBEE status of the contractor
- Financial proposal
- Ability to execute
- Competencies
- Size (preference will be given to smaller contractors)
- Area of operation (preference will be given to local contractors)

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.

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. Both the number of contracts advertised, and the scope of operations of each contract, will be managed by REDISA taking into consideration:

- Supply and demand within each grade of tyre waste.
- Supporting existing and smaller waste tyre processors.
- Job creation and establishment of BBBEE enterprises.
- Evaluation of the opportunities for re-use, recycling or energy conversion to maximise the total benefit to the country.

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**

- Appointments will remain valid for a period of 5 years subject to meeting performance criteria and compliance with regulations.
- All appointees will be subject to review at any time
- All appointees will be bound to the REDISA contract
- Registrations will be reviewed and renewed initially annually, thereafter periodically
- Existing contracts awarded before the inception of the plan will be phased out and put out to tender as and when applicable.

### **8.3. Declarations**

Waste tyre processors will amongst other mandatory requirements declare:

- Tonnage of tyres received from transporters

- Details of transporters used
- End products (where applicable)
- Stockpiles
- Employment levels and jobs created
- Compliance to the Waste Tyre Regulations
- Compliance to Safety and Compliance as per the OHS Act.

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

#### **8.4. Payments**

The biggest inhibitor of new businesses is cash flow. 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.

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 compliance 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 licenses/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:

- Be subject to review at any time;
- Be contractually bound to REDISA;
- Have allocated collection sites (which allocations may change from time to time as operationally needed).

## **9.3. Review Process**

Depots, collection points and recyclers 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:

- Existing jobs and jobs created
- Compliance to the Waste Tyre Regulations
- Compliance to Safety and Compliance as per the OHS Act
- Transportation of all categories of tyres

## **9.6. Duties of Tyre Transporters**

The duties of the waste tyre transporters will include:

- 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;
- The transportation of waste tyres to approved interim storage and recycling sites.

Waste tyre transporters must:

- Provide their own suitable vehicles and be responsible for all insurance and licensing of the vehicles.
- Load and offload their waste tyres in a manner that is approved by the managers of the destination site.
- 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. This information will be automated by the NCCS.

- 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.
- 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:

- Record-keeping of collections and deliveries of waste to processors or licensed storage sites to ensure that waste is delivered to legal sites or processors.
- Compliance with the relevant controls.

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 phone-based 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 Storage Sites**

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

The sites will be spread over the metropolises and gradually expanded country wide. Depots will be identified via a tender process.



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

### **11.1. Tender Process for Waste Storage Sites**

A tender process that fosters both free competition and local participation by BBBEE businesses will be created. Tenders will be advertised dependent on supply and demand.

Tender processes will require declarations of tonnage of tyres 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, 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. Monitoring will take place via regular inspections from the Management Company. The Management Company will employ suitably trained investigative specialists to ensure a high level of inspectorate ability and evaluations. Inspections will be conducted at predetermined times and at the registered sites.

## 13. ACCREDITATION CARDS

### a. Waste Transporter Accreditation card

Minimum Level 3 BEE Certification	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

### b. Waste Tyre Storage Site Accreditation Card

Minimum Level 3 BEE Certification	y/n
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 recyclers (Rating benefits for sites close to railways and recyclers)	
Sign a contract	y/n
Appropriate insurance	y/n

### **c. Waste Processor Accreditation Card**

Compliance to existing environmental standards	y/n
Minimum Level 3 BEE Certification	y/n
Sign a contract	y/n
Weighbridge	y/n
Waste operators must register with the relevant provincial authority	y/n
A Business Plan showing sustainability	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	
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 of 13 February 2009.

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
- 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
  - Name, address and Registration Number of transporter
  - Name, address and registration number of the collection point
  - Mass and/or categories of Tyres loaded
  - Vehicle used
  - Agreed Destination
  - Date and Time Loaded
- Receipt by Storage Site / Depot
  - Name of processor
  - Received from Transporter
  - Mass of Tyres
  - Vehicle used
  - Source Dealer or Legacy or other Stockpile (specify)
  - Date and Time received
  - Date & time despatched
  - Registration number of despatch transporter
  - Product description outgoing
  - Details of destination
  - Stockholding
- Recycler

- Date & time
- Received from transporter
- Origin
- Type of product received
- Stockholding by output and input product
- 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.

All categories of tyres manufactured or imported into South Africa will become part of the plan and will be collected by no later than 5 years after the date of publication.

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

## **16. Estimated Costs**

In the initial years of operation, there will be over-recovery of costs from the Waste Management Fee as the number of depots, transporters and recyclers 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 in later years.

First year operational costs, establishment costs and provision for future establishment costs are estimated to be approximately R624 million. 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 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**

### **a. 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.

Payment terms for subscribers will be 90 days. 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.

Importer's liability will occur at the time of import 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 all tyres that must be disposed of in South Africa must be subject to payment of the Waste Tyre Management Fee.

Credits will be awarded for all exports.

## **18. Building Awareness**

REDISA will actively promote awareness in relation to the management of waste tyres in various advertising mediums (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 waste management 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 per kilogram, 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 certification 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 recyclers will be done via the owner-driver concept.

Recyclers are 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 tyres 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 recyclers' output products (which will be paid for by the recyclers 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.

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

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

### 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 fund employees= 200

50 recyclers 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, recycler 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	200
Depot	12	3	36	27	324	40	480	40	480	40	480	150	1800
Recycler	20	2	40	8	160	12	240	14	280	14	280	50	1000
Transporter	1.75	300	525	600	1050	800	1400	1200	2100	1100	1925	4000	7000
<b>Total Jobs</b>			<b>801</b>		<b>1534</b>		<b>2120</b>		<b>2860</b>		<b>2685</b>		<b>10000</b>

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

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. 3% (three 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 recyclers.

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.

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 recyclers;
- mass of tyres processed by recyclers;
- mass of finished products.

This ensures uniformity, ease of reporting and transparency.

The operations of all recyclers and 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 below:

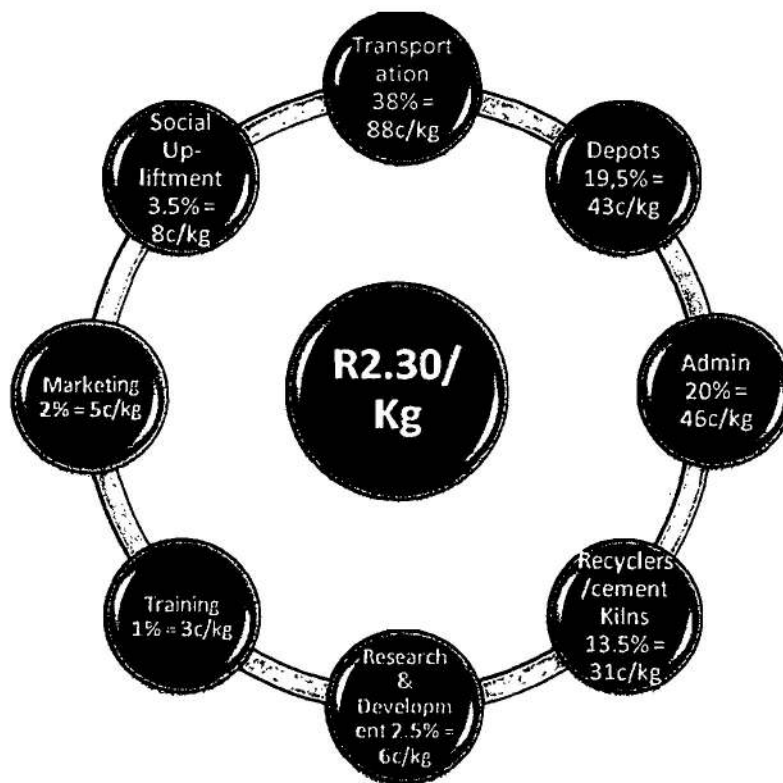
## 25. Initial Cost Allocations

Initial cost allocations will be allocated as per diagram below.

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

- General management, administration, accounts, IT, HR
- Project management – to assist with business plans and project management for depot and recycler establishment
- Legal and contracts
- Marketing – to drive public awareness
- Environment – specialists to assist and advise with EIAs and compliance required for depots and recyclers
- Training – to develop “train the trainers” programmes and manage outsourced training for transporters
- Recycler division – to work with recyclers and would-be recyclers
- Depot division – to work with and manage REDISA's interaction with depots
- Transporter division – to work with, support and manage the transporters

- Compliance team – monitor compliance and identify areas where special training and education is needed, and enforcement if needed.
- Stockpile Abatement division – team focused on managing stockpile abatement
- 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. The external auditor will amongst other aspects audit:

## **26.1. Items to be audited**

### **26.1.1. Subscribers**

- Ensuring that all manufacturers and importers in South Africa are paying the same Waste Tyre Management Fee and are part of the Plan
- All documentation supporting the import and manufacture of tyres
- Invoicing and payment of Waste Tyre Management Fees

### **26.1.2. Transporters**

- All documentation pertaining to the collection and delivery of waste tyres or processed waste tyres
- All documentation pertaining to the invoicing for the transportation and the payment

### **26.1.3. Waste Tyre Depots**

- All documentation supporting waste tyres received, waste tyres sent out.
- Processes are in accordance with the REDISA contract
- Waste tyre inventory estimations are correct
- The appropriate insurance policies are in place and the rules of the policy being adhered to
- The depot operates with all permits and licences

### **26.1.4. Waste Tyre Processors**

- All waste tyres received
- Products produced
- Processors are in accordance with REDISA contract
- Waste tyre processors inventory estimations are correct
- Processor operates with all permits and licences

### **26.1.5. External Management Company**

- Managers of REDISA within accepted accounting standards
- Compliance with the management contract
- Handles all information confidentially
- Supplies monthly management accounts
- Supplies annual reports to the Department of Environmental Affairs

### **26.1.6. Nationalised Centralised Computer System**

- Evaluate processes
- Audit information
- Audit input procedures
- Audit security

**26.1.7. Adjudication Committee**

- The auditing company is part of this committee and ensures proper governance
- Ensures 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 contract between the subscriber and REDISA will result in non-compliance, and this will occur but not 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. 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.

## **30. Historical Waste Tyre Stockpiles**

Historical stockpiles are stockpiles that have been registered and are known.

All historical waste tyre stockpiles will be identified by:

- Categories of waste tyres
- Details of the stockpile owner
- Registration number with DEA if applicable
- Physical address of the stockpile/ GPS Co-ordinates
- 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 recyclers will not be allowed to accept tyres which have not been specifically authorised by REDISA through the NCCS.

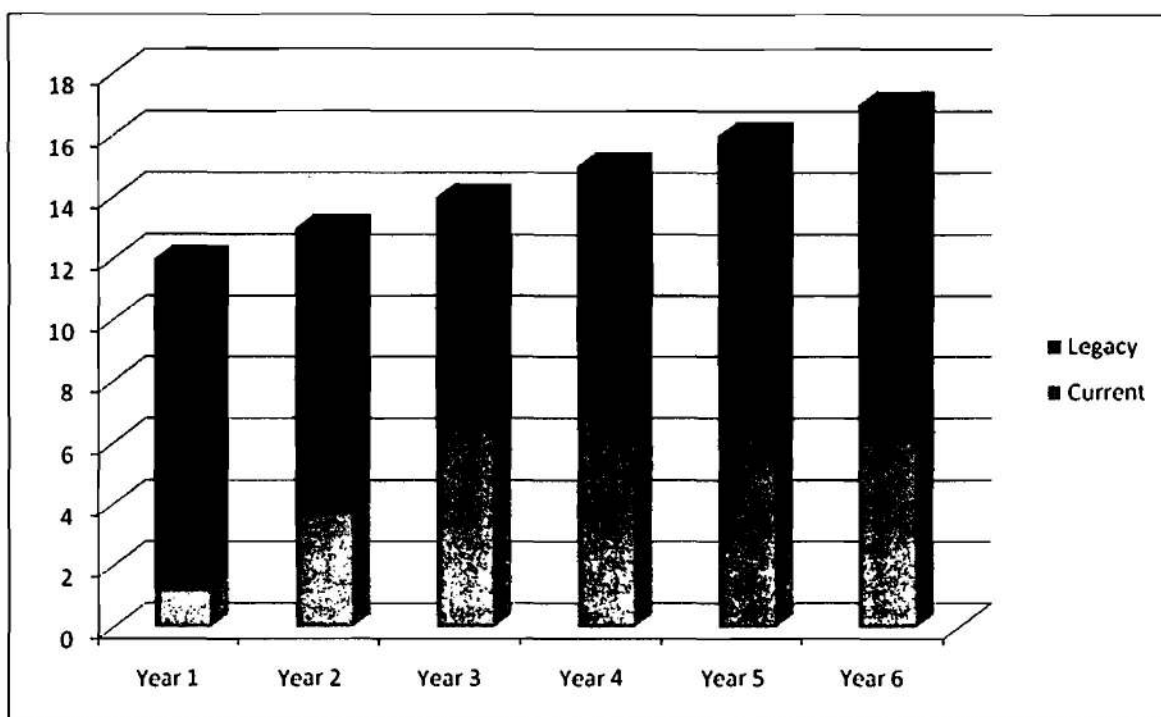
### **32. The Abatement of Historical Waste Tyre Stockpiles**

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.

The first 2 years of the plan will be spent to build capacity with waste tyre processes. As soon as sufficient capacity is available REDISA will allocate this capacity towards the abatement of historical waste tyre stockpiles.

Because of this REDISA does not foresee addressing historical waste tyre stockpiles sooner than 2 years after the Date.

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

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.

Tyre Dealers must register with the Management Company as subscribers to the Waste Tyre Management Plan. 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.

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

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

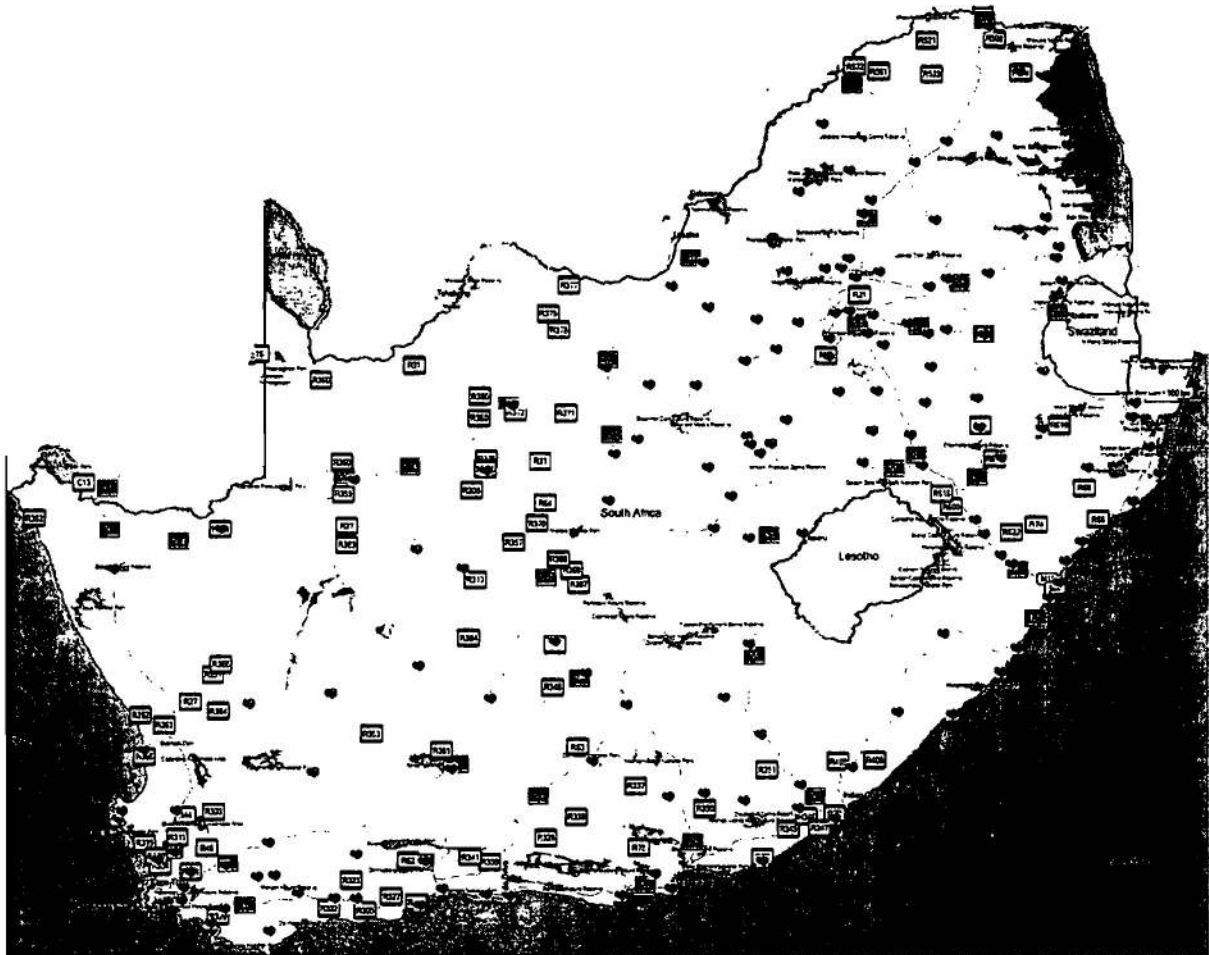
Importers signed up already with the REDISA Plan

Ameen Vally	ARCH Import & Export
Craig Hutchinson	STAMFORD Tyres
Imraan Minty	NATRIC Motors cc
Ridwan Motan	A1 Wheel & Tyre
Dave Mills	TIREPOINT Tyres
Robbie Perold	BOLAND Bikes
Mr Akoon	AKOON Enterprises
Gaff Sayed	RAYAN International
Mike Stradford	KWIKFIT Head Office
Dave Evans	S A Tyre Distributors
Anees Osman	Island View Distributors
Renier Botha	LOMBARD Group of Companies
E Thomas	Thomas Tyres Group
D Osborne	Sharmon & Campbell
J Laskarides	BANDAG Head Office
Mark Pitout	Marks Tyres
Marco Els	GLOBAL Import Export
Derick Oosthuizen	FASTRAK Trading 570cc

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

1	Aliwal North	51	Knysna	101	Richard's Bay
2	Amanzimtoti	52	Kokstad	102	Riversdale
3	Atlantis Town Centre	53	Kroonstad	103	Robertson
4	Balfour	54	Kuruman	104	Rustenburg
5	Barberton	55	Kwadukuza	105	Sabie
6	Beaufort West	56	Ladismith	106	Saint Lucia
7	Bedford	57	Ladybrand	107	Saldanha
8	Bela-Bela	58	Lamberts Bay	108	Sasolburg
9	Belfast	59	Leandra	109	Schweizer-Reneke
10	Bethal	60	Lephalale	110	Sebokeng
11	Bethlehem	61	Lichtenburg	111	Secunda
12	Bloemfontein	62	Lydenburg	112	Somerset
13	Botshabelo	63	Mafikeng	113	Somerset East
14	Bredasdorp	64	Malmesbury	114	Somerset West
15	Brits	65	Marble Hall	115	Soshanguve
16	Bultfontein	66	Marydale	116	Soweto
17	Butterworth	67	Mbombela	117	Springbok
18	Caledon	68	Middelburg EC	118	Springs
19	Calvinia	69	Middelburg MP	119	Standerton
20	Carletonville	70	Mkuze	120	Stellenbosch
21	Carnarvon	71	Modimolle	121	Strand
22	Christiana	72	Mokopane	122	Stutterheim
23	Cleveland	73	Molteno	123	Sutherland
24	Cullinan	74	Montagu	124	Swellendam
25	De Aar	75	Mooi River	125	Thabazimbi
26	Dundee	76	Mossel Bay	126	Thohoyandou
27	Durban	77	Mthatha	127	Tonga
28	East London	78	Musina	128	Touwsrivier
29	Ermelo	79	Newcastle	129	Tzaneen
30	Estcourt	80	Odendaalsrus	130	Uitenhage
31	Fort Beaufort	81	Oudtshoorn	131	Ulundi
32	Frankfort	82	Paarl	132	Upington
33	Ga-Rankuwa	83	Phalaborwa	133	Vaalwater
34	George	84	Piet Retief	134	Ventersdorp
35	Graaff-Reinet	85	Pietermaritzburg	135	Victoria West
36	Graskop	86	Piketberg	136	Virginia
37	Hanover	87	Plettenberg Bay	137	Volksrust
38	Harrismith	88	Pofadder	138	Vrede
39	Heidelberg GP	89	Polokwane	139	Vredenburg
40	Heidelberg WC	90	Port Alfred	140	Vryburg
41	Heilbron	91	Port Edward	141	Vryheid
42	Hennenman	92	Port Elizabeth	142	Warden
43	Hermanus	93	Port Saint Johns	143	Warrenton
44	Hluhluwe	94	Port Shepstone	144	Welkom
45	Howick	95	Postmasburg	145	White River
46	Jeffreys Bay	96	Potchefstroom	146	Williston
47	Jozini	97	Pretoria	147	Witbank

48	Kimberley	98	Prieska	148	Wolmaransstad
49	King Williams Town	99	Queenstown	149	Worcester
50	Klerksdorp	100	Reitz	150	Zeerust



### 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:

<u>Description</u>	<u>number of opportunities</u>	<u>Jobs created</u>
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		<u>100</u>
<b>Total</b>		<b>9.930</b>

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.

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.