



PROPOSED TEXT ON ESTABLISHMENT OF A NATURAL RESOURCE MANAGEMENT AGENCY

PORTFOLIO COMMITTEE MEETING
30 JANUARY 2018



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA



PURPOSE

- To request the Portfolio Committee on Environmental Affairs to include a provision on the establishment of the National Resource Management Agency in the National Environmental Management Laws Amendment Bill [B14–17] as introduced in the National Assembly on 24 May 2017, should the Committee agrees with the proposed text.

BACKGROUND

National Environmental Management Laws Amendment Bill [B14—2017]

- Invasive alien species are plants, animals and microbes that are introduced into countries, and then out-compete the indigenous species.
- Invasive alien species are not only the single biggest threat to the country's biological diversity, but also pose a direct threat to South Africa's water security, the ecological functioning of natural systems and the productive use of land.
- Invasive alien plants also intensify the impact of fires and floods, and worsen soil erosion, siltation and sedimentation.
- Invasive aquatic plants can double the area they invade every ten days, and cause a 40% increase in evaporation, among other impacts.
- Invasive alien species are causing several billions of Rands of damage to South Africa's economy every year. Left alone, they will spread and grow, with an exponential ecological, economic and social impacts.

BACKGROUND

National Environmental Management Laws Amendment Bill [B14—2017]

- The escalating loss of biological diversity, ecosystem services and natural capital can be reversed through integrated, systematic and structured restoration interventions, such as Working for Water, Working on Fire and their associated programmes.
- It is clear that conventional control options will not suffice, and the Department has initiated two programmes to utilize the biomass, and thus reduce the cost of the control of the invasive species:
 1. The Eco-Furniture Programme, which primarily uses logs to make solid-wood products such as office furniture, school desks, coffins and many others. This programme been temporarily administered through the SANParks, with some challenges; and

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2. The Value-Added Industries Programme, which seeks to find further ways to utilise the rest of the biomass of invasive alien plants that are cleared in terms of the Working for Water programme and the Biosecurity mandate of the Department. The programme has a particular focus on using composite (wood-chip) invasive biomass to make products, with a particular focus on building materials, and especially the “Light House”, and wood-plastic composite as a building materials. This programme is temporarily administered through the Working on Fire programme.
- The Eco-Furniture and Value-Added Industries programmes are temporarily administered by SANParks and Working for Fire programme respectively, whilst researching the Treasury requirement of a dedicated special-purpose vehicle with a Trading Account, and dedicated supply-chain management capacity, to administer the programmes.
 - The Department proposes that the capacity to manage the broad VAI programme (including Eco-Furniture Programme) should be concentrated in a public entity of the Department.
 - The public entity may later be a home for the Working for Fire programme, including the Department’s Green Economy initiative, and other appropriate programmes.





The Light House is made up of 75% invasive biomass, mixed with cement, fly ash and binding agents. It is spectacularly fire-proof. It's load-bearing, acoustic and thermal properties are excellent. It can be built over existing shacks. It will be competitively priced with RDP, but create many more jobs.

The Light House has been presented to the Employment Inter-Ministerial Committee chaired by the Deputy President, and to key Ministers, including of Environmental Affairs; Human Settlements; Public Works; COGTA; Finance; Basic Education; and, Tourism.

The Fire Test in Mamelodi, Tshwane



The cut-out part of the wall used in the Agrément test showed that just 5 cm of the 20 cm thick wall was impacted by the fire – after a record three hours!

We plan to have another fire test in Knysna (necessary to convince over 1,000 families who lost homes) that this is ideal for their new homes.

It will be showcased with the Public Employment Programme Inter-Ministerial Committee.

We shall have VIPs inside.

We plan to have an international live feed on YouTube – including to Portugal and the USA.



The Light House

Using a major source of fires
(invasive plants)
to prevent fires

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and many added benefits



Capital purchase items required

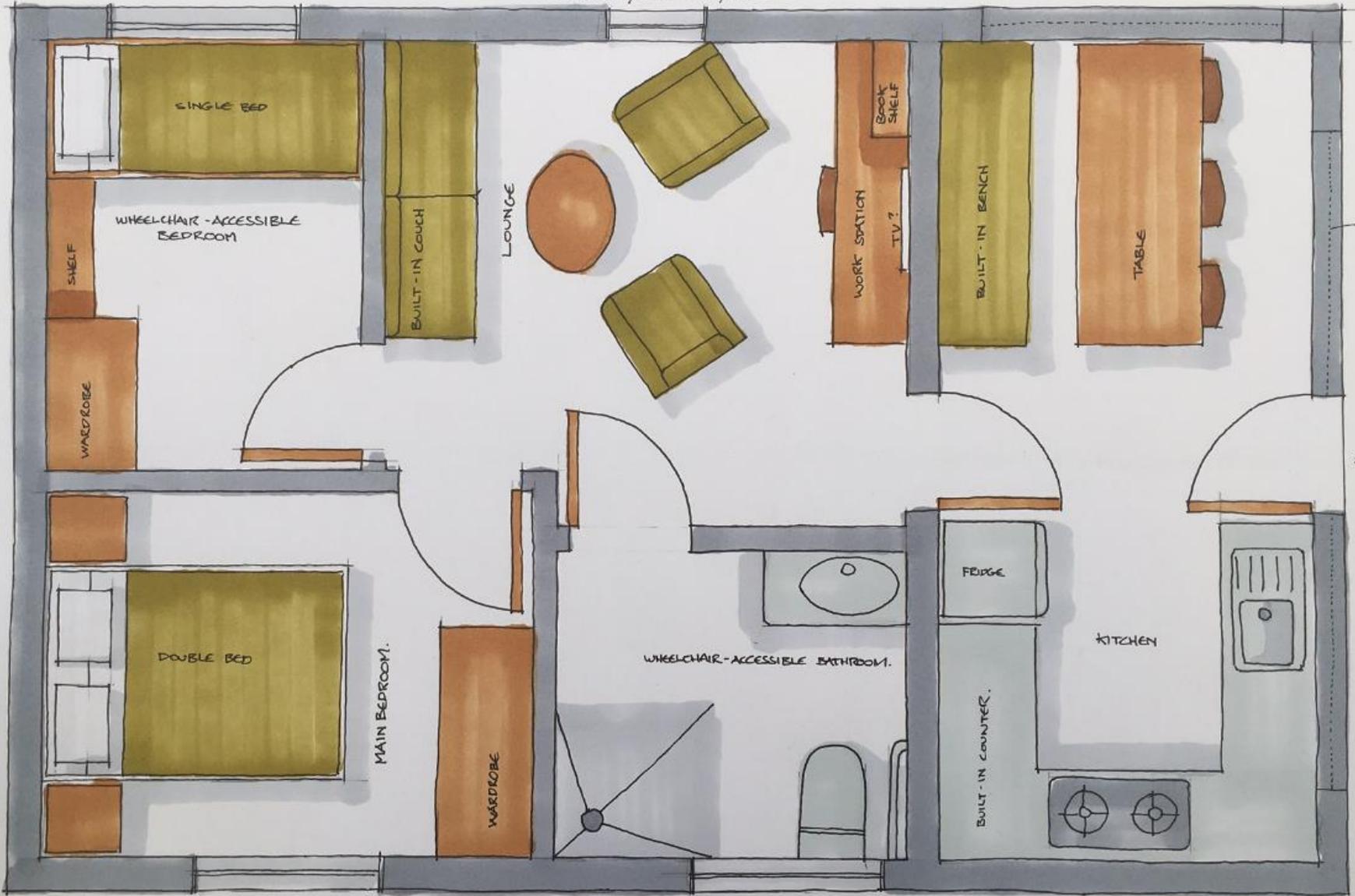


1. Vibrator
2. Small cement mixer
3. Mobile chipper
4. Scaffolding
5. Formwork (low tech, produced in-house)

The Isiqalo unit in Newlands, Cape Town, built for the Agrément trial. The green wall took 45 minutes to build. It is estimated that over 40% of the cost of a Light House will be for labour.



WINDOW/EMERGENCY EXIT



INSECT SCREEN

SCREEN DOOR

SINGLE BED

WHEELCHAIR-ACCESSIBLE
BEDROOM

SHELF

WARDROBE

DOUBLE BED

MAIN BEDROOM

WARDROBE

LOUNGE

BUILT-IN COUCH

WORK STATION

BOOK SHELF

TV?

BUILT-IN BENCH

TABLE

WHEELCHAIR-ACCESSIBLE BATHROOM

KITCHEN

FRIDGE

BUILT-IN COUNTER



LIGHT HOUSE PROJECT
KRUGER NATIONAL PARK
SINGLE STAFF/STUDENT UNIT
22m² + BATHROOM 4.3m²
LAYOUT C.

Light House presentation, 9 nov 2017,
confidential



Wood-plastic composite (75% invasive biomass and 25% recycled and virgin plastic) is an ideal material for many products, including school desks and weather-proof structures for Marion Island and Antarctica.

Marion Island Demonstration Field Hut

Internal walls:	6.5 x 4 meters.
Alcove:	1 x 4 meters.
Veranda:	1 x 4 meters.
Height of ceiling:	3.0 meters. Roof slopes to left.
Roof area:	8.5 x 4.0 = 34.0 m ² (plus walls).
Area (10 cm eaves):	8.7 x 4.2 = 36.5 m ² (plus walls).

Wall, roof, floor:	Wood-plastic composite.
Doors:	Wood-plastic composite? 90 x 210 cm.
Windows:	Aluminium; night blinds in runners. 100 cm wide. 50 cm high. Top at 180 cm.
Cupboards:	Wood from EFP.
Counters:	WPC / Wood from EFP?
Shelving:	Wood from EFP.
Furniture:	Wood from EFP.

Toilet:	Urine-diversion, composting (WRC). Receptacles flown back to base.
Waste water:	Drained away. Built-in drains on all floors.
Washing lines:	Multiple lines under shelf in Drying Area.
Lights:	LED. (Bedside-mounted reading lamps.)
Plugs:	Counters, table, beds & veranda. Planned conduiting. Converter in storage cupboard.
Gas:	Conduits to kitchen and dining area

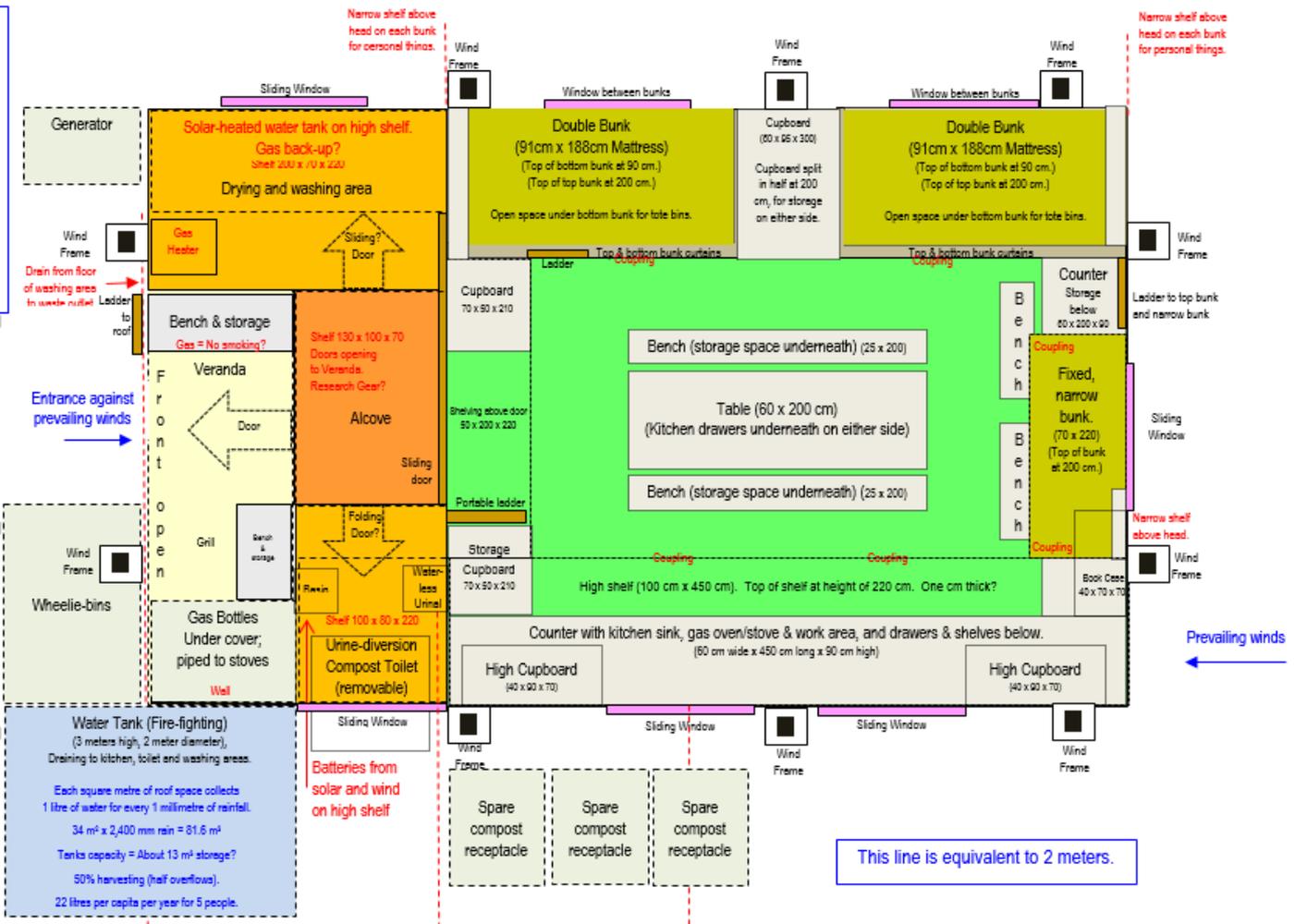
1. NB: Must be rodent-proof.
2. Tightly sealed, but with strategic air-vents.
3. Extra beams bolted all the way around, for wind.
4. Do we need eaves? Risk of wind vs rain? 10 cm?
5. Coupling from roof to top shelves, as shown.
6. Solar hot-water, PV & wind energy. (Bird-proofed.)
7. All conduiting to plugs & lights built into panels.
8. WPC colour: Canary yellow (ingraind).
9. Trial assembly in Cape Town in March 2018.

Drawing has not taken width of walls into consideration (awaiting report). Likely to be:

1. Outside walls, floor & roof = 30 cm.
2. Inside wall = 10 cm.
3. Counters, bunks, shelves = 3 cm.
4. EFP to make cupboards, ladders, table, benches & storage areas (3 cm).
5. WRC asked to specify sanitation, water, waste water and fire-fighting options.
6. DST & IPPC to specify energy options.
7. Guidance on windows being sought.
8. Commit to formal drawings & Bill of Quantities by 10 January 2018.
9. All items to be in CT by 10 March 2018.
10. Ship sails to Marion at end of March.

Storage Space:

450x60x90	= 2.43 m ³ Under Kitchen
450x100x80	= 3.60 m ³ Above Kitchen
200x70x50	= 0.70 m ³ Above Door
380x95x85	= 3.07 m ³ Below Bunks
200x90x60	= 1.08 m ³ Below Counter
210x70x50	= 0.74 m ³ Storage Cupboard
210x70x50	= 0.74 m ³ Cupboard
300x95x60	= 1.71 m ³ Split Cupboard
90x40x70	= 0.25 m ³ High Cupboards
70x40x70	= 0.20 m ³ Book Case
400x20x40	= 0.32 m ³ Below Benches
160x30x40	= 0.19 m ³ Below Benches
100x80x70	= 0.56 m ³ Above Toilet
200x70x70	= 0.98 m ³ Above Drying
130x100x70	= 0.91 m ³ Above Alcove
290x100x70	= 1.74 m ³ Gas Canisters
Total:	= 17.60 m³



Water from all floors, washing area, basin & kitchen, and urine from toilet and urinal, drained a suitable distance away, through rodent-proof piping.

This line is equivalent to 2 meters.



Manufacturing of sanitary pads and diapers (nappies) using invasive alien plant biomass – and with no chemical additives or plastic – in partnership with the Medical Research Council.

Through our Eco-Furniture Programme, we have been using invasive biomass for:



Eco-coffins



High-quality furniture (desks, chairs, etc)



Eco-benches



Eco-desks

Over 500,000 Learners now have quality school desks through our Eco-Furniture Programme, and many other products are being developed, to take full advantage of the potential utilization of invasive biomass.



Wood-wool erosion blankets



Multi-purpose chess tables



Early childhood toys & games, and crafts



Bio-char (soil carbon/fertility)

Biosecurity



Natural Resource Management Programmes

- Working for Water
- Value-Added Industries
 - Eco-Furniture Programme
- Working for Ecosystems
- Working for Forests
- Working for Wetlands
- Working on Fire

Environmental Protection & Infrastructure Programmes

- Working on Waste
- Working for the Coast
- Working for Land
- Greening & Open-Space Management
- People & Parks
- Wildlife Economy
- Youth Environmental Service

Information Management & Sector Co-ordination

Green Fund Green Infrastructure

DISCUSSION: PROPOSED TEXT

National Environmental Management Laws Amendment Bill [B14—2017]

- It is against this background that the Department is proposing the establishment of a dedicated Natural Resource Management Agency as a specialised implementing entity responsible for the management of natural resources within the DEA.
- The entity will be governed by a Board appointed by the Minister.
- Minister will also have powers to determine a policy within which the Agency must exercise its powers and perform its functions, as well as supervisory powers on the exercise and performance by the Agency of its powers and duties, including the powers to set norms and standards for the exercise and performance by the Agency of its powers and duties.
- The proposed text also empowers Minister to intervene if the Agency:
 - is in financial difficulty or is being mismanaged;
 - fails to perform its functions effectively or efficiently;
 - has acted unfairly or in a discriminatory or inequitable way towards a person to whom it owes a duty; or
 - has failed to comply with any law or any policy envisaged in this Act.

DISCUSSION: PROPOSED TEXT

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- The objects of the Agency are, amongst others, as follows:
 - *promoting the management of natural resources to ensure that environmental assets are conserved, valued, sustainably used and enhanced;*
 - *promoting the management of natural resources to enhance socio-economic benefits and employment opportunities, particularly for the poor and marginalized groups, and including in the full support of the Expanded Public Works Programme;*
 - *monitoring implementation of natural resource management research, advocacy, incentives, disincentives and controls;*
 - *progressively build capacity within the Agency to provide specialist support for the development and implementation of management plans and capacity-building programmes relating to natural resource/ecosystems management.*
- The functions and general powers are aligned to the objects of the Agency.

DISCUSSION: PROPOSED TEXT

- The proposed entity will be a Schedule 3A public entity under the Public Finance Management Act governed by a Board.
- The Board will be appointed by the Minister, and must perform its general duties in terms of good governance and corporate responsibility in terms of the laws of the Republic, to be set out in the Terms of Reference by the Minister, or perform its special duties as determined by the Minister.
- The Agency will be led by a Chief Executive Officer appointed by the Board, with the approval of the Minister.
- The funds of the Agency will be consist, amongst others, of:
 - Money appropriated by Parliament, including through EPWP and any other Public Employment Programmes;
 - Income derived by the Agency for services rendered;
 - Income derived by the Agency from the sale of products;
 - Voluntary contributions, donations or bequests received in accordance with the law;
 - Contributions in cash or in kind by land owners or partners, for implementation of programmes; and
 - Money from any other source, subject to the PFMA.

ORGANS OF STATE CONSULTED

- A draft copy of the proposed text was forwarded to National Treasury for concurrence, and the Office of the Chief State Law Adviser for constitutional certification.

RECOMMENDATION

- The Department is hereby requesting the Portfolio Committee on Environmental Affairs to include the proposed text on the establishment of the National Resource Management Agency in the NEMLA Bill as introduced in the National Assembly on 24 May 2017, should the Committee agree with the proposed text.

A photograph of a wooden signpost with a dark sign that says "Thank You" in white letters. The image has a green tint and a white border, giving it the appearance of a sticker or a cutout. The background is a sky with white clouds.

Thank You