#### (29 November 2013 - to date)

## NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT 59 OF 2008

(Gazette No. 32000, Notice No. 278. Commencement date: 1 July 2009 – save for sections 28(7)(a), sections 35 to 41 and section 46 [Proc. No. 34, Gazette No. 32189])

# NATIONAL STANDARDS FOR THE SCRAPPING OR RECOVERY OF MOTOR VEHICLES

Government Notice 925 in Government Gazette 37087 dated 29 November 2013. Commencement date: 29 November 2013

I, Bomo Edith Edna Molewa, Minister of Water and Environmental Affairs, in terms of section 19(3)(a) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008), hereby publish the national standards for the scrapping or recovery of motor vehicles in the Schedule hereto for implementation.

(Signed) BOMO EDITH EDNA MOLEWA MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS

## SCHEDULE

# NATIONAL STANDARDS FOR THE SCRAPPING OR RECOVERY OF MOTOR VEHICLES

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## 1. **DEFINITIONS**

In these standards, any word or expression to which a meaning has been assigned in the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) have the meaning so assigned, unless the context otherwise indicates-

"**Asbestos regulations**" means the Asbestos Regulations published under Government Notice R. 155 of 10 February 2002, in terms of section 43 of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993);

"Auto fluff" means waste residue from the vehicle shredding operation;

"Best practice" means to perform or exercise a particular activity or activities in the most suitable, appropriate, advantageous or best advised manner in order to achieve the highest standards while performing or exercising such activity or activities;

"Ground water" means water that occupies pores in the soil and cavities and spaces found in the rocks which are situated in the saturated zone of the profile by rising from a deep magmatic source or by the infiltration of rainfall;

"Handling" means functions associated with the movement of waste, including storage, treatment and ultimate disposal, by the use of manual systems or automated systems;

"Holding tank" means a container installed above ground or underground at the lowest point at the scrap yard, where contaminated water from the scrap yard collects and from which it is pumped out;

"**Monitoring**" means continuous or non-continuous measurement of a concentration or other parameters for purpose of assessment or control of environmental quality or exposure and the interpretation of such measurements;

"Motor vehicle" means an automobile, automobile truck, automobile wagon, motorcycle, or any other self-propelled vehicle designed for running on land but not on rails;

"**Oil or water separator**" means an engineering designed drainage system at the lowest point of the motor vehicle scrapping or a recovery facility which separates hydrocarbons from water;

"**Scrapping or recovery facility**" means an operational area in excess of 500m<sup>2</sup> where vehicles are dismantled and valuable material extracted for reuse or recycling;

"**Scrapping**" means the dismantling of a motor vehicle and the recovery and separation of useful material for re-use or recycling in an operational area in excess of 500m<sup>2</sup>;



"Sewer" means the system for collection and transportation of effluent, waste water or sewage, including conduits, pipes, and pumping stations;

"Sustainable" means - capable of being continued with minimal long- term effect on the environment.

#### ACRONYMS

NEMA	-	National Environmental Management Act, 1998 (Act No. 107 of 1998);
NEMWA	-	National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008);
SANS	-	South African National Standards;
SDS	-	Safety Data Sheet;
SEMAs	-	Specific Environmental Management Acts.

## 2. PURPOSE

The standards aim at controlling the scrapping or recovery of motor vehicles at a facility that falls within the threshold as described in paragraph 4 of these standards in order to prevent or minimize potential negative impacts on the bio-physical and socio-economic environment.

## 3. LEGISLATIVE FRAMEWORK

The Bill of Rights contained in Chapter 2 of the Constitution of the Republic of South Africa, 1996 places an obligation on the State to (through reasonable legislative and other measures) give effect to the right to an environment that is not harmful to the health or well-being of its citizens, and to have the environment protected for the benefit of present and future generations. South African legislators responded to this provision of the Constitution by developing and promulgating the National Environmental Management Act, 1998 (Act No. 107 of 1998) which sets principles for environmental management in the country. The National Environmental Management Act, 1998 was followed by a number of SEMAs, including amongst others the National Environmental Management: Waste Act, 2008 (Act No.59 of 2008), which makes provisions for the development of standards set in this document.

## 4. APPLICATION

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- (1) These standards apply to a vehicle scrapping or recovery facility with an operational area in excess of 500m<sup>2</sup>, which was initiated, constructed or upgraded after the coming into effect of the standards.
- (2) These standards are applicable throughout the Republic of South Africa.

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# 5. MINIMUM REQUIREMENTS FOR THE DESIGN, CONSTRUCTION OR UPGRADING OF A FACILITY

- (1) A scrapping or recovery facility must not be constructed in an environmentally sensitive area such as floodplain, residential area, wetland and any other conservation or protected area and within 100m from such areas.
- (2) A scrapping or recovery facility must be constructed in an area that is accessible to emergency response personnel and equipment.
- (3) Construction at the scrapping or recovery facility must be carried out under the supervision of a registered professional engineer appointed by the facility owner and according to the approved engineering drawings, which must set out the following:
  - (a) drainage systems (including storm water, sewerage and waste water drains);
  - (b) Floor area design, including the
    - i. storage yard for all motor vehicles brought on site;
    - ii. motor vehicle dismantling area;
    - iii. storage area for solid dismantled parts;
    - iv. storage area for liquid parts (including used oil, fuel and other fluids);
    - v. vehicle shredding area;
    - vi. location of a liquid waste treatment area (including oil or water separator system);
    - vii. location of a dispatching area for shredded parts; and
    - viii. location of a storage area for recyclable or re-usable materials.
- (4) The floor in the following areas within the scrapping or recovery facility must be designed and paved with an impermeable concrete layer with impermeable joints to prevent pollutants ingress into the soil or ground water in an area-
  - (a) that stores a motor vehicle that still contains motor vehicle fluids;
  - (b) where a dismantled and unclean part that still contains fluid is stored;

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- (c) where a fluid containing container or tank is stored;
- (d) where a crushing operation is undertaken;
- (e) where a shredding operation takes place; and
- (f) where a storage for recyclable or re-usable material takes place.
- (5) The floor design area must make provision for the storage of recyclable materials.
- (6) This floor must be designed and sloped towards an oil or water separation system, which should be located down gradient of the scrapping or recovery facility.
- (7) The design of the oil or water separation system must be dependent on the locality of the scrapping or recovery facility and oil or water separation system must be designed to prevent or minimise the escape of pollutants that will likely cause adverse impacts on the environment.
- (8) A storage area for oil and fuel drained from the motor vehicle engines must be constructed. The storage area must have impermeable floors with bund walls capable of holding up to 110% of oil or fuel in the case of accidental leaks, spillages, or overflows. The storage area must also be surrounded by an interception trench with a sump for intercepting and recovering potential leakages, spillages or overflows.
- (9) The installation of a waste storage container or tank (above- ground or underground) including a secondary containment equipment and mitigation measure must be undertaken by an experienced professional.
- (10) The construction times and noise levels must comply with relevant applicable legislation or municipal by-laws in order to minimise the impact of noise on the neighboring [*sic*] properties.
- (11) Onsite fueling [*sic*] and servicing of construction equipment and motor vehicle must only occur in a designated area. A motor vehicle requiring maintenance must be removed from site and repaired at a service workshop or garage.
- (12) An area under construction must be demarcated to prevent unauthorised access during the construction phase.
- (13) Dust generated by construction activities must be minimised by dust suppression techniques.

## 6. MINIMUM REQUIREMENTS DURING OPERATIONAL PHASE



- (1) Vehicle dismantling operation
  - (a) A motor vehicle must not be shredded or crushed with the following parts and or lubricants still attached to it:
    - (i) Asbestos containing parts (including brake pads);
    - Mercury containing parts from hood and trunk light switches, anti-lock braking systems, high-intensity headlights, and virtual-image instrument panels, especially from old motor vehicle models;
    - (iii) Lead containing parts (including acid lead batteries, lead tire weights and battery cable ends);
    - (iv) Petrol or diesel or gas, liquid petroleum gas, brake fluid, oil and oil filters;
    - (v) Refrigerants;
    - (vi) Tyres; and
    - (vii) Any other part made of or containing hazardous substance(s).
  - (b) The dismantling operation must be undertaken on a concrete floor linked to an oil or water separation and/or collection system.
  - (c) The requirement for the removal of oil and oil filters and does not apply to a motor vehicle engine intended to be removed from the motor vehicle for reuse.
- (2) Solid waste management
  - (a) Tyres that are damaged beyond repair (i.e. are road un-worthy, not suitable to be retreaded, repaired or sold as a part, and not fit for their original intended use) should be managed in accordance with the Waste Tyre Regulations, 2009. In case the scrapping or recovery facility falls within a sector that has an approved Integrated Industry Waste Tyre Management Plan, the damaged tyres must be managed in accordance with such a plan.
  - (b) Brake pads containing asbestos should be placed in heavy plastic bags, double tied, and stored in a leak proof, airtight container designated for asbestos waste. Disposal of such parts should be carried out in accordance with the provisions of the NEMWA and Asbestos Regulations, 2001.



- (c) Unbroken mercury containing lamps and switches must be stored in a dry locked container labeled [*sic*] "Used Mercury Switches". The mercury containing material must be taken to a facility that is approved or registered to handle or dispose of mercury or mercury containing material.
- (d) Cracked or leaking acid battery must be placed separately in a closed leak-proof and acid resistant storage container and the container must be labeled [*sic*] as "Hazardous Waste-Lead Acid Batteries". The waste must be removed by an approved or registered hazardous waste handling company for disposal in an approved or licensed hazardous waste disposal facility. Spilled battery acid must be neutralised with a basic material such as lime or baking soda with residue from battery cleanup [*sic*] to be managed and disposed of as hazardous waste.
- (e) Reusable or recyclable battery must be stored indoors, upright and in heavy plastic sheeting or on pallets in an area that will prevent the battery from being damaged by moving or falling objects, prior to dispatch to a customer or commercial battery recycler.
- (f) Filters removed from a motor vehicle engine must be drained of oil and fuel completely and stored in a container labeled [*sic*] "used oil or fuel filters". Completely drained metal filters must either be recycled or disposed at a licensed disposal facility. Incompletely drained or not drained fuel filter must be stored in a separate fireproof container marked "Hazardous Waste Filters Only" away from potential sources of ignition and must be handled by an approved hazardous waste handling company for recycling or disposal at an approved or licensed hazardous waste disposal facility.
- (g) Parts containing gas, such as gas for fueling [*sic*] the motor vehicle in the case of a hybrid motor vehicle, as well as gas from the air-conditioning refrigerants, should be kept in an area designated for temporary storage of such parts. No gas must be vented into the atmosphere. The parts containing gas must be handled by a facility registered to safely recycle or dispose the gas.
- (h) The sludge removed from the oil or water separation system must be stored in a container labeled [sic] "Hazardous Waste-Sludge". The container must be handled and disposed at a hazardous waste disposal facility by an approved or registered hazardous waste handling company.
- Waste oily rugs and any other contaminated cloths from the cleaning of parts must be stored in a closed, fireproof container with no structural defects. The container must be labeled [*sic*]
   "Used contaminated rugs or cloths". The oily rugs or contaminated cloths must be disposed at licensed hazardous waste disposal facility where such cloths may not be reused or recycled.
- (j) Auto fluff, at a shredding plant, must be stored separately from the clean and valuable scrap metal picked up following the shredding process. The auto fluff must be stored in a covered or



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closed container labeled [*sic*] "Auto Shredder Residue", and where the recycling market for such does not exist; the auto fluff must be regarded as hazardous and disposed at a licensed hazardous waste disposal facility.

- (k) A facility must put in place measures to prevent soil contamination from occurring. Where soil contamination has occurred, the source of the contamination must be identified and cleanup [*sic*] activities undertaken to remove contaminated soil.
- Contaminated soil must be collected and stored in a leak proof container labeled [*sic*]
  "Hazardous Waste-Contaminated Soil" until it can be treated or transported to a waste treatment or disposal facility.
- (m) Minor leakage within the bunded area must be contained by use of appropriate spill kits, with contaminated material handled as hazardous waste.

# (3) Liquid waste management

- (a) Oil drained from motor vehicle engine, oil filters, fuel drained from fuel tanks, fuel filters and any other motor vehicle fluid such as brake fluid, must be poured into a container designated for the temporary storage of such liquids. The container must be labeled [*sic*] with the name of the fluid they are holding, and must be stored in a bunded area, capable of holding up to 110% of liquid in case of major leakage, overflows or spillages. In addition, a facility must ensure compliance with provisions made in the norms and standards for the storage of waste, with regard to the design of such a container.
- (b) The container must be in good condition and must not exhibit any structural defects, rust, leaks or deterioration.
- (c) Where underground containers are used to store used fuel, the scrapping or recovery facility must ensure compliance with the design specifications for underground tanks, as set out in the norms and standards for the storage of waste. The following additional requirements must be complied with:
  - (i) the underground tank must have monitoring wells and fitted with a leak detection system;
  - (ii) the underground tank must be fitted with overfill shut-off valve to prevent potential overflows and spillages.
- (d) To minimise potential overflows and spillages the above ground or underground containers must be emptied before fuel or oil reach the level of 80%.



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- (e) No fuel, oil, brake fluid or other motor vehicle fluids must be allowed to drip or poured direct into the soil, storm water drain, sewer lines, septic tanks or to any water course.
- (f) Used oil may be given or sold to an approved used oil recycling company or disposed at a licensed hazardous waste disposal facility.
- (g) Brake fluid must be handled as hazardous waste by an approved hazardous waste handling and disposal company.
- (h) Hydrocarbon contaminated water from the scrapping or recovery facility must be passed through an oil or water separation system.
- (i) Water residue from the oil or water separation system must not be discharged direct into the storm water drains, nearby water streams; soils; ground water or wetlands without an approval from the National Department responsible for water affairs.
- (j) Disposal of such residue water into the municipal sewer must be in compliance with municipal by-laws regulating sewerage systems, and may only be undertaken after authorization has been granted in writing from the relevant municipality.
- (k) The opportunity for the onsite reuse and recycling of contaminated water must be investigated prior to disposal.
- (I) The oil or water separation system must be inspected daily and maintained by trained personnel in such a way that oil or contaminated water does not overflow and spill direct into storm water drains or direct into the environment.
- (m) Oil from the oil or water separation system must be pumped out for recycling by a registered waste oil handling company or for disposal at a licensed hazardous waste handling and management facility.
- (n) If the antifreeze is not reused or recycled, it must be handled as hazardous waste and disposed at a licensed hazardous waste landfill site by a registered hazardous waste handling company.
- (o) Used hot tank solutions must be stored in a container designed to hold strong corrosives and labeled [*sic*] "Hazardous Waste-Corrosive" and must be disposed as hazardous waste at a hazardous waste landfill site by a registered hazardous waste handling company.
- (p) Liquids or solvents from mineral spirits and petroleum based parts washers must be handled and disposed as hazardous waste.

## 7. GENERAL REQUIREMENTS



- (1) These standards do not replace any other relevant requirements stipulated in terms of other legislation, unless the requirements in terms of the other legislation are less stringent than these requirements.
- (2) Pollution of the biological and physical environments (including habitats for animal and plant species, water resources, land, soil and air) as a result of operations within the facility must at all times be prevented or minimized.
- (3) Waste streams must not be mixed. While general waste generated during the construction, operation and decommissioning phases of the facility may be disposed at a general waste management site, all hazardous waste material must be disposed at a licensed hazardous waste disposal or handling facility.
- (4) The yard area where a core pile of auto shells are kept must be well maintained, with weed growth and dust emissions kept under control.
- (5) A Safety Data Sheet for each of the chemical products utilised must be kept on site. The SDS information must be obtained, maintained and updated and the files to be kept in an easily accessible location to employees. If SDSs are kept on a file in a computer, a hard copy should also be available.
- (6) Non-recyclable general waste must be stored in a storage container designed for such waste and must be disposed at a licensed waste disposal or handling facility.
- (7) The installation and maintenance of underground fuel storage tanks must comply with SANS10089 or any other applicable and valid national standards.

## 8. TRAINING AND CAPACITY BUILDING

- (1) A motor vehicle scrapping or recovery facility must, during the safety, health and environment induction, train a new employee or employees on waste management in order to be able to identify, prevent, minimise or manage actions or behavior [*sic*] that is likely to cause adverse impacts on air, water, land, fauna and flora as a result of construction, operation and decommissioning of the facility.
- (2) Members of staff must be trained to manage all types of wastes in accordance with the provisions of these standards and any other relevant legislative requirements applicable to the motor vehicle scrapping or recovery facility.
- (3) The oil or water separation system must be maintained and serviced by only suitably qualified and trained personnel.

## 9. MANAGEMENT OF EMERGENCY SITUATIONS



- (1) Response measures must be put in place to deal with overflows of the oil or water separator system or holding tank into the environment or into the municipal sewerage system.
- (2) Emergency incidents must be dealt with in accordance with section 30 of the National Environmental Management Act, 1998 (Act No. 107 of 1998).

# 10. MONITORING, AUDITING AND REPORTING.

- (1) The site must be inspected on a daily basis to ensure early detection and addressing of environmental pollution.
- (2) The relevant authority must be given access to audit or inspect the site at any time and at such frequency as the authority may decide. The audit or inspection reports by the authority must be made available to the facility owner within sixty (60) days of the audit or inspection.
- (3) The oil storage area (including the oil or water separation system) must be inspected daily to ensure early detection of leakages, overflows or spillages and a speedy cleanup [*sic*] response.
- (4) The site owner must, during the audit or inspection, make any records or documentation available to the audit or inspection team as may be required.
- (5) Safe disposal certificates for hazardous waste removed from site must be kept on record.
- (6) A certificate of compliance with relevant SANS standards regarding the installation of above ground or underground waste storage containers must be kept in the files and made available to the relevant authority on request.
- (7) A record of any non-compliance findings by the relevant authority and the manner such noncompliances were addressed must be kept in the file.
- (8) Internal audits detailing environmental performance of the facility must be conducted bi-annually and official reports thereof must be prepared. Each of the internal audits must be made available to the external auditor referred to in paragraph (9) below and to the relevant authority upon request.
- (9) External audits of the facility must be conducted biennially by an independent auditor and the auditor must prepare an official audit report documenting the audit findings. The external audit report must be submitted to the Department and must include the following:
  - (a) Confirmation of compliance of the facility to these standards;



- (b) Confirmation of compliance with any specific requirements issued by the relevant authority either at national, provincial or local sphere of government;
- (c) Confirmation that the oil or water separation system is functioning well and maintained in good order;
- (d) Confirmation of any major environmental incidences that occurred and details of the manner the incidences were addressed;
- (e) Confirmation that hazardous waste is separated from non-hazardous waste and that such waste is removed by a registered waste handling company for either recycling or disposal at licensed disposal facility; and
- (f) Confirmation of the presence of records of safe disposal certificates for all hazardous waste removed from the facility.
- (10) For the purposes of compliance monitoring, all facilities that fall within the scope as described in paragraph 4 of these standards must prior to commencement with the construction of this activity inform the Department for a once off registration of the activity in the Departmental database.
- (11) The registration application referred to in subparagraph (10) above must as a minimum include the following:
  - (a) the name of the owner of the facility where the activity is intended to take place;
  - (b) the location of the facility in terms of the name of the local municipality, erf number and geographical coordinates;
  - (c) the size of the facility;
  - (d) the proximity of the facility to the nearest residential area; and
  - (e) the land use or zoning.

## 11. MINIMUM REQUIREMENTS DURING DECOMMISSIONING PHASE

- A facility to be discontinued, for whatever reasons, must be rehabilitated to the satisfaction of the Department.
- (2) A rehabilitation plan for the site, including the indication of end use of the area must be developed and submitted to the Department for approval not more than one (1) year prior to the intended closure of the facility.



- (3) The rehabilitation plan must set out the following:
  - (a) Rehabilitation measures for contaminated areas within the facility;
  - (b) Indication of the intended use of containers or tanks and related piping that previously stored hazardous fluids such as used fuel, used brake fluid, used engine and transmission oil drained from the dismantled motor vehicles; and
  - (c) Measures to be undertaken to deal with infrastructure such as oil or water separation systems, bund walls within which fluid storage tanks or containers were kept, the contaminated floor and shredding areas as well as any waste material still kept on site such as auto shells, tyres, auto fluff, used fuel, used oil, etc.
- (4) The site must be rehabilitated according to the rehabilitation plan.
- (5) The owner of the facility, including the subsequent owner of the facility will remain responsible for any adverse impacts on the environment, even after operations have ceased.

#### 12. TRANSITIONAL ARRANGEMENTS

A person who lawfully conducted the activity of scrapping or recovery of motor vehicle prior to and on the date of coming into operation of these standards may continue with the activity for the duration as stipulated in the approval, authorisation or licence and after the expiry of the approval, authorisation or licence comply with the provisions of these standards.

