

A Quarterly newsletter that is aimed at communicating the Department of Environmental Affairs (DEA) Branch: Chemicals and Waste Management projects

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Welcome to the 45th issue of *Waste Information Today*.

In this issue, we present the upcoming Good Green Deeds, Asbestos and Land Remediation Summit. We also provide update on the review of the effectiveness of the Waste Classification and Management Regulations and the associated Norms and Standards that came into operation in 2013. A report on the management of nappies and other Absorbent Hygiene Products waste is also provided. There is also an article which gives some insight on Waste Characterisation Training conducted in selected local municipalities in the KwaZulu-Natal Province. Lastly the article on the Stockholm convention on persistent organic pollutants (POPs) 2019 roadshows is also included.

Please feel free to forward any comments to SAWIC on info@sawic.environment.gov.za.

We look forward to hearing from you.

Regards,
Waste Information Team

Good Green Deeds, Asbestos and Land Remediation Summit

The National Department of Environment, Forestry and Fisheries will be hosting the Waste Khoro 2019: Good Green Deeds, Asbestos and Land Remediation Summit in Kimberley in the Northern Cape from 18 to 20 September 2019. The event will coincide with the World Ozone Day which will be celebrated on 16 September 2019. The Waste Management Officers (WMO) Khoro is an annual conference of all government institutions dealing with waste. The aim of this conference is to provide a platform for WMOs in all three spheres of government to share information and exchange thoughts in a mutually beneficial manner. It further aims to strengthen capacity and streamline the institutional framework across government entities to enhance effective waste management. The evolution of national legislation, policy, agreements and research in waste management led to the promulgation of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008).

The passing of this Act by Parliament has reformed the law regulating waste management and also offers direction for the coordination of all waste management efforts to protect the environment and human health by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development. The Summit will provide a platform for the engagement and debate on what approaches will be best for the country, learning from other developed and developing economies, and this will include the private sector delegates. At the same level, the Waste Summit will allow for the high level inputs on the direction the country is taking on waste management. There is a need for continued coordination and management of resources amongst the three spheres of government as well as industry and civil society in order to expedite the transformation of the waste sector.

The theme for the event is: "Good Green Deed towards a Recycling Economy and Sustainable Land Remediation".

The emphasis will be on the recycling economy, asbestos management issues and land remediation aspects which will be presented under the umbrella of the National Good Green Deeds Programme.

Enquiries can be directed to Khoro@environment.gov.za or to Ms. Tanya Faber, Tel: 012 399 9110.

Comprehensive review of the effectiveness of the implementation of the Waste Classification and Management Regulations (WCMR) and the associated Norms and Standards (N&S)

The Department of Environment, Forestry and Fisheries (DEFF) developed the WCMR and the two associated N&S in 2013, among the main objectives of the three documents was to facilitate execution of other options of the waste hierarchy. The fundamental change in the legislative regime from the Minimum Requirements for waste disposal by landfill to WCMR is the shift in the responsibility from the waste manager to the waste generator.

The purpose of the WCMR is to:

- Regulate the classification and management of waste in a manner which supports and implements the provisions of the Waste Act;
- Establish a mechanism and procedure for the listing of waste management activities that do not require a waste management license;
- Prescribe the requirements for the disposal to landfill;
- Prescribe the requirements and timeframes for the management of certain waste; and
- Prescribe general duties of waste generators, transporters and managers.

The Department is conducting a comprehensive review on the effectiveness of implementation of the Waste Classification Management Regulations and the associated Norms and Standards.

The scope and extent of the study includes:

- Assess the effectiveness of implementation across the country of the WCMR and its associated Norms and Standards (NS);
- Assess the accuracy of the classification by waste generators of waste in terms of SANS 10234 and the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and identify challenges associated with the application of SANS 10234 to waste;
- Assess the capacity of local laboratories in providing analyses that are accredited by the South African National Accreditation System (SANAS);

- Conduct evaluation of the effectiveness and implications of the transition from Minimum Requirements to Waste Classification Regulations including:
- Assessment of capacity constraints at existing and transitional sites and implications to new applications if any;
- Assessment of the impact of waste characterisation and loading limit, if any, of the waste body, leachate characterisation and rate of generation, temperature, gas rate of generation
- Assessment of the transitional impact on all spheres of government and the private sector;
- Assessment and collation of litigation and judgements as it relates to the WCMR; and the implications for further implementation of the regulations;
- Assessment of implementation of the WCMR in terms of alignment with Water Act, local bylaws;
- Identification and recording of the extent of the challenges with regard to the implementation of the WCMR and the associated norms and standards; (both own assessment and feedback);
- Determine and verify if the objectives and purpose of the requirements of the WC&MR and associated norms and standards, have been achieved or are being achieved;
- Outline any successes that were achieved by the coming into effect of the WCMR and the associated norms and standards; and
- Determine how the WC&MR and norms and standards could be improved to facilitate implementation thereof and to ensure increased compliance thereto.

La Terra Earth Sciences (Pty) Ltd has been appointed to conduct the study on behalf of the Department. The work of collecting data commenced on May 2019 and will continue until end of September 2019. As a valued stakeholder in waste management you are encouraged to contact La Terra to obtain the programme of engagement with stakeholders and how you can make your inputs. La Terra's contact details are as follow:

Tel: 011 463 3592

Email: info@laterraeearth.com

Website: www.laterraeearth.com

Managing Nappies and other Absorbent Hygiene Product Waste - "Bag it and Bin it"

This guideline provides advice on the management of absorbent hygiene product (AHP) waste, that is generated by households, shopping centers, child care centers, public toilets, restaurants, offices, education facilities, retirement centers and other facilities whose primary function is not health care related.

What is AHP Waste?

AHP waste is the name for the waste emanating from the use of baby nappies, feminine care products (tampons, pads and panty liners) and adult incontinence products.

What must I do with nappies and other AHP waste?

AHP waste is safe and compatible with controlled and sanitary landfilling so you can place it in your black bag with the rest of your household waste that should be collected by the local municipality in which you reside.

How do I manage smell of nappies and the hazard of having them in the bin in-between collection by the municipality?

There are a number of ways to manage the disposal of nappies which include:

- If possible, dispose of any solid waste collected in the nappy or incontinence product into the toilet before disposing of the nappy as this will help reduce odour and bacterial growth whilst awaiting for the waste stream to be removed for disposal.
- Wrap dirty nappies and incontinence products tightly in a plastic bag.
- Use smaller bags that can be closed tightly or double wrapped before placing them in the waste collection receptacle (wheelie bin, black bag etc.) that you have. This will reduce the amount of air circulating around the dirty nappies and reduce the smell.
- Store the waste collection receptacle in the shade and out of direct sunlight whilst awaiting collection by the municipality.
- Make sure your bin lid closes properly and there are no cracks on the sides.
- Keep bins away from pets as they may take out the waste and unwrap the bags containing AHP waste.

- Keep bins away from pets as they may take out the waste and unwrap the bags containing AHP waste.
- Constantly wash your bin after emptying the contents.
- You can use general odour removing products, including cat litter and crystals, bicarbonate of soda and others found in hardware stores and supermarkets.

Did you know that a baby will use approximately 4100 disposable nappies before becoming toilet trained at two and a half years old and that this will weigh approximately one ton?



Are nappies and other AHP waste considered to be medical waste (otherwise known as healthcare risk waste)?

No, AHP waste generated from healthy individuals is not deemed to be medical waste. However if the AHP waste results from a person receiving treatment for an infectious disease or who is receiving cytotoxic drugs, it must be segregated and managed as HCRW.

Must nappies and other AHP waste emanating from households be treated prior to disposal?

No, if the AHP waste is from healthy individuals it does not require treatment prior to collection for landfilling by the municipality.

Must nappies and other AHP waste emanating from healthcare facilities be treated prior to disposal?

Yes, AHP waste generated by a healthcare facility is deemed to be HCRW and must be treated at an approved facility either by incineration or non-combustion treatment technologies prior to disposal.

What type of landfill may accept nappy and other AHP waste coming from households?

If the AHP waste is not deemed to be HCRW then it may be disposed of at a suitably licensed general landfill.

How should large premises manage their AHP waste?

It is recommended that premises generating large volumes of AHP waste, e.g. shopping centres, office blocks, education facilities etc., develop procedures for managing this type of waste which provide clear guidelines on how to handle, package, store, transport and dispose of the waste. Dedicated bins

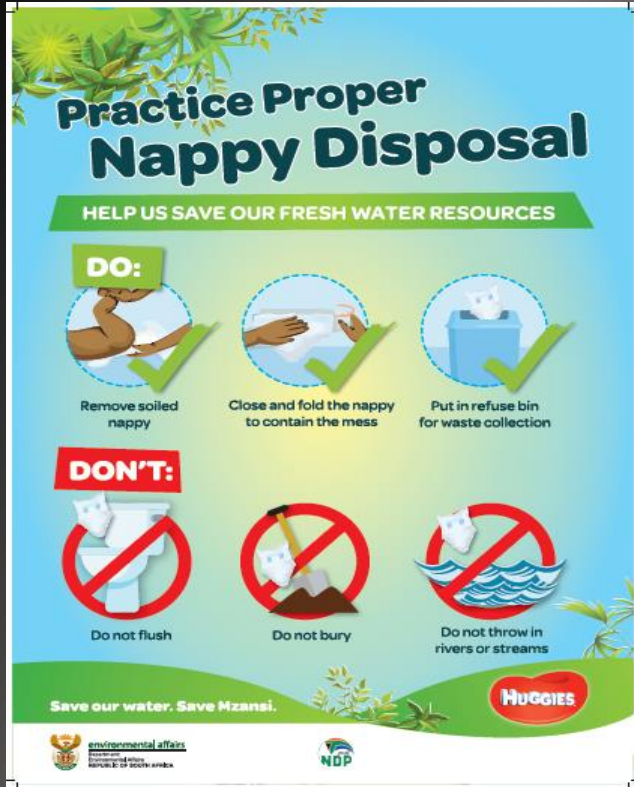
What must I do with nappies and other AHP waste that is generated in an area where waste removal services are not provided?

It is recognised that, depending on the location and cost efficiency of delivering a waste removal service, service levels may differ, between areas of a municipality.

In areas where waste removal services are not provided, the municipality must allow for more feasible alternative ways of waste handling such as on-site disposal that is regularly supervised by waste management officer. Further assistance may be requested from the local authority in your area.

FOR MORE INFORMATION CONTACT:

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Household waste was randomly sampled as per income generation levels (low, medium and high income) whilst other waste were sampled as commercial and industrial waste. Over a one day per municipality, statistically designed number of samples for waste composition were hand sorted and weighed based on their source of generation. The waste categories were measured using approved International American Society for Testing and Materials technique. Samples revealed that different waste stream such as plastics, metals, papers, glass, organic were statistically different across source of generation.

Packaging waste from both household and businesses were at a high volume and that provides opportunity for recycling initiatives and composting facilities that may contribute to circular economy. However, packaging waste was characterised being very dirty and contaminated due to lack of waste separation at source program in place. In addition, there was a high volume of organic waste and garden waste in all municipalities that can lead to composting but not limited to other treatment technologies that municipalities can explore such as biogas.

The exercise also showed the other type of waste that were not supposed to be disposed at the general waste disposal facility such used oil, Health Care Risk waste from clinics and hospitals. The training was an eye opener to municipalities to put measures in place of not accepting hazardous and health care risk waste in the general waste disposal facility as these contravene the waste management license conditions. The training was conducted by Ms Sindiswa Duma from Municipal Waste Support Directorate with assistance of Siyabonga Dlamini from Harry Gwala District Municipality and Shadrack Buthelezi from Uthukela District Municipality both deployed by the department in the two districts.

Waste Characterisation Training

Waste characterisation is the act of determining how much paper, glass, food waste, etc. is discarded in waste streams. Through waste characterisation we can determine how to reduce waste, set up recycling programs, and conserve money and resources. It provides valuable information for the planning of waste management systems and infrastructure to recover waste and minimise its disposal at waste disposal facilities. Currently, volume and waste types collected from the households, businesses and disposed in the waste disposal facilities of Inkosi Langalibalele Local Municipality, Dr Nkosazana Dlamini Zuma Local Municipality, Greater Kokstad Local Municipality and Umzimkhulu Local municipality are not known. Ubuhlebezwe Local Municipality does not own any waste disposal facility and dispose its waste in Umzimkhulu waste disposal facility.

Waste characterisation was used as a tool to identify waste stream and calculation of the volume of waste stream that reaches waste disposal facilities in these municipalities. Further, waste characterisation was also used for the scenario planning of the development of Integrated Waste Management Plans (IWMPs) for these municipalities to determine if the projects are bankable and that they can create job opportunities whilst protecting the environment. Municipal officials, Expanded Public Works Programmes (EPWPs), Community Work Programmes (CWPs), waste pickers in the disposal sites, Youth Environmental Coordinators and provincial officials from five different municipalities were trained on how to characterise waste stream generated from households, businesses etc.



Inkosi Langalibalele Waste Characterisation



Dr Nkosazana Dlamini Zuma Local Municipality Waste characterisation



Greater Kokstad Waste Characterisation



Umzimkhulu & Ubuhlebezwe Waste Characterisation

Municipalities or SMMEs that have an interest in training, may send their requests to the Municipal Waste Support Directorate on emails below:
MMogotsi@environment.gov.za or SPDuma@environment.gov.za

Stockholm Convention on Persistent Organic Pollutants 2019 Roadshows

The Department will be conducting public outreach on the sound management of persistent organic pollutants (POPs), with a particular focus on the 30 POPs listed by the Stockholm Convention.

POPs are hazardous and environmentally persistent substances which can be transported between countries by earth's oceans, atmosphere and migration species. POPs bio-accumulate and have been found in the fatty tissues of humans and other animals. The Convention lists POPs in 3 annexes, based on persistence, bioaccumulation, long-range dispersion and toxicity:

- Annex A requires elimination of the import, export, production and use of a chemical.
- Annex B restricts the use of chemicals to acceptable purposes or a specific exemption (i.e. chemicals which have restricted use)
- Annex C covers POPs when they are formed and released unintentionally from anthropogenic sources

The aim of the outreach is:

- To raise awareness on health and environmental effects caused by POPs;
- To inform the South African community about the Convention and its obligation to the country – where the government commit to reducing and where feasible, eliminating the production, and release of POPs; and
- To inform the public on what the country is doing to comply with the provisions of the Convention.

Stockholm Convention is a global treaty that seeks to protect human health and the environment from the harmful effects of persistent organic pollutants

The persistent organic pollutants (POPs) are toxic chemicals that adversely affect human health and the environment

Stockholm Convention Roadshows

Dates: September, October and November 2019 (actual dates to be announced)

Venues: Northern Cape, Western Cape and Free State Provinces (actual venues to be announced)

The objectives of the Stockholm Convention on POPs is to protect human health and the environment from effects of POPs. The Convention sets out a range of control measures to reduce and, where feasible, eliminate POPs releases, including emissions of by-product POPs or through unintentional releases. The Convention also aims to ensure the sound management of stockpiles and waste that consist, contain or are contaminated by POPs.

Stockholm Convention commits government to reducing, and where feasible, eliminating the production and environmental releases of POPs and also requires each country, for this instance, South Africa to develop a National Implementation Plan (NIP) setting how it will address its obligations under the convention and how it will reduce POPs in the environment and the South African community, through public information, awareness and education.

The chemicals controlled by the Stockholm Convention are listed below.

Chemical	Pesticide	Industrial chemicals	Unintentional production	Annex
DDT	+			B
Aldrin, Dieldrin, Endrine, Dicofof	+			A
Chlordane, Chlordecone, Toxaphene,	+		By-product of Lindane	A
Alpha-, Beta- and Gamman HCH	+			A
Endosulfan, Heptachlor, Mirex,	+			A
Pentachlorophenol	+	+		A
Commercial PentaBDE		+		A
Commercial OctaBDE		+		A
Commercial DecaBDE		+		A
Hexabromobiphenyl (HBD)		+		A
Hexabromocyclododecane (HBCD)		+		A
Perfluorooctane sulfonic acid (PFOS), its salts and PFOST, PFOA, PFHxS	+	+		B
Short chain chlorinated paraffin		+		A
PCB, PeCBz, HCB, PCN, HCBd	+	+	+	A/C
PCDD, PCDF			+	