Proposed Establishment of the N.N. Metals (Pty) Ltd Waltloo Metal Reclamation Facility

BACKGROUND INFORMATION DOCUMENT (BID)

Prepared for: N.N. Metals (Pty) Ltd

Prepared by: Bokamoso Landscape Architects &

Environmental Consultants

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N N Metals (Pty) Ltd



Purpose of the document

The Background Information Document (BID) provides information pertaining to the proposed N.N. Metals (Pty) Ltd Waltloo Metal Reclamation Facility, which is to be established on the remaining extent of erf 110, Waltloo Township, Registration Division: JR., Gauteng Province and measures approximately 1,2328 hectares in extent. The said property falls on a regional scale within the jurisdiction of City of Tswane (CoT), Gauteng Province (*Please refer to Figure 1-Locality Map and Figure 2-Aerial Map*)

You are subsequently invited in terms of Chapter 6 of the 2010 Environmental Impact Assessment (EIA) Regulations to participate in the application process for Environmental Authorisation (EA), through the submission of issues, concerns and representations which pertain to the proposed Metal Reclamation Facility (MRF). Your participation would ultimately assist in the identification of the potential environmental and social consequences associated with the said MRF. Please kindly submit your name, contact information, and interests in the matter in writing to the entity/contact person given below:

Bokamoso Landscape Architects & Environmental Consultants

Niel Brink

Tel: (012) 346 3810 Fax: 086 570 5659

E-Mail: <u>lizelleg@mweb.co.za</u>

Please kindly ensure that your contact details and interests in the matter are forwarded to Bokamoso by or on **Monday 26 August 2012.**

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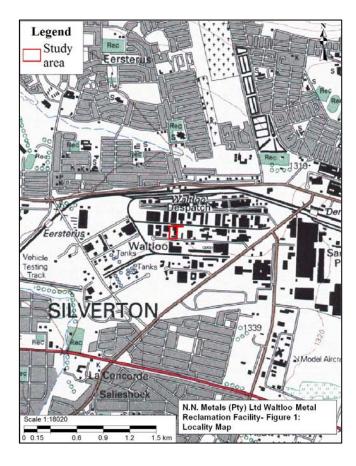
ВА	Basic Assessment		
BAR	Basic Assessment Report		
BID	Background Information Document		
СоТ	City of Tshwane		
EA	Environmental Authorisation		
EAP	Environmental Assessment Practitioner		
ECA	Environmental Conservation Act		
EIA	Environmental Impact Assessment		
GDARD	Gauteng Department of Agriculture and Rural Development		
GN	Government Notice		
I & AP	Interested and Affected Party		
MRF	Metal Reclamation Facility		
NEMA	National Environmental Management Act		
NEMWA	National Environmental Management: Waste Act		
WMF	Waste Management Facility		

Section 1: Introduction and Background

Bokamoso Landscape Architects & Environmental Consultants have been independent appointed as an environmental consultants/Environmental Assessment Practitioner (EAP) to facilitate the environmental management processes associated with the proposed N.N. Metals (Pty) Ltd Waltloo Metal Reclamation *Facility* in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), the 2010 Environmental Impact Assessment (EIA) and regulations, the National Environmental Management: Waste Act, 2008 (Act 59 No. of 2008) (NEMWA) (here referred to as 'the Waste Act').

The Waste Act, came into effect on 1 July 2009, and subsequently repealed Section

20 of the Environment Conservation Act, 1989 (Act No. 73 of 1989) ('ECA') and introduced new provisions regarding the licensing of waste management activities. On 3 July 2009 the Minister of Water and Environmental Affairs published a list of waste management activities, which requires authorisation in terms of the Waste Act prior to commencement. In terms of Government Notice (GN) 718 of the Waste Act, any person who wishes to commence, undertake or conduct a waste management activity, as listed under Category A, must conduct a Basic Assessment (BA) process, as stipulated in the EIA Regulations, made under Section 24(5) of NEMA, 1998 as part of a waste management license application.





N. N. Metals (Pty) Ltd is a prominent and well-known dealer of ferrous and non-ferrous metals and their metal reclamation facilities services a considerable number of scrap metal suppliers, dealers and vendors in the broader Pretoria, Brits and Phalaborwa area. N. N. Metals (Pty) Ltd is operating an existing metal reclamation facility in the in Koedoespoort, Silverton, but it is their intension to relocate the said facility to a property in Waltloo, which is

currently owned by the applicant. (Please refer to Section 2 for a process overview of the proposed Metal Reclamation Facility)

Thus, in order to ensure compliance with the Waste Act, an application for a new Waste License was compiled and submitted to approving authority, the Gauteng Department of Agriculture and Rural Development (GDARD) on 04/06/2012.

Section 2: Overview of the proposed Metal Reclamation Facility

The metal reclamation process involves the sourcing of non-ferrous and ferrous scrap metal from various external suppliers and the processing of the said metal to physically recover metals for further use by external entities.

2.1 Input Material

Ferrous and Non-ferrous scrap metal is supplied by a number of external suppliers and vendors, delivered to the operation by truck and/or bakkie loads. (Please note that an external supplier will specifically deliver either non-ferrous metals or ferrous metals, or both, but however separated, thus creating two waste streams). scrap metal received is visually inspected prior to being weighed, to remove any other waste material that will not be recycled as part of the process. Such materials are designated as unwanted, and are disposed by the service provider and/or vendor which supplied the scrap metal in the first instance. The scrap metal is weighed at a weighbridge (situated at the entrance of the site) or a platform/bench scale for small weight items not delivered in truck and/or bakkie loads.

2.2 Ferrous scrap metal waste stream:

Ferrous metals are able to be recycled, with steel being the most recycled material in the world. Ferrous metals contain an appreciable percentage of iron and the addition of carbon and other substances creates steel. The most commonly recycled items are containers, cans, structural steel, parts of motor vehicles, household appliances etc. Ferrous metals are once weighed, graded and sorted into (a) steel, (b) sub-grade material and (c) cast iron and routed to different stockpiles at the facility. Please note that in many instances an external supplier may deliver ferrous scrap metals as steel, or subgrade material or cast iron prior to being weighed. The stockpiles of steel and subgrade material are in addition visually inspected to separate and remove any (1) non-ferrous metals or (2) other waste material which remained behind in the graded stockpiles.

(a) <u>Ferrous scrap metal waste</u> stream: Steel Material

Once separated from the sub-grade material, the dimensions and sizes of the steel are reduced with the use of a cutting torch and/or cropper. The steel material is essentially reduced to enable enhanced handling, loading and transportation thereof. The steel once reduced, are stockpiled as recycled collected material, by trucks and transported to clients.

(b) <u>Ferrous scrap metal waste</u> stream: Sub-grade material

The sub-grade material is either directly collected from the stockpiles by trucks or reduced through the use of a bailing machine.

(c) <u>Ferrous scrap metal waste</u> <u>stream: Cast Iron</u>

The cast iron is directly collected from the stockpiles by trucks and transported to clients.

2.3 Non-ferrous scrap metal waste

A non-ferrous metal is any metal, including alloys, that does not contain iron in appreciable amounts. Non-ferrous metals are generally more expensive due to its desirable properties such as low weight, higher conductivity, non-magnetic property, or resistance to corrosion. Some important non-ferrous metals include aluminium, copper and the alloy brass, lead, nickel, tin and titanium.

Non-ferrous metals are supplied by external suppliers and vendors. Non-ferrous metals, once weighed are visually sorted, and graded (in different classes) at an enclosed Waste Management Facility (WMF). The non-ferrous scrap metal is as with the ferrous metal waste stream visually inspected to remove other waste material that will not be recycled in the process. Such materials are temporary stored on site at a designated waste storage area and/or facility until disposed of by a service provider.

The proposed Waltloo facility will have the addition of a specialised non-ferrous metal shredder, which would essentially separate non-ferrous metals from nonmaterials. The specialised metallic process is specifically designed accommodate the recovery of non-ferrous metals which forms a component of used cables. The said input material is predominantly sourced from the electrical services and telecommunication industries.

The non-ferrous metals are once sorted and recovered temporarily stored at the enclosed WMF until collected by trucks and transported to clients.

Section 3: Components of the proposed Metal Reclamation Facility:

The proposed metal reclamation facility would include the following components:

- Office buildings;
- Weighbridge(s);
- > One shredder, with a dust extraction component;
- Generator;
- > Enclosed non-ferrous Metal Reclamation Facility; and
- Bailing machine(s)

Section 4: Application process in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEMWA)

As mentioned before, the Waste Act came into effect on 1 July 2009 and repealed Section 20 of the ECA, 1989 and is thus considered as the lead environmental statutes which regulate authorisations for waste management activities. The Minister of Water and Environmental Affairs subsequently published a list¹ of waste management activities on 3 July 2009 that have or are likely to have a detrimental effect on the environment which requires authorisation in terms of the Waste Act prior to commencement.

In terms of the Waste Act, the term waste is defined and referred to as: any substance, whether or not that substance can be reduced, re-used, recycled and recovered-

- -that is surplus, unwanted, rejected, discarded, abandoned, or disposed of;
- -which the generator has no further use of for the purpose of production;
- -that must be treated or disposed of; or
- that is identified as a waste by the Minister by notice in the Gazette

It should be noted that the in terms of the Waste Act, the material(s) received by the proposed facility, is regarded as waste, and that the proposed waste management activities which are associated with the metal reclamation facility are furthermore subsequently listed in terms. Category A of GN 718 of 2009, which require formal authorisation prior to commencement.

Please refer to Table 1 for a summary of the relevant legislation and the listed activities.

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¹ Government Notice 718 of 2009

Table 1: Summary of applicable listed activities

INDICATE THE NO. & DATE OF THE RELEVANT NOTICE:	CATEGORY A OR B (AS LISTED IN NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT)	ACTIVITY NUMBERS (AS LISTED IN EITHER CATEGORY A OR B OF NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT)	DESCRIBE EACH LISTED ACTIVITY:	COMPONENT OF DEVELOPMENT
GN 718 of 3 July 2009	Category A	Activity 1	The storage, including the temporary storage of general waste at a facility that has the capacity to store in excess of 100m³ of general waste at any one time, excluding the storage of waste in lagoons.	The proposed mental reclamation facility entails the temporary storage ² of waste in excess of 100m ² .
GN 718 of 3 July 2009	Category A	Activity 5	The sorting, shredding, grinding or bailing of general waste at a facility that has the capacity to process in excess of one ton of general waste per day.	The proposed activity entails the sorting, shredding and bailing of general waste in excess of one ton per day.
GN 718 of 3 July 2009	Category A	Activity 7	The recycling or re-use of general waste of more than 10 tons per month	The proposed metal reclamation facility entails the recycling of general waste of more than 10 tons per month.
GN 718 of 3 July 2009	Category A	Activity 18	The construction of facilities for activities listed in Category A of this Schedule.	The proposed metal reclamation facility entails the construction of waste management facilities for the management said waste.
GN 718 of 3 July 2009	Category A	Activity 19	The expansion of facilities for or changes to existing facilities for any process or activity, which requires an amendment of an existing permit or license or a new permit or license in terms of legislation governing the release of pollution, effluent or waste.	The proposed metal reclamation facility entails the expansion of existing facilities on site, which are associated with the management of waste on site.

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 $^{^2}$ Note: Temporary storage of waste means the continues storage of waste, excluding a once-off storage of waste for a period not exceeding 90 days.

It should be noted that any person who wishes to commence, undertake or conduct a waste management activity, as listed in Category A, must conduct a BA process in terms of the 2010 EIA Regulations made under section 24(5) of the National Environmental Management Act, 1998 as part of a waste management license application. Bokamoso is at present facilitating the compilation of the Draft Basic Assessment Report (BAR) in terms of the regulations for the proposed MRF. The BAR is considered as a mini EIA, and is essentially geared to provide for a description of bio-physical and socio-economical environment, and the manner in which the said environment may be affected by the proposed activity. The BAR would furthermore include a description and assessment of the significance of any environmental impacts which is to be associated with the proposed activity. The EAP would amongst others include a reasoned opinion whether the activity should or not be authorised, and if authorised any conditions made in respect of the authorisation.

All registered I & APs and other indentified stakeholders will be afforded an opportunity to comment on the Draft BAR, which will be made available for a period of 60 days in terms of Regulation 56(8) of the EIA Regulations. All comments received from I & APs and stakeholders will be included and addressed in the Final BAR which will be submitted to the approving authority-GDARD for consideration.

Assessment of potential environmental impacts:

The EAP managing the application for a waste license application is obligated to describe and assess the significance of environmental impacts associated with the development proposal. The most significant environmental impacts which may emanate from the proposed MRF include:

▶ Bio-physical Environment:

- Surface water pollution and contamination;
- Sub-surface water pollution and contamination; and
- Air pollution

> Social and Economical Environment:

- Noise pollution;
- Visual pollution;
- Safety and Security;
- Impacts on property values; and
- Traffic Impacts;