PART B: GENERAL

1. DESCRIPTION OF PROJECT

The entire project will entail the following (full detail of the project can also be appended):

Tutuka Power Station, in the Mpumalanga Province, envisages the continuation of dry ash disposal (i.e. dry ashing) over Eskom owned land. Such land was purchased before the commencement of Environmental laws, the Environment Conservation Act, in particular. Part of its planning processes, Eskom developed designs which were approved internally ~ these designs showed the proposed ashing lands. With the promulgation of the environmental laws, and the National Environmental Management Waste Act, Act 59 of 2008, in particular, Eskom would like to align its continued ashing activities with the requirements of the waste licensing processes.

The proposed continuous development is an ash disposal site with the following specifications:
-Capacity of airspace of 353,1 million m^3 (Existing and remaining); and
-Ground footprint of 2500 Ha (Existing & Remaining ash dump & pollution control canals)

This ash disposal facility shall be able to accommodate the ashing requirements of the power station for the next 44 years, from 2012 to 2055, which is the life of the station. The proposed 759 Ha portion, of farms Rouxland 348 IS (Portions 1, 25, 27 and 28), Mooimeisjesfontein 376 IS (Portions 4 and 2), Dwars in de Weg 350 IS (Portions 2, 5, 6, and 8) and Spioenkop 375 IS (Portions 1, 2 and remainder), is located on the South Eastern portion of the Eskom, Tutuka Power Station ashing lands site boundary. The continued portion of ash dump will continue from the existing ash dump, all on Eskom's land within the originally planned ashing area.

The need for this application is to allow station to continue ashing in an environmentally responsible way for life of station.

Purpose of application:

The purpose of the application is to, on behalf of the applicant – Eskom Holdings SOC Limited, apply for an environmental authorisation for the relevant listed activities under both the National Environmental Management Act (Act 107 of 1998) and the National Environmental Management Waste Act (Act 59 of 2008), as well as to apply for a Waste Management License, due to the fact that the ash disposal facility is deemed a waste disposal facility.

2. FLOW CHART OF OPERATIONS

Please provide a brief description of the activities and operations at the site. Provide a flow chart of the operation showing all inputs and outputs of the process. Give particulars of the source, location, nature, composition and quantity of emission to the atmosphere, surface water, sewer, and ground-water including noise emissions. Solid waste must be in tons and specify units for liquids and gases.

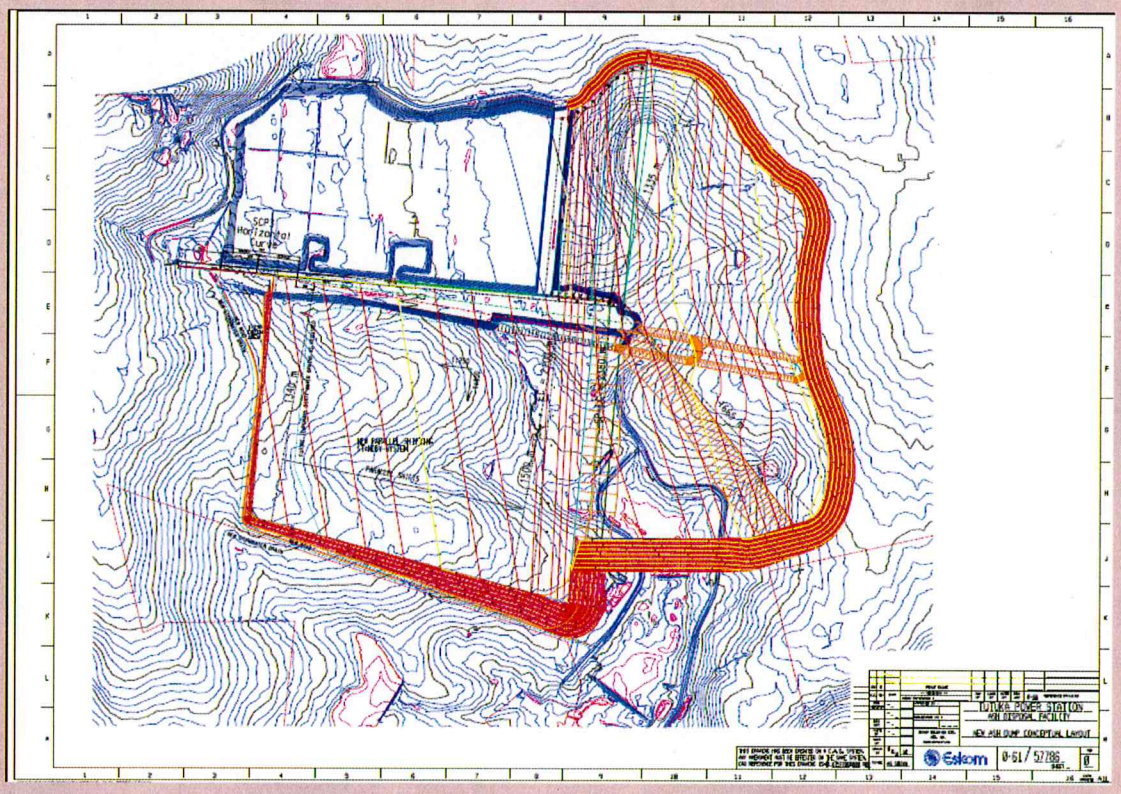
Tutuka Power Station, a coal fired power generation facility commissioned between 1985 – 1990, is located 25 km North of Standerton in the province of Mpumalanga. Tutuka Power Station currently disposes of burnt boiler ash in a dry (20% moisture content) format by means of conveyors, spreader and a stacker system from the station terrace to the Ash Disposal site. The ash disposal site covers an area of 2500 ha and is located approximately 4,5 km east of the station terrace.

The waste product is deposited onto the dump by means of a stacker, which handles some 85% of the total ash whilst the remaining 15% is placed by a standby spreader system. Figure 1 below illustrates the ash dump layout as currently constructed and outlines the footprint of the proposed future extent of the facility.

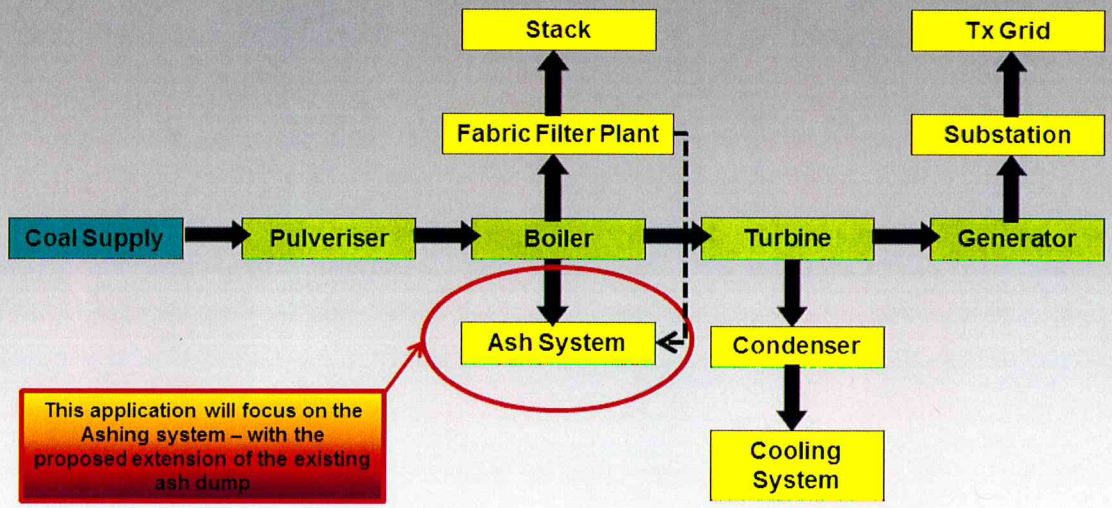
As the ash dump progresses from west to east, the two extendible conveyors will be extended to its final lengths of 4000 m each. The ash dump is built out in two layers. The front stack is deposited by the stacker and spreader to a height of approximately 45 m. The ash is bulldozed out to a slope of 1:3 for dust suppression and rehabilitation purposes. The stacker then moves around the head – end of the shiftable conveyor to dump another 10 meters high back stack.

As the dump advances, the topsoil is stripped ahead of the dump and is taken by truck and placed on top of the final dump height. Grass is then planted in this top soil.

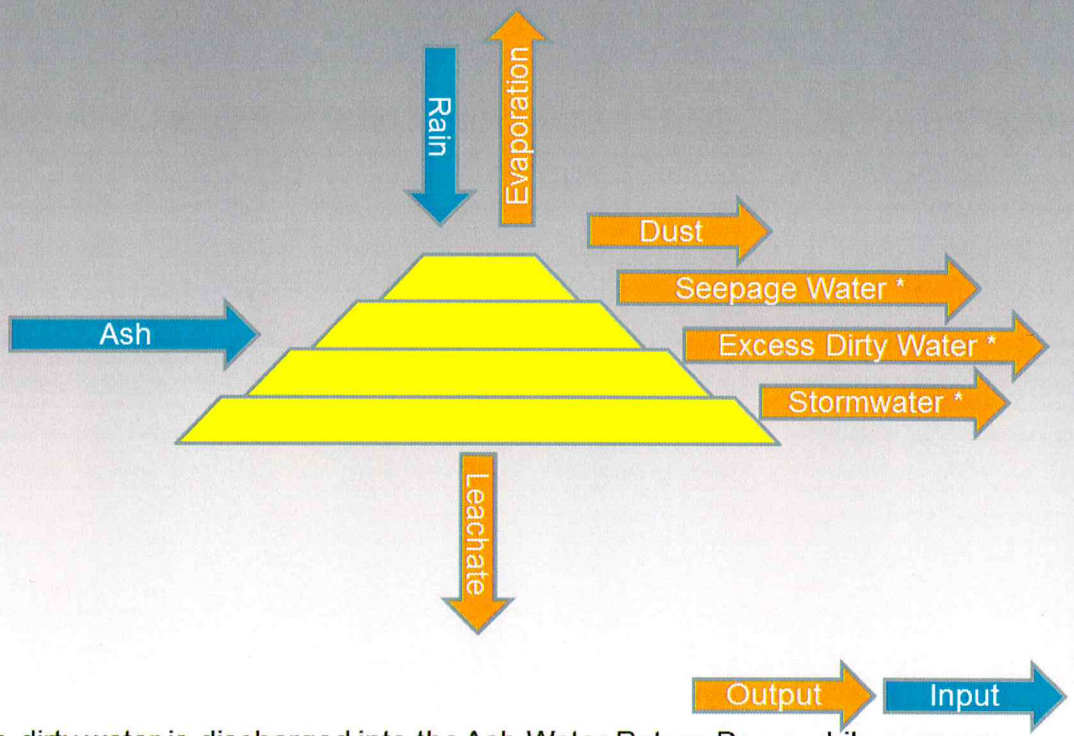
The ash dump facility has the required dirty and clean water channels and the clean storm water flows to the north and south clean water dams. The dirty water flows to the south settling dam and then to the south dirty water dam.



Tutuka Power Station - Process Flow Diagram



Tutuka Power Station Ashing System – Simplified Inputs and Outputs Diagram



* Excess dirty water is discharged into the Ash Water Return Dams while seepage water and stormwater is discharged into the Seepage water dam

3. BACKGROUND INFORMATION

Project applicant:	**Eskom Holdings SOC Limited**		
Trading name (if any):	**As Above**		
Contact person:	**Deidre Herbst**		
Physical address:	**Megawatt Park, Maxwell Drive, Sunninghill, Sandton**		
Postal address:	**PO Box 1091**		
Postal code:	**2000**	Cell:	**083 660 1147**
Telephone:	**011 800 3501**	Fax:	**086 660 6092**
E-mail:	**deidre.herbst@eskom.co.za**		

Landowner:	**Eskom Holdings Limited (Tutuka Power Station)**		
Contact person:	**Mr Ryno Lacock (Power Station Manager)**		
Postal address:	**Private Bag X2016, Standerton**		
Postal code:	**2430**	Cell:	[redacted]
Telephone:	**017 749-5700**	Fax:	**017 749-5736**
E-mail:	**LacockR@eskom.co.za**		

In instances where there is more than one landowner, please attach a list of landowners with their contact details to this application.

Ownership of the property (mark only one with an X)

Property owned by applicant (100% Share value)	**X**	**Property leased by applicant**	[redacted]
Property owned by applicant (Share value less than 100%)	[redacted]	**The property is communal land**	[redacted]

Local authority in whose jurisdiction the proposed activity will fall:	**Lekwa Local Municipality**		
Nearest town or districts:	**Standerton**		
Contact person:	**Mr. S.Z. Luwaca (Municipal Manager)**		
Postal address:	**P O Box 66, Standerton**		
Postal code:	**2430**	**Cell:**	[redacted]
Telephone:	**(017) 712 9600**	**Fax:**	**(017) 712 6808**
E-mail:	[redacted]		

In instances where there is more than one local authority involved, please attach a list of local authorities with their contact details to this application.

[redacted]

Please note that a complete list of all organs or state and or any other applicable authority with their contact details must be appended to this application.

Property description/physical address:

Eskom owned land:

- **Pretorius Vley 374 IS (Portions 2, 4, 10, 11)**
- **Mooimeisjesfontein 376 IS (Portions 2 and 4)**
- **Rouxland 348 IS (Portions 1, 25, 27 and 28)**
- **Dwars in de weg 350 IS (Portions 2, 5, 6 and 8)**
- **Spioen Kop 375 IS (Portions 1, 2 and Remainder)**

(Farm name, portion etc.) Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application.

In instances where there is more than one town or district involved, please attach a list of towns or districts to this application.

Current land-use where the site is situated:

Industrial		Recreation	
Agriculture		Commercial	
Residential		Mining & quarrying	
Forestry		Wilderness areas	
Wetlands		Nature area	
Open spaces	X		

Other current land-use.....

Current land-use zoning:

Agricultural

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to , to this application.

Is a change of land-use or a consent use application required?	**Unsure as yet**
Must a building plan be submitted to the local authority?	**Unsure as yet**

Locality map:

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.) The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection).