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## PART B: GENERAL

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### 1. DESCRIPTION OF PROJECT

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

Majuba 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. As 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 dump site with the following specifications:

- Capacity of airspace of 156.2 million m<sup>3</sup> (remaining from August 2010 survey); and
- Ground footprint of 955 ha (362 ha: 0 – 15 year + 593 ha: 15 – 45 year) Ha (Fenced Area including pollution control dams)

This ash disposal facility shall be able to accommodate the ashing requirements of the power station for the next 33 years, from 2012 to 2045 (these timelines are based on an annual ash production rate of 3.579 million tonnes). The proposed portion of 593 Ha is located on the Southern portion of the current Majuba Power Station ash dump site boundary. The proposed progressive 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 is applicaiton is to allow the Majuba Power Station to continue with the disposal of its ash in an environmentally responsible way for the 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

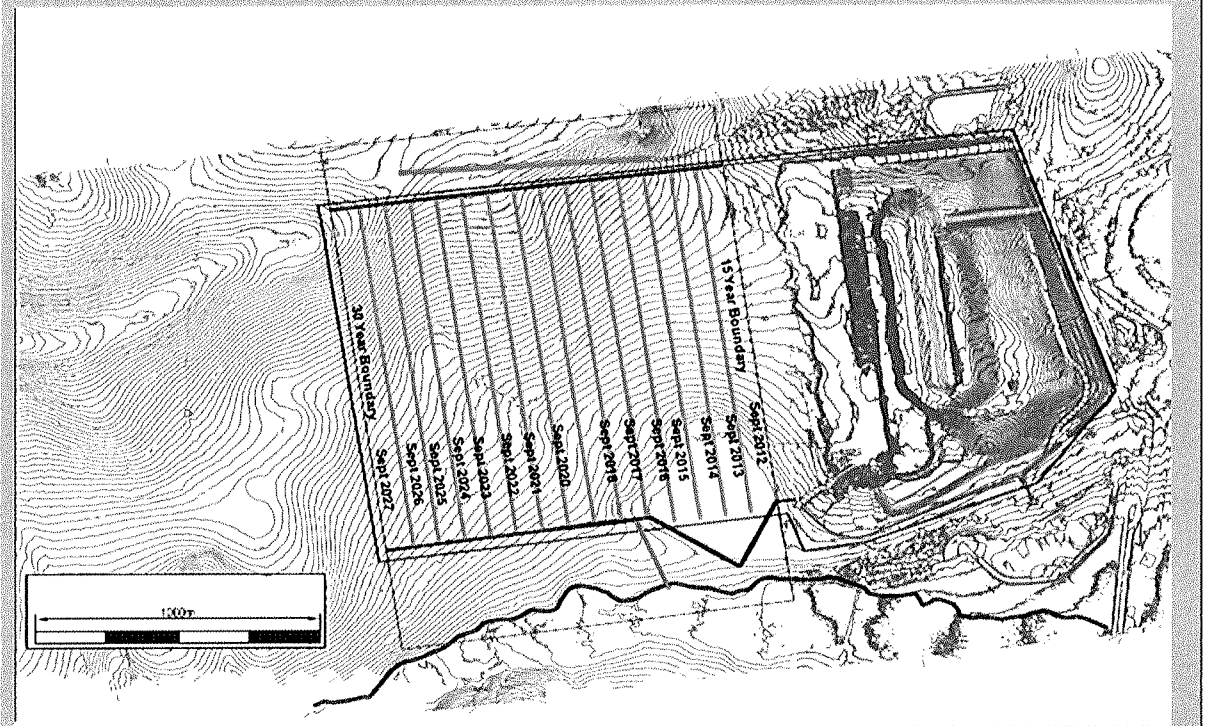
Please provide a brief description of the activities and operations at the site. Provide a flow chart of the operation showing all inputs and outputs of the process. Give particulars of the source, location, nature, composition and quantity of emission to the atmosphere, surface water, sewer, and ground-water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

The relevant flow diagrams depicting inputs and outputs, as well as the process flow, are provided below. The waste in question is ash which has its source from the coal combustion process of the power station. The nature and composition of the ash will be determined and classified during the EIA process.

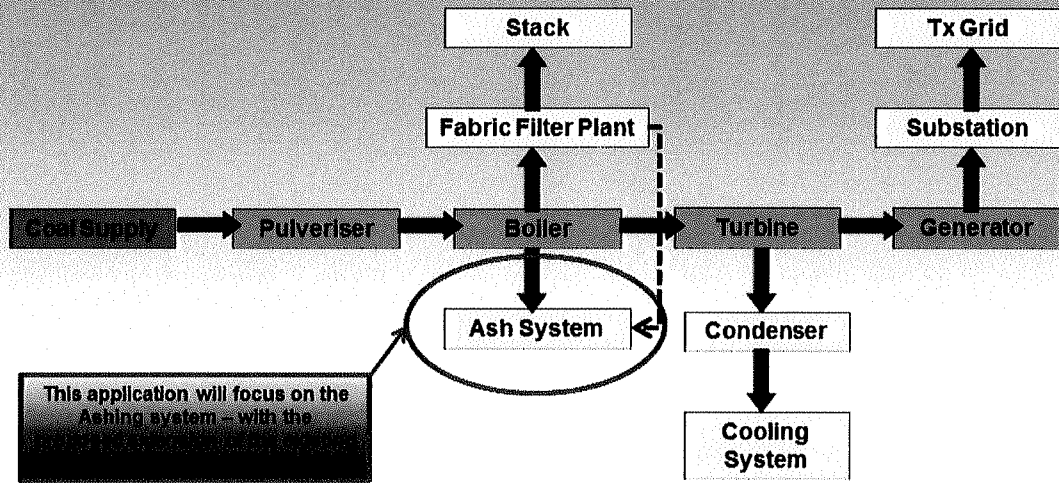
The waste product is deposited onto the dump by means of a stacker at a rate of approximately 15 333 tons per day.

In terms of the emissions from the ash disposal facility, these will be identified during the EIA process by the relevant specialists.

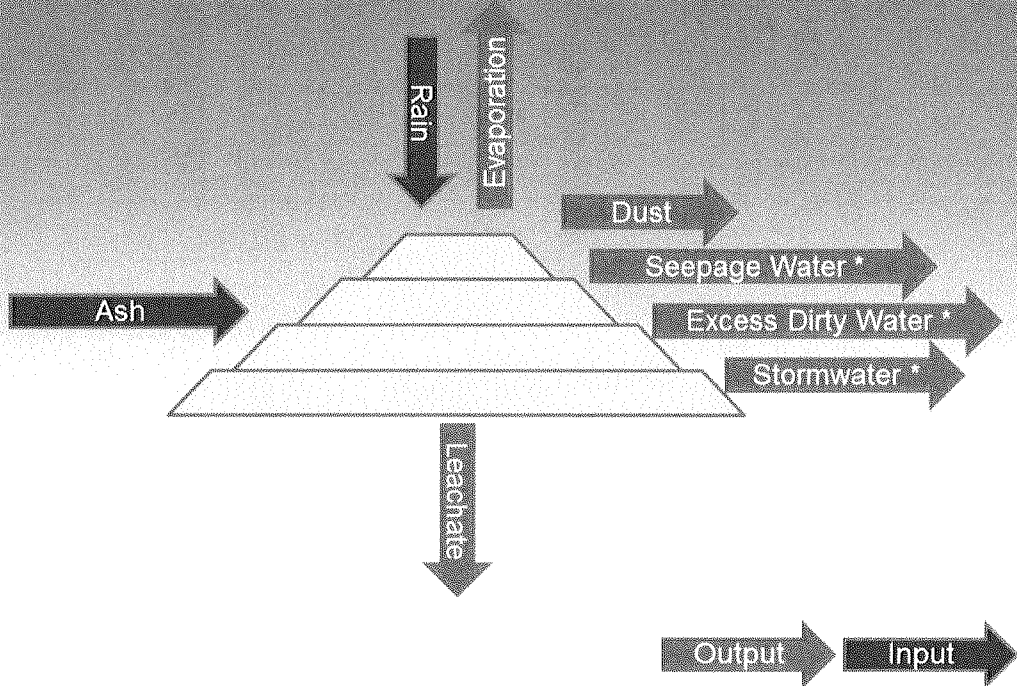
The figure below illustrates the ash dump layout as currently constructed and outlines the footprint of the proposed future extent of the facility.



### Majuba Power Station - Process Flow Diagram



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

|                 |  |       |                     |
|-----------------|--|-------|---------------------|
| Landowner:      | <b>Eskom Holdings Limited (Majuba Power Station)</b> |       |                     |
| Contact person: | <b>Gladman Mkwai (Power Station Manager)</b>         |       |                     |
| Postal address: | <b>Private Bag 9001, Volksrust</b>                   |       |                     |
| Postal code:    | <b>2470</b>  | Cell: | <b>082 877 9808</b> |
| Telephone:      | <b>017 799 2100/1</b>                                | Fax:  | <b>017 799 2145</b> |
| E-mail:         | <b>MkwaiMG@eskom.co.za</b>                           |       |                     |

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)           | <input checked="" type="checkbox"/> | Property leased by applicant  | <input type="checkbox"/> |
| Property owned by applicant (Share value less than 100%) | <input type="checkbox"/>            | The property is communal land | <input type="checkbox"/> |

|  |  |       |                          |
|--|--|-------|--------------------------|
| Local authority in whose jurisdiction the proposed activity will fall: | <b>Pixley Ka Seme Local Municipality (MP 304100)</b> |       |                          |
| Nearest town or districts:   | <b>Amersfoort</b>                                    |       |                          |
| Contact person:  | <b>Mr L de Jager, Municipal Manager</b>              |       |                          |
| Postal address:  | <b>Private Bag x 9011, Volksrust</b>                 |       |                          |
| Postal code:   | <b>2470</b>  | Cell: | <input type="checkbox"/> |
| Telephone:   | <b>(017) 734 6101</b>                                | Fax:  | <b>086 630 2209</b>      |
| E-mail:  | <b>records@pixleykaseme.co.za</b>                    |       |                          |

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.

**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:**

- Farm Roodekopjes 67 HS (Portion 1)
- Farm Witkopjes 81 HS (Portions 1, 2, 5, 6, 7, 13 and 14)

(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
- Agriculture
- Residential
- Forestry
- Wetlands
- Open spaces

|   |
|---|
| X |
| X |
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|   |
| X |
|   |

- Recreation
- Commercial
- Mining & quarrying
- Wilderness areas
- Nature area

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|   |
| 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?  
Must a building plan be submitted to the local authority?

|                      |
|----------------------|
| <b>Unsure as yet</b> |
| <b>Unsure as yet</b> |

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).