Environmental Impact Assessment (EIA) and Waste Licensing Application for the Proposed Continuous Ashing Activities at Majuba Power Station

Ezamokhuhle Community Hall
Public Meeting
20 November 2012

Purpose of the Meeting

• Provide information regarding the project
• Provide an opportunity to raise issues and comments on the project
• Invite I&APs to register on the project database
• Provide an opportunity for interaction with the project team
Conduct of the Meeting

- Focus on issues at hand
- Equal opportunity
- Cell phones on silent
- Work through the facilitator
- Speak in language of choice

Role Players

<table>
<thead>
<tr>
<th>Lidwala Consulting Engineers (SA) (Pty) Ltd</th>
<th>• Independent Environmental Assessment Practitioner</th>
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<tbody>
<tr>
<td>Imaginative Africa</td>
<td>• Public Participation Consultant</td>
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<tr>
<td>Eskom Holdings SOC Ltd – Generation Division</td>
<td>Majuba Power Station</td>
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<td>Department of Environmental Affairs</td>
<td>• Lead Decision maker for the Environmental Authorization Application</td>
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<td>Interested and Affected Parties</td>
<td>• Raise comments and issues regarding the proposed project for inclusion in the relevant documentation</td>
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<td>Commenting Authorities</td>
<td>• MDEDET,</td>
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<td>• DMR, etc..</td>
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What does the Project Entail?

Presented by:
Tebogo Madisha – Majuba Power Station

What does the Project Entail?

• The project entails the continuation of dry ash disposal at Majuba Power Station
• Majuba disposes it’s ash via conveyors and stackers.
• Extension of drainage canals, access roads and fence installations.
• The extension is envisaged on previously acquired/purchased land (Existing footprint).

Current challenges:

• Majuba will run out space for the disposal of ash on the existing footprint
Specification and Requirements

- Land for continuous ash disposal up to 45 years (remaining life of station).
- Ash disposal capacity of 184 million cubic metres and land of 800 hectares.
- Eskom would like to align its ashing activities with NEMWA’s requirements.
- EIA in progress to investigate potential alternatives within the vicinity of Majuba Power Station.

Majuba’s Existing Ash Disposal Facility
Environmental Studies

Presented by:
Ashlea Strong

Why Environmental Studies?

• Legislative tool used to ensure that potential impacts are:
  – Identified;
  – Assessed; and
  – Mitigation measures recommended

• Integrated Application
  – EIA Regulations (NEMA); and
  – Waste Act (NEMWA)
## The EIA Process

![Diagram of the EIA Process]

**We are here**

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## Envisaged Timeline

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<th>Phase / Task</th>
<th>Envisaged Date</th>
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<tr>
<td>Application form submission</td>
<td>August 2012</td>
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<tr>
<td>Screening / Scoping Phase</td>
<td>August 2012 – January 2013</td>
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<tr>
<td>EIA Phase</td>
<td>January – June 2013</td>
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<tr>
<td>Final Documents to DEA</td>
<td>June 2013</td>
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<tr>
<td>Authorisation and License</td>
<td>August 2013</td>
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Sensitivity Mapping

• Eskom have already identified an area for the proposed continuous ashing.
• However - in order to allow for a robust environmental process all land within a radius of 12 km was assessed in order to:
  – Identify potential alternatives sites
  – Identify sensitive environmental aspects that may limit the suitability of all identified alternative sites

Proposed Study Area
Sensitivity Mapping

Final Map – Max Wins
Sensitivity Mapping: Placement of sites within acceptable areas

Sensitivity Mapping: Final Alternative Areas
Potential Impacts:
Biophysical

• Geology (underlying rock structure)
  – Impacts related to the construction-related earthworks
  – Impacts related to the pollution in case of spillage/leakage of hydrocarbon and other hazardous material from storage facilities
• Geotechnical issues (Stability)
  – Phase 1 geotechnical study will be undertaken in the EIA phase.
• Topography (hills and valleys)
  – Change to drainage patterns due to construction-related earthworks and additional stormwater drainage patterns.

Potential Impacts:
Biophysical

• Agricultural Potential
  – Pollution of soil due to handling, use and storage of hazardous substances during construction and operation.
  – The loss of available top soil.
  – Key variables that determine the land capability of the study area such as soil fertility reduced and disturbed due to the potential activities related to the ash disposal facility.
  – The loss of viable agricultural land.
• Avifauna (birds)
  – Destruction of habitat and disturbance of birds due to Ash Disposal Facility
  – Impacts due to associated Infrastructure such as powerlines e.g. Electrocutions, Collisions etc..
**Potential Impacts: Biophysical**

- **Surface Water**
  - Impacts on surface water quality;
  - Impacts on hydrology;
  - Impacts related to erosion and sedimentation;
  - Impacts on aquatic biota; and
  - Impacts on aquatic ecosystem services.

- **Groundwater**
  - Contamination of ground water due to hydrocarbon spillage and seepage into groundwater reserves, affecting groundwater quality.
  - Further construction of infrastructure and compaction of the area will further contribute to reduced water infiltration rates to replenish groundwater aquifers.

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**Potential Impacts: Biophysical**

- **Biodiversity (plants and animals)**
  - Direct impacts on threatened flora and fauna species;
  - Direct impacts on protected flora species;
  - Direct impacts on common fauna species/ faunal assemblages (including migration patterns, corridors, etc.);
  - Human - Animal conflicts;
  - Loss or degradation of natural vegetation/ pristine habitat (including ecosystem functioning);
  - Loss/ degradation of surrounding habitat;
  - Impacts on SA’s conservation obligations & targets;
  - Increase in local and regional fragmentation/ isolation of habitat; and
  - Increase in environmental degradation, pollution (air, soils, surface water).
Potential Impacts:
Social

- **Air Quality**
  - Increase in dust generating activities during construction and operation including exceedances of PM10 concentrations and exceedances of dustfall rates.

- **Visual**
  - Impact on the current visual landscape.
  - Impact on sensitive receptors,

- **Heritage**
  - identify the potential heritage sites within the study area
  - identify any impacts (if any) that may occur on these sites as a result of the continuous ashing project

- **Socio-Economic**
  - Perceptions associated with the proposed project; and
  - Local, site-specific issues
  - Job opportunities - None

Conclusions and Recommendations

- Five Alternative Areas and the No-Go Alternative to be investigated in the EIA Phase
- Due to the fact that none of the alternative areas are big enough to stand alone the EIA will investigate which combination of 2 sites are most feasible for use
- Investigate alternatives for relocation / establishment of linear infrastructure (where required)
- Undertake detailed specialist studies
- Compile Environmental Impact Assessment Report
- Waste License Report to be compiled
- Geotechnical studies to be undertaken along with site survey
- Develop Conceptual Design
Public Participation

Presented by:
Bongi Mhlanga

What is Public Participation?

- Public participation is a joint effort between:
  - Stakeholders
  - The proponent
  - Technical Specialists
  - Decision-makers
- Work together to produce better decisions
- Aim: To inform a wide range of I&APs
- Tool: Allows the public to exchange information and express their views and concerns
- Scoping: Facilitates the identification of issues and concerns early in the EIA process
- All contributions from I&APs will be fully documented, evaluated and responded to in the EIA
Public Participation Process to Date

- Identification of Stakeholders or I&APs
- Notification and Advertisements
  - Project advertised in 2 newspapers
    - The Record
    - Cosmos News
- Background Information Document
  - Distributed to all identified I&APs
  - Placed in local public libraries and municipalities
- Meetings:
  - Focus Group meetings, consultations, public meetings and one-on-one interactions

**You can still get involved!! How?**

Discussion

**Facilitator:**

**Bongi Mhlanga**
Way Forward

- Compilation and distribution of minutes
- Inclusion of I&AP comments in Final Environmental Scoping Report (FESR)
- Submission of FESR report to DEA and Provincial Environmental Authorities
- Release of FESR into the public domain
- Authority review
- DEA comments and decision on FESR and POS for EIA
- Proceed with EIA phase if FESR is Accepted

Contact Details

PUBLIC PARTICIPATION OFFICE
CONTACT DETAILS

Lidwala Consulting Engineers (SA) (Pty) Ltd

Bongi Mhlanga / Nicolene Venter

Post: PO Box 32497, Waverley, 0135
Tel: (0861) LIDWALA (0861 543 9252)
Fax: 086 764 9282
E-mail: majubaeia@lidwala.com