

**MEDUPI INFRASTRUCTURE PROJECTS
PUBLIC MEETING
THURSDAY 26 JUNE 2008
14:00
MACHAUKA LODGE, LEPHALALE**

MINUTES

1. WELCOME AND INTRODUCTION

Ms Ingrid Snyman of MasterQ Research opened the meeting and welcomed everyone present, after which all those present introduced themselves.

2. APOLOGIES

No apologies were received.

3. PURPOSE OF THE MEETING

Ms Snyman briefly outlined the purpose of the meeting, which was to provide stakeholders with background information on the proposed Medupi infrastructure projects, as well as feedback on the findings of the various environmental studies that were conducted. Once this was done, the stakeholders present at the meeting would have the opportunity to discuss these issues.

4. BACKGROUND TO THE MEDUPI INFRASTRUCTURE PROJECTS

Ms Jo-Anne Thomas of Savannah Environmental presented the background to the Medupi Infrastructure Projects, which included the following projects:

- Basic Assessment for the proposed Raw Water Reservoir and associated Water Pipelines (DEAT Ref 12/12/20/1139);
- Environmental Impact Assessment process for the Proposed Re-Alignment of the Afguns Road near Medupi Power Station (DEAT Ref 12/12/20/1179);
- Basic Assessment for a proposed telecommunications mast to be constructed within the Medupi Power Station complex (DEAT Ref 12/12/20/1228);
- Request for amendment of the Record of Decision for Medupi Power Station (DEAT Ref 12/12/20/695): Removal of requirement for ambient monitoring of carbon monoxide; and
- Request for amendment of the Record of Decision for Medupi Power Station (DEAT Ref 12/12/20/695): Alignment of the conveyor system.

The presentation is included in Appendix A.

Ms Thomas indicated to the meeting that the environmental studies for the above-mentioned projects were all undertaken in terms of the National Environmental Management Act (NEMA) (Act No. 107 of 1998). Eskom as the project proponent required environmental authorisation from the Department of Environmental Affairs and Tourism (DEAT) and therefore independent environmental studies had to be undertaken in terms of the Environmental Impact Assessment (EIA) regulations stipulated in NEMA. Before continuing with the background information, **Ms Thomas** outlined the various environmental assessment processes, namely the Basic Assessment Process as well as the full EIA process.

4.1 Basic Assessment for the proposed Raw Water Reservoir and associated Water Pipelines (DEAT Ref 12/12/20/1139)

The purpose of the proposed project was to supply raw water to the Medupi power station. The reservoir would have a storage capacity of 19 days, with a total capacity of 400 000m³. The pipelines from the reservoir to the power station would be underground in a permanent servitude of 15m (temporary servitude of 45m during construction). The system will be gravity fed and the reservoir itself will be located on the farm Kuipersbult 511LQ.

During the basic assessment process, two alternative pipeline alignments have been investigated, in light of the potential impacts on the following environments:

- Flora, fauna and ecology;
- Cultural, heritage and archaeological sites;
- Visual; and
- Social.

The results of the basic assessment process indicated that the location of the reservoir was acceptable. Although alternative 3 (an alignment within the existing conveyor belt servitude) was marginally preferred, all the pipeline alignments were considered to be acceptable.

4.2 Environmental Impact Assessment process for the Proposed Re-Alignment of the Afguns Road near Medupi Power Station (DEAT Ref 12/12/20/1179)

Because of the location of the Medupi Power Station, the Steenbokpan Road is being realigned. The proposal is therefore that Afguns Road should also be realigned to intersect at a 90° angle with Steenbokpan Road. This realignment will involve approximately 700m length of road on the portion of the farm Hanglip that is owned by Eskom. The road will be a single carriage way with an asphalt surface and will be in line with provincial road specifications.

The scoping phase of the EIA process has been completed, which indicated that potential impacts would be minimal or unlikely for the social and heritage environment, and therefore no further studies would be conducted for these two specialist fields during the Impact Assessment Phase. Potential impacts on the ecological environment will be considered during the Impact Assessment phase and will include an assessment of impacts associated with the loss of biodiversity (threatened species and their habitat as well as protected tree species), and habitat degradation.

4.3 Basic Assessment for a proposed telecommunications mast to be constructed within the Medupi Power Station complex (DEAT Ref 12/12/20/1228)

The proposed telecommunications mast would be to serve as a voice and data telecommunications mechanism for Eskom staff and contractors. The mast will be situated within the Medupi power station complex and will be less than 70m in height. The mast will be built from angle-iron members to form a self supporting lattice tower.

As the proposed telecommunications mast would be located on a technically feasible site within the Medupi Power Station complex, no alternative site locations have been investigated during the basic assessment process. Of the potential environmental impacts, only the visual impact has been assessed in detail as it is believed that there would be no other significant impacts as a result of the location of the mast. The visual impact associated with the mast was shown to be confined to the power station complex, with minimal impact on the surrounding environment. The proposed mast was therefore found to be acceptable as the potential impacts can be mitigated to an acceptable level.

4.4 Request for amendment of the Record of Decision for Medupi Power Station (DEAT Ref 12/12/20/695): Removal of requirement for ambient monitoring of carbon monoxide

A request has been made to DEAT to remove the requirement for ambient carbon monoxide monitoring from the Record of Decision (ROD) that was issued for the Medupi Power Station. This request was made based on the fact that carbon monoxide streams from Eskom's coal-fired power stations are extremely low as is evident from the air quality monitoring station at the various power stations throughout the country. The contribution from power stations to ambient carbon monoxide is considered to be negligible and therefore none of the power stations actively monitor ambient carbon monoxide. Lastly, it is extremely difficult to monitor ambient carbon monoxide as a result of the contribution of pollutants from other sources such as motor vehicles and coal combustion at nearby mining operations. Eskom have erected an air quality monitoring station within Marapong to monitor other parameters (i.e. sulphur dioxide, nitrogen oxides, ozone, PM2.5 and PM10 concentrations and meteorological parameters). Eskom

acknowledges that they must be responsible for monitoring impacts on surrounding environment and local population.

4.5 Request for amendment of the Record of Decision for Medupi Power Station (DEAT Ref 12/12/20/695): Alignment of the conveyor system

Two alternative conveyor alignments were assessed as part of the EIA process for the Medupi Power Station. These alignments were an eastern alignment, which runs from the Exxaro Grootegeeluk mine along the existing railway line, turning south towards Naauw Ontkomen; and a western alignment, which was a shorter and straighter alignment cutting through the farms Enkelbult and Turfvlakte. The eastern alignment was selected based on the fact that it would pose no significant impacts on Exxaro's future mining developments. These developments plans have since been adapted and therefore Eskom applied to DEAT to amend the ROD from the eastern alignment to the western alignment, based on the fact that:

- There was no significant environmental difference between the two alignments;
- Both alignments were considered as acceptable during the EIA process;
- The western alignment was preferred from a technical perspective; and
- Holistically (technical, economical and environmentally) the western alternative was the preferred alternative.

5. DISCUSSION

Ms Snyman thanked **Ms Thomas** for the presentation, and opened the floor for discussion.

Mr Ben Sengani of the Department of Water Affairs and Forestry (DWAF) indicated that the capacity of the reservoir would require a safety risk assessment from DWAF. **Mr Willem Laenen** of Eskom replied that the reservoir was designed to meet the safety criteria set forth by DWAF.

Mr Bernard Petlane of Eskom DCO asked how the public review period worked. **Ms Thomas** replied that the various reports were placed at public places for a 30-day period and that the availability of such reports was advertised in the local press in addition to notifications sent to registered stakeholders on the project database. Members of the public were encouraged to submit written comments to the consultants once they have reviewed the documents.

Mr Sengani commented that Eskom had to comply with DWAF criteria on the safety of water resources. **Mr Nico Gewers** of Eskom replied that Eskom are required to apply for an integrated water use license from DWAF.

Mr Mahlatji of DWAF asked why the meeting was deemed to be a public meeting if the majority of attendants were Eskom representatives. **Ms Snyman** replied that the meeting had been advertised in the local press to invite the public to attend. There has not been a lot of interest from the public in these projects from the start, potentially as a result of the construction of the Medupi Power Station already being underway. The Eskom attendees were invited to attend in order to be able to answer questions/queries raised.

Mr Sengani (DWAF) stated that the current water resources in the Lephalale area had to support all the various developments that were taking place in the area. He was of the opinion that the amount of water that would be used at the reservoir would impact on other stakeholders and that the size of the reservoir had to consider the water balance in the area as a whole. **Mr Laenen** (Eskom) replied that Eskom was in regular contact with these and other stakeholders on this very issue. **Mr Gewers** added that this was not the first time that Eskom had undertaken projects in the area and that the water issue has been raised in previous EIAs, and had been considered as part of the EIA process for the power station. The issues raised by Mr Sengani were addressed in the EIA for the power station, and this particular project (i.e. the raw water reservoir) is part of the greater power station project that was initially applied for - it is only the position of the reservoir that is changing.

Mr Sengani commented that disadvantaged rural communities were often not represented and that such communities had to have access to water resources. **Mr Gewers** replied that DWAF had their own separate public participation process to discuss water issues with these communities and that Eskom had used the information stemming from the DWAF processes to feed into their (Eskom's) own processes.

Mr Masindi Mapholi of the Lephalale Local Municipality noted that the municipality supported development in the area, but that certain issues had to be considered within the ambit of the environment. He added that Eskom and the Municipality still had to engage on such issues and further suggested that ward councillors should be involved in the process as the representatives of the community. **Ms Snyman** replied that stakeholders were requested to suggest additional stakeholders whom they regarded should form part of the process. She added that the ward councillors were registered on the project database and that they had been invited to attend the public meeting. **Mr Kubentheran Nair** of Eskom also indicated that Eskom has been trying to engage with the Municipality since April 2008 to request a meeting with the Municipality (with proof of such requests) but thus far they have had no response. **Mr Laenen** stated that Eskom would be one of the stakeholders that would be involved in the Municipality's water summit that commenced on 9 July 2008.

Mr Wolfie Jahn from Exxaro stated that representation from the Lephalale Municipality at the Lephalale-Mokolo Water Augmentation Project (Liaison

meeting between Eskom, Sasol, Exxaro and the Department of Water Affairs and Forestry) chaired by DWAF had been requested on several occasions, but no representation had been forthcoming thus far.

A representative from DWAF indicated that the draft water licences that had been issued might have to be amended with the realignment of the conveyor belt as different river systems may be crossed. **Mr Gewers** replied that Eskom would cross check with DWAF to ensure that these licences were still valid and submit applications for any amendments if required.

6. WAY FORWARD

Ms Snyman indicated that the two applications to amend the ROD have already been submitted to DEAT. The public review period for the Scoping Report on the proposed Afguns Road realignment ended on 26 June 2008, whereas the public review period for the Basic Assessment reports for the Reservoir and pipelines ended on 12 July 2008 and for the Telecommunications mast on 26 July 2008.

7. CLOSURE

Ms Snyman thanked the attendants for their participation and closed the meeting at 15:00.

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ATTENDANCE REGISTER

NAME	ORGANISATION & DESIGNATION	POSTAL ADDRESS	TELEPHONE	FAX / E-MAIL
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10. Mapholi, Masindi	Lephalale Municipality	Private Bag X136 Lephalale 0555	084 500 0662	masindi.mapholi@lephalale.gov.za
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	Polokwane Region			
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17. Sengani, Ben	DWAF Polokwane		015 290 1270	senganib@dwaf.gov.za
18. Sithole, Frans	Eskom Auxiliary Engineering	PO Box 427 Garsfontein 0042	011 800 4734	sitholefr@eskom.co.za
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20. Thomas, Jo-Anne	Savannah Environmental	PO Box 148 Sunninghill	011 234 6621	086 684 0547 joanne@savannahsa.com
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DRAFT AGENDA

- Welcome, introduction & apologies
- Purpose of the meeting
- Outline of the Medupi Infrastructure Projects
- Outline of EIA processes & summary of findings
- Discussion session

CONDUCT OF THE MEETING

- Work through the facilitator
- Language of choice
- Do not interrupt speakers - there will be discussion time
- Equal participation
- Identify yourselves

PURPOSE OF THE MEETING

- To provide I&APs:
 - with relevant information regarding the proposed Medupi Infrastructure projects
 - with feedback regarding the findings of the Environmental Assessments
 - the opportunity to seek clarity regarding the proposed projects
- To record any additional comments, issues and concerns raised

MEDUPI INFRASTRUCTURE PROJECTS

- Basic Assessment for the proposed Raw Water Reservoir and associated Water Pipelines (DEAT Ref 12/12/20/1139)
- Environmental Impact Assessment process for the Proposed Re-Alignment of the Afguns Road near Medupi Power Station (DEAT Ref 12/12/20/1179)
- Basic Assessment for a proposed telecommunications mast to be constructed within the Medupi Power Station complex (DEAT Ref pending)
- Request for amendment of the Record of Decision for Medupi Power Station (DEAT Ref 12/12/20/695): Removal of requirement for ambient monitoring of carbon monoxide
- Request for amendment of the Record of Decision for Medupi Power Station (DEAT Ref 12/12/20/695): Alignment of the conveyor system

LEGAL CONTEXT

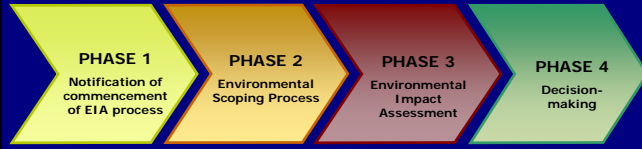
- National Environmental Management Act (No 107 of 1998)
 - Overarching environmental legislation in South Africa
 - Identifies and regulates activities which may have a detrimental impact on the environment
 - Specifies the EIA process - BAR or EIA process
- Eskom requires authorisation from DEAT
- Independent environmental studies must be undertaken in accordance with the EIA Regulations

ENVIRONMENTAL ASSESSMENT PROCESSES

Basic Assessment (BAR)



Environmental Impact Assessment (EIA)

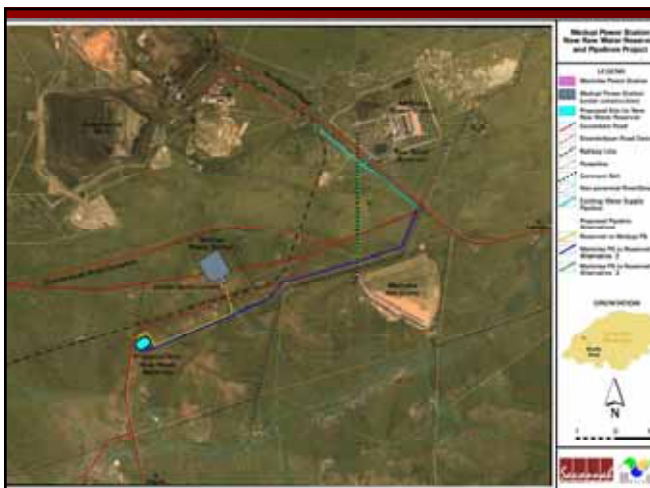
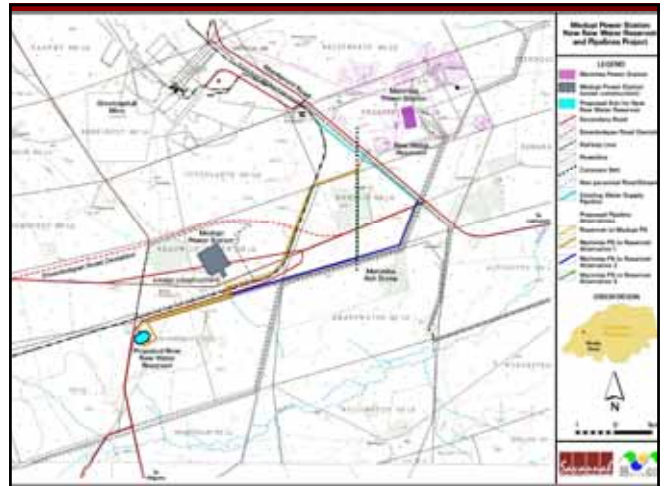


EVALUATION OF IMPACTS ASSOCIATED WITH THE PROJECTS

- Impacts associated with both the **construction** & **operational** phases of the project
- Potential **positive** & **negative** environmental impacts identified as a result of the project
- Potential for **cumulative impacts** on the local environment
- Identification of **environmental fatal flaws**
- Assessment of **technically feasible alternatives**

BAR: PROPOSED RAW WATER RESERVOIR & ASSOCIATED PIPELINES

- Purpose:
 - Raw water supply to Medupi Power Station
 - Provide water storage capacity for a 19 day period
 - A gravity fed system
- Reservoir site & structure:
 - Kuipersbult 511 LQ at 915 m asl
 - Estimated footprint: 124 200 m²
 - Dimensions: 250 m X 430 m X 5 m
 - Total capacity: 400 000 m³
- Pipeline route & structure:
 - The pipelines to be buried
 - Average pipeline length of <9 km
 - Servitude: Construction ~45 m ; Operation ~15 m

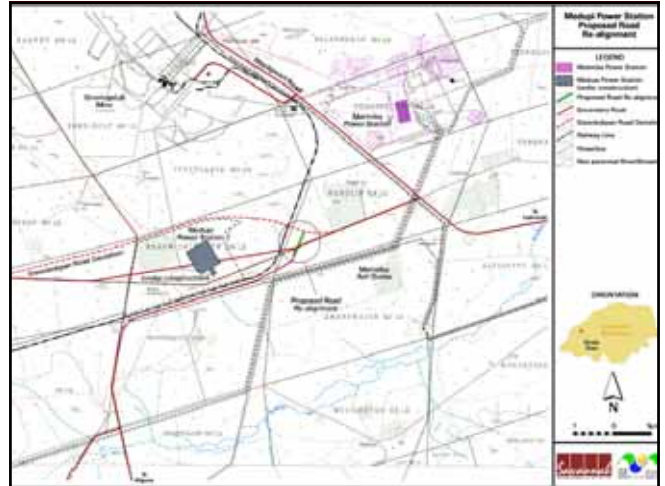


PROPOSED RAW WATER RESERVOIR & ASSOCIATED PIPELINES

- Basic Assessment assessed **2 alternative** pipeline alignments
- Potential environmental impacts:
 - Flora, Fauna & Ecology
 - Cultural, Heritage & Archaeological sites
 - Visual impacts
 - Social environment
- Potential impacts to be minimised through appropriate **mitigation measures**
- Recommendations:
 - Reservoir site **acceptable** - impacts can be mitigated to acceptable levels
 - Both alternative pipeline routes **acceptable**
 - **Alternative 3 marginally preferred** - possible to consolidate pipeline servitude within existing 93 m conveyor servitude

EIA: PROPOSED RE-ALIGNMENT OF THE AFGUNS ROAD

- Purpose:
 - Steenbokpan road (D1675) realigned because of Medupi Power Station
 - Afguns road (D2001) to intersect realigned Steenbokpan road at-grade (90°)
- Project Specifications:
 - Hanglip - Eskom-owned
 - Realignment length: ~700 m
 - Single-carriage way with asphalt surface
 - Road reserve: 30 m
 - Constructed to Provincial road specifications
 - 6 week construction phase



PROPOSED RE-ALIGNMENT OF THE AFGUNS ROAD

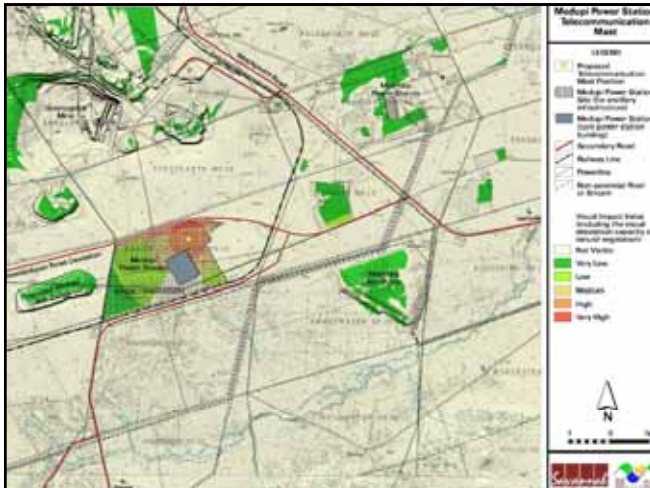
- Potential environmental impacts:
 - Evaluated through **Scoping Phase**
 - **Social environment**: Minimal - No further investigation in EIA
 - **Heritage sites**: Unlikely - No further consideration in EIA
 - **Ecology**: Moderate - Further consideration in EIA
- EIA Phase will consider the following **ecological impacts**:
 - Loss of biodiversity: Threatened species & associated habitat
 - Loss of biodiversity: Protected tree species
 - Habitat degradation: Pristine/sensitive habitat type

BAR: PROPOSED TELECOMMUNICATIONS MAST WITHIN THE MEDUPI POWER STATION COMPLEX

- Purpose:
 - Voice and Data telecoms to Eskom staff & Contractors on Medupi Power Station Project
- Project Specifications:
 - Located within Medupi Power Station complex
 - <70 m high self-supporting lattice tower
 - Built from angle-iron members
 - 3 associated containers to house IT&T equipment

PROPOSED TELECOMMUNICATIONS MAST WITHIN THE MEDUPI POWER STATION COMPLEX

- No alternative sites assessed through Basic Assessment process
- Potential environmental impacts:
 - Only **visual impact** assessed
 - No other significant impacts - Medupi Power Station site already authorised
 - Construction-related impacts - minimised through appropriate **mitigation measures**
- Recommendations:
 - Telecomms mast **acceptable** - impacts can be mitigated to acceptable levels



AMENDMENT TO ROD: AMBIENT MONITORING OF CARBON MONOXIDE

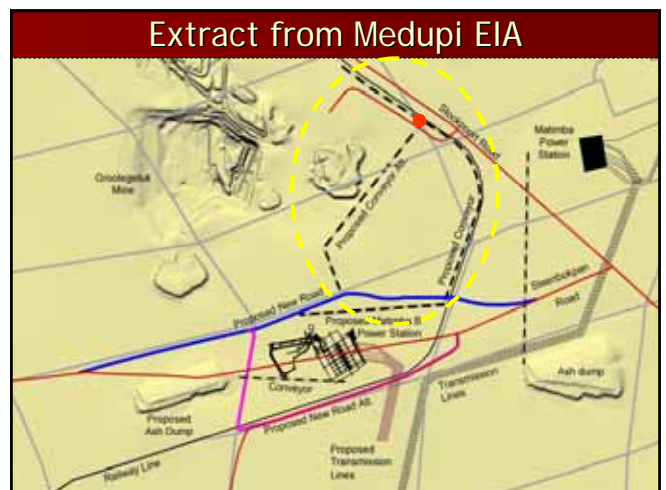
- Request for amendment of the Record of Decision for Medupi Power Station (DEAT Ref 12/12/20/695): Removal of requirement for ambient monitoring of carbon monoxide
- Eskom's air quality monitoring station in Marapong
 - commissioned 8 September 2006
 - continuous measurements of sulphur dioxide, nitrogen oxides, ozone, PM2.5 and PM10 concentrations and meteorological parameters
 - Eskom must be responsible for monitoring impacts on surrounding environment and local population

AMENDMENT TO ROD: AMBIENT MONITORING OF CARBON MONOXIDE

- Rationale:
 - CO concentrations in flue gas streams from Eskom's coal-fired power stations are extremely low
 - Contribution of power stations to ambient CO concentrations is considered negligible
 - CO not monitored at any power stations in ambient air quality monitoring
 - Not considered to be a reasonable requirement to monitor for pollutants which are derived from other sources (CO is derived from motor vehicles, and potentially also from domestic coal combustion and spontaneous coal combustion at mines)

AMENDMENT TO ROD: ALIGNMENT OF THE CONVEYOR SYSTEM

- Request for amendment of the Record of Decision for Medupi Power Station (DEAT Ref 12/12/20/695): Alignment of the conveyor system
- Review of the assessment of conveyor alignments from the Medupi Power Station EIA process - two alignments assessed:
 - **Eastern alignment:** from the Exxaro Grootegeluk mine along the existing railway line, turning south towards Naauw Ontkomen - ~7,5km in length
 - **Western alignment:** shorter, straighter alignment across farms Enkelbult and Turfvlakte south towards Naauw Ontkomen - ~4,5km in length
- Subsequent to EIA, Exxaro indicated they would allow Eskom to construct and operate a coal conveyor over the 'mineable area' on Turfvlakte, provided that certain conditions be met



AMENDMENT TO ROD: ALIGNMENT OF THE CONVEYOR SYSTEM

■ Rationale:

- No significant environmental differences between western & eastern alignments
- Both alignments are considered acceptable from an environmental perspective
- Technical (& long-term economic) feasibility of the alternative alignments conclude that the western alignment is clearly preferred
- Considering technical, economic & environmental aspects holistically - western alignment is preferred
- Shortest conveyor route above major fault line

ENVIRONMENTAL CONSULTANTS

Specialist component	Project components	Specialist
EIA Practitioner	Reservoir & Pipelines, Afguns road re-alignment, Telecomms mast, CO Monitoring, Conveyor re-alignment	Savannah Environmental
Visual impacts	Reservoir & Pipelines, Afguns road re-alignment, Telecomms mast	MetroGIS
Social impacts	Reservoir & Pipelines, Afguns road re-alignment	MasterQ Research
Biodiversity/ecology	Reservoir & Pipelines, Afguns road re-alignment	Bathusi Environmental Consulting
Heritage sites	Reservoir & Pipelines, Afguns road re-alignment	Johnny van Schalkwyk
Public Consultation Process	Reservoir & Pipelines, Afguns road re-alignment, Telecomms mast, CO Monitoring, Conveyor re-alignment	MasterQ Research

PROJECT TIMELINES

	Project components	Report Status & Timeline
1	Reservoir & Pipelines project (BAR)	BAR – public review period ends 12 July 2008
2	Afguns road re-alignment project (EIA)	DSR – public review period ends 26 June 2008 DEIR – public review in August 2008
3	Telecommunications mast project (BAR)	BAR – public review period ends 26 July 2008
4	CO Monitoring application for amendment	Application with DEAT for decision
5	Conveyor re-alignment application for amendment	Application with DEAT for decision

WHO TO CONTACT?

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