

Environmental Impact Assessment Environmental Impact and Waste Management License Application for the proposed extension of ash disposal facilities and associated infrastructure at Camden Power Station

(DEA Ref No 12/12/20/2300)

Issues and Responses Report

Version 3

This report (Version 3) captures the issues raised by stakeholders during the Environmental Impact Assessment (EIA) process and Waste Management License Application for the proposed extension of ash disposal facilities and associated infrastructure at Camden Power Station.

As part of the announcement, a Background Information Document (BID), with a comment and registration sheet was posted and distributed by hand during May 2011. Letters of notification were also sent out by registered mail in May 2011 to all landowners within a 10 km radius of the Camden Power Station. An advertisement was placed in various newspapers and site notices were also put up in the area of the proposed development during May 2011.

An open house and public meeting to discuss the Draft Scoping Report was held at the Indawo Game Lodge, Ermelo on 27 July 2011. This event was announced by advertisements in various newspapers and letters of invitation were also sent out to stakeholders. Issues and comments raised at this meeting as well as comments received during the public review period from 18 July to 22 August 2011 were added as Version 2 of this report to the Final Scoping Report before it was submitted to the Department of Environmental Affairs.

This report will be updated as the EIA unfolds.

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COMMENTS, QUESTIONS AND ISSUES		COMMENTATOR(S)	SOURCE(S)	RESPONSE(S)
1 ENVIRONMENTAL PROCESSES				
1	May stakeholders comment at any time during the environmental impact assessment (EIA)? We had previous experiences with EIAs when we were not given the opportunity to comment.	Mr Johan Cilliers, Weltevrede, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Yes, stakeholders may comment anytime during the whole process and these comments will become part of the various reports used in the EIA process. All comments will be recorded in an Issues and Response Report (IRR) which will be submitted to the DEA.
2	Once a decision has been taken, to whom must we address our appeal?	Mr Johan Cilliers, Weltevrede, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	The appeal in this case must be address to the Department of Environmental Affairs.
2 ALTERNATIVE SITES				
1	Alternatives 2 and 3 of the proposed ash disposal facility consist of highly productive soil. Soya and maize are planted and these lands produce some of the highest yields per hectare in the district year after year. Alternative 3 lies on a hill. Alternative 1 looks like the best option. This is the most productive part of my farm and I will oppose any development on Alternatives 2 and 3.	Mr Lood de Jager, Uitkomst, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Noted.
2	Alternative 3 will pose other problems as well, because a water pipeline towards Kriel runs through it and a 400kV transmission line as well as the Richards Bay railway line.	Mr Lood de Jager, Uitkomst, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Noted.
3	What will happen if you cannot find a site for a new ash disposal facility?	Mr Kenneth Venter, Moreson, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Kuzelj said then Camden Power Station will have to shut down once the existing ash facility is full.
4	Common sense should be used in this process to determine which alternative will be used.	Mr Lood de Jager, Uitkomst, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge,	Noted.

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			Ermelo on 27 July 2011.	
5	What about old underground mines? I think alternative 4 is on top of an old mine.	Mr Jan van Staden, Uitkomst, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Babst said an ash disposal facility may not be built on top of an old mine. This would need to be confirmed. Post-meeting note: An ash disposal facility cannot be established on an old mining area due to stability problems and for this technical aspect the establishment of an ash disposal facility on an old mining area will not be investigated.
6	There are mineral rights on my farm which could influence alternative 3	Mr Jan van Staden, Uitkomst, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Kuzelj said Eskom could look at the possibility to buy out a mining right once a preferred site has been identified and recommended by the EIA process.
7	Alternative 1 looks like the best option for the ash disposal facility. Alternative 2 and 3 are highly productive agricultural land that can provide food for many years to come. There are also old graves on 2 and 3 that have been there for many years. Eskom transmission lines as well a water pipeline are also running through 2 and 3 that will be very costly to move. A major concern is the potential pollution problems of a development of this scale, irrespective of where it is constructed. What will be very important is proper maintenance and management of this ash disposal facility to prevent further pollution of surface water such as what happened between May and August 2011. This cannot happen again.	Mr Johan Cilliers, Chairperson, TLU, Ermelo	Comments in response to the Final Scoping Report	Noted.

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3 BIOPHYSICAL COMMENTS				
(3.1) Heritage				
1	There are San rock paintings and figures near the area of the alternatives.	Mr Kenneth Venter, Moreson, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	The facilitator said the specialist studies have not yet been undertaken and that a heritage assessment will be done and this person will contact Mr Venter to discuss these paintings.
(3.2) Water-related matters				
1	Waste water from the existing ash dam flows into the nearby stream.	Mr Sam Hallatt, Postnet Suite 495, Private Bag X 9013, Ermelo, 2350	Letter on 3 June 2011 in response to the announcement.	The reverse osmosis plant has been charged, drawing water from De Jagers Pan, and is now running at full capacity at 3.5ML per 24hr day. Due to the extreme high level of the De Jagers Pan, a gradual slow decrease in the De Jagers Pan level over the next few months will be observed.
2	The pan (De Jagers pan) next to the ash disposal facility started flooding last year and all this contaminated water is running east polluting the water resources of Messrs Sam Hallett and Leon Strydom as well as other neighbours. This water is even running through Camden Power Station.	Messrs Leon Strydom, Witpunt, and Johan Cilliers, Weltevreden, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Noted.
3	When I was young we caught fish in the pan (De Jagers pan) next to the existing ash disposal facility. There was still fish in the pan until a few years ago, but pollution from the ash disposal facility has killed everything in the pan.	Mr Kenneth Venter, Moreson, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Noted.
4	Will the new ash disposal facility be lined? What will happen to rain water? Will it not leak into the surrounding soil?	Mr Johan Cilliers, Weltevreden, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July	Yes, the whole proposed facility of 120 ha will be lined to prevent leakages. There will be a water recovery dam where the excess water and rain water will be

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			2011.	stored. This water will be used to transport the ash to the disposal facility.
5	Where do you measure water quality and what about the sewage problem in Camden Village?	Mr Kenneth Venter, Moreson, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Kuzelj said water samples are taken all around the power station and especially towards the east, because that is the natural flow of water in this area. This groundwater monitoring information is sent to the Department of Water Affairs, as is required by law. Discussions have been held regarding the sewage problem in Camden Village. Camden Power Station also treats the sewage of the military base next to it.
6	I am also a member of an Ermelo conservation organisation. Will it be possible for us to study your groundwater data?	Mr Johan Cilliers, Weltevreden, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Thabiso Mpongo, environmental officer at the Camden Power Station, said he can be contacted for this information.
7	The quality of the water in the De Jagers pan has deteriorated due to seepage from the ash disposal facility. What happened?	Mr Johan Cilliers, Weltevreden, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Kuzelj said the ash disposal facility receives three times more ash than before due to the low quality of coal being burnt. This has caused the facility to expand very fast, which is the reason why another ash disposal facility is needed. Another problem was that the whole ash transport system was upgraded while the power station was in full operation. More ash is also being deposited, because the scrubbers in the stacks capture ash that would have polluted the atmosphere.
8	Where does Camden Power Station get its clean water from?	Mr Johan Cilliers, Weltevreden, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Kuzelj said it comes from Jericho Dam. This water is used for cooling and a small quantity is used for 'ashing' – where water is used to transport the ash to the ash disposal facility.

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9	What pollutants can be found in De Jagers pan?	Mr Johan Cilliers, Weltevreden, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Kuzlej said tests have shown sulphates, nitrates, sodium, chlorine, some magnesium and a little boron to be present in the pan.
10	Will you take the flood lines into consideration for the new ash facility?	Mr Kenneth Venter, Moreson, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Warren Kok said the 1:50 and 1:100 flood lines will be studied during the EIA.
(3.3) Air Pollution				
1	Dust suppression must be done. People suffering from asthma live within 5 km of the Camden power station.	Mr Kenneth Venter, Farmer, PO Box 903 Ermelo, 2350	Fax on 19 May 2011	An irrigation system has been considered previously but was not implemented due to the ash dam already being saturated with large amounts of water used for ashing and dusting. However, a dust suppression system on the sides of the ash dam is to be installed in the very near future.
2	The ash of the current ash facility blows onto our thatched roof buildings.	Mr Frik du Plooy, Indawo Game Farm, PO Box 2825, Ermelo, 2350	Telephonic comment on 11 May 2011	
3	The power station has a direct influence on my farm and farming activities due to the dust from the ash facility, which is a problem.	Mr Sam Hallatt, Postnet Suite 495. Private Bag X 9013, Ermelo, 2350	Letter on 3 June 2011 in response to the announcement.	
4	How many tons of sulphates are emitted by Camden Power Station? Do you monitor the air quality at the station?	Mr Johan Cilliers, Weltevreden, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	

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5	What about the dust problem?	Mr Kenneth Venter, Moreson, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Kuzelj said dust from the existing ash disposal facility is a problem to neighbours. The dust does not come from the top, but the sides of the ash dump. A short-term solution is to put soil on the sides to prevent the dust from blowing away. A 4,5 km sprinkler system has been constructed for dust-suppression.
6	The value of a property will decrease if it is suddenly next to an ash disposal facility. Who will compensate a farmer who suddenly has a decrease in the annual yield per hectare due to dust from the ash facility?	Mr Johannes Klopper, Mooiplaats, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Kok said this will be investigated during the specialist studies.
4 SOCIO-ECONOMIC COMMENTS				
(4.1) Social				
1	Will there be work for local contractors on this project?	Mr Kenneth Venter, Moreson, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Kuzelj said it is Eskom policy to use local contractors if the relevant skills are available.
(4.2) Land Use				
1	How do you work out compensation for a land owner whose property is needed?	Mr Kenneth Venter, Moreson, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Kuzelj said accredited assessors are used to calculate the price of a property. Various factors will be taken into consideration such as improvements done to a property and a final price will be negotiated with the land owner. The facilitator added that Eskom is not interested in expropriating land from anybody and will always try to negotiate a result that is beneficial to all parties.
2	What happens to the land owner who suddenly	Mr Johannes Klopper,	Open house to discuss	Mr Kok said the specialist studies will also

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	gets an ash disposal facility next to him? What will happen to his ground water resources? Does he get compensated?	Mooiplaats, Ermelo	Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	look at the effect of the facility on neighbours as well as groundwater. The facilitator added that neighbours do not get compensated by Eskom.
6 ECONOMIC				
1	<p>We request that an additional study be done with specific focus on the long term economic and agronomic impact on landowners as well as the loss in food security. This study should be done by an expert with an agricultural background.</p> <p>Our motivation for this study is as follows: The viewpoint of the EIA that since agricultural land is no longer in its natural state, then it may well be converted into an ash disposal facility is wrong. With this I do not want to reduce the importance of natural grazing. The agricultural land in question has a high yield and we have a growing population in South Africa. The land in question has been planted for over 50 years and continues to produce deliver a high yield due to good soil management by the farmers.</p> <p>No compensation paid out to a farmer will make up for the long term loss of production. The current owners are only custodians of the land and it will be needed by future generations to produce food.</p> <p>There is the example of a piece of land in Rothamstead, England that has been producing wheat every single year since 1843.</p>	Mr Johan Cilliers, Environmental Management, TLU, Ermelo	Email on 23 February 2012	<p>The EAP considered the need for such a study and concluded that there was no need for the study because the sites are uniformly the same. The study will not help to differentiate one site from another.</p> <p>The impact on soils and land capability was taken into account as part of the Biophysical specialist assessment.</p> <p>Therefore, the only mitigation measure possible to reduce this impact is to place the site off of deep arable soils, and to reduce the footprint of the site as far as possible. It was determined in the Biophysical specialist study that it is impossible not to impact arable soils at all, as each of the sites have arable soils present. Site 1 was recommended as it has the smallest area, and smallest impact on arable soils.</p>
7 OTHER ISSUES				
1	Who supplies Camden Power Station with coal?	Mr Johannes Klopper, Mooiplaats, Ermelo	Open house to discuss Draft Scoping Report,	Mr Anthony Kuzelj, Camden Station Manager, said coal is currently sourced

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			Indawo Game Lodge, Ermelo on 27 July 2011.	from eight different suppliers. Some of the coal is supplied from as far as 130 km. Eskom must source coal that is economically viable. Camden was supplied by coal from neighbouring mines before it closed down. Once it was started up again, it was not possible to get a contract with one of the neighbouring mines for a variety of reasons. Eskom's head office procures contracts with coal suppliers.
2	Is all your coal transported by road?	Mr Johan Cilliers, Weltevreden, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Kuzelj said Camden needs 4, 6 million tons of coal per year of which about 50 % is transported by rail. Eskom has a policy to reduce coal trucks on the road and is looking at alternatives to reduce trucks. One of the options that are being investigated is a conveyor belt to transport coal to the power station.
3	Why do you transport the coal from so far away? You can buy it next to you from Coal for Africa.	Mr Johannes Klopper, Mooiplaats, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Kuzelj said Eskom buys coal with specific specifications and Eskom cannot buy coal that is too expensive. All the Camden coal contracts are short term contracts and long terms contracts are being investigated. Most of the coal mined around Camden is being exported.
4	Does Eskom know about the De Jagers pan overflowing into water resources towards the east? What caused the overflow?	Mr Johannes Klopper, Mooiplaats, Ermelo and Mr Johan Cilliers, Weltevreden, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Kuzelj said Eskom is aware of this "overflow" problem towards the east of the De Jagers pan. Eskom built a water treatment plant (using reverse osmosis technology) next to De Jagers pan and the ash disposal facility to purify waste water. This plant has been in operation since the beginning of July 2011 and it will be

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				<p>another two months before the seepage will be under control. The plant cost R38 million to construct and took two years to construct.</p> <p>The main problem was that more water was being pumped from the current ash disposal facility into De Jagers pan and too little water was being pumped out.</p> <p>Eskom has solved this problem by balancing the water being extracted from the pan with the water being pumped back to the pan.</p>
5	Who uses the 1600MW generated by Camden?	Mr Johannes Klopper, Mooiplaats, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Kuzelj said it is not possible to give an exact allocation, because Camden power station (like all other stations) feeds the 1600 MW into Eskom's national grid that distributes the electricity all over southern Africa.
6	Can the ash be used for something?	Mr Johannes Klopper, Mooiplaats, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	<p>Mr Kuzelj said ash is used:</p> <ul style="list-style-type: none"> • in cement; • as a filler for rubber; • in bricks • as a filler in toothpaste; and • as a substitute for lime by maize farmers. <p>Camden Power Station will be advertising an open tender process later in the year to start selling some of the ash. The problem is that very low volumes are sold and the buyer must use it close to the power station or else the transportation costs do not make it economically viable.</p> <p>Post meeting note: Eskom has contracted a waste specialist</p>

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				who is investigating other responsible uses of ash.
7	Can this facility be built on an incline?	Mr Johan Cilliers, Weltevreden, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Mr Kobus Babst from Eskom said it can be built on an incline with no seepage taking place, because the incline will be taken into consideration during the planning and construction phases.
8	Will this not interfere with the proposed 400kV Camden-Theta line? How far is the EIA on that project?	Mr Johannes Klopper, Mooiplaats, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	This ash facility will not impact on the Camden-Theta line. The Final Environmental Impact Report of this process is currently with the Department of Environmental Affairs awaiting decision.
9	It is very difficult to download the Eskom Vendor List.	Johan van der Meulen, Adrianople, Ermelo	Open house to discuss Draft Scoping Report, Indawo Game Lodge, Ermelo on 27 July 2011.	Noted.