

**ENVIRONMENTAL IMPACT ASSESSMENT AND WASTE MANAGEMENT LICENSE
FOR THE PROPOSED CONTINUOUS ASH DISPOSAL ACTIVITIES AT THE
TUTUKA POWER STATION, MPUMALANGA PROVINCE**

**COMMENT AND RESPONSES REPORT – FINAL ENVIRONMENTAL IMPACT ASSESSMENT
REPORT**

SUMMARY OF ENVIRONMENTAL ISSUES/CONCERNS AND SUGGESTIONS RAISED BY INTERESTED AND/OR AFFECTED PARTIES

- This Comments and Responses Report (C&RR) is a record of all the contributed issues raised by Stakeholders ranging across all sectors of society.
- Full record of every issue raised is available from Lidwala Consulting.
- The name, affiliation (as at that time) and date of the commentator are also indicated
- Comments are captured under each impact alphabetically according to Surname

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ABBREVIATIONS USED IN THIS COMMENT AND RESPONSES REPORT:

DARDLA Dept Agriculture, Rural Development and Land Administration	DSR: Draft Scoping Report	EAP Environmental Assessment Practitioner
EA Environmental Authorisation	FGM Focus Group Meeting	KSW Key Stakeholder Workshop
PM Public Meeting	TAUSA Transvaal Agricultural Union SA	

Issue/Comment	Raised By	Response
1. Agricultural Potential Related Comments/ Issues		
Should an EA be granted would it have negative impacts on farming activities?	Vosloo, Thys ThysVoslooFamily Trust E-mail: 3 October 2012	Chapter 8 has identified potential Agricultural impacts.A full agricultural potential study will be undertaken during the EIA phase.
It was suggested that pollution of grazing, crop and land be investigated during the EIA process.		The Agricultural Potential study has been conducted and is available as Appendix P (Soil Survey Report) to the Final EIA Report. Ashlea Strong, EAP, Lidwala Environmental
2. Air Pollution Related Comments/ Issues		
It was commented that the stockpile yards at Tutuka Power Station seem like they are not being managed properly.	Riekert, Simon Landowner FGM: 22 November 2012	Coal dust at Tutuka Power Station's Coal Stockyard is managed by doing dust suppression. The dust suppression is done by the use of water tankers driving around at frequent intervals. It is unfortunate that water sprinklers cannot be utilised at the stock yard due to the effect of water on coal, it is a huge problem to transport wet coal via conveyers as they trip due to excess weight, it is also a problem to burn wet coal as it takes a while to burn. It should also be noted that Eskom took the contacts details of SR so that he can elaborate more on his comment, so that it will give Eskom a better chance to respond to the comment. William Mogwase, Eskom Tutuka Power Station
The project team was informed that Tutuka Power Station monitoring is not done properly because buckets have been placed at their house, but not collected.		The matter will be addressed. Eskom is in the process of placing a new contract to handling fugitive dust management on site inclusive of the ash disposal facility and inclusive of maintaining dust buckets, target date is 02/2013. William Mogwase, Eskom Tutuka Power Station
The project team that Tutuka Power Station ash suppression is not effective as surrounding landowners experience serious problems due to ash settling on their crops and grazing land. During the dusty seasons, ash is often blown to the surrounding atmosphere and it impairs visibility. The situation is so bad that the farm workers do not want to live on the farms anymore due to this health issue. Tutuka Power Station is urged to address the current problems before continuing with more ashing.	Van Heerden, Kobus Landowner FGM: 22 November 2012	Tutuka Power Station is doing dust suppression on top of the ash disposal facility using two mechanisms that is dust suppression by moveable sprinklers and a water tanker driving on top of the ash disposal facility. The dust suppression sprinklers are running 24 hours a day and a tanker is driving around at frequent interval. Tutuka has just started with a project of looking at different dust suppression methods, one of the methods being looked at is dust suppression on the sides/slope of the ash disposal facility as both the sprinklers and the tankers cannot reach those areas.

Issue/Comment	Raised By	Response
<p>It was suggested that the environmental team visit the adjoining farms to familiarise themselves with the environmental impacts experienced by the landowners in the area.</p> <p>Upon Lidwala's request as to which specialists the attendee is referring to, it was replied that it should be the Air Pollution Specialist and the Agricultural Specialist.</p>		<p>William Mogwase, Eskom Tutuka Power Station</p> <p>Tutuka Power Station has an ISO 14001 EMS certification. He further said that the farmers should make use of the farmer's quarterly meetings to discuss such matters because it is disheartening when one attends meetings to discuss future developments and then be made aware that challenges due to current operations are not being discussed or addressed by the power station.</p> <p>Tobile Bokwe, Eskom Sustainability Division</p> <p>Tutuka Power Station will conduct a few site visits with the landowners and requested the public participation team to forward the attendees' contact details to him.</p> <p>William Mogwase, Eskom Tutuka Power Station</p>
<p>It was suggested that Air Pollution be investigated during the EIA process.</p>	<p>Vosloo, Thys ThysVoslooFamily Trust E-mail: 3 October 2012</p>	<p>Appendix O addresses potential Air Pollution impacts. A full air quality study will be undertaken during the EIA phase.</p> <p>The Air Quality study has been conducted and the results and findings are included as part of the Final EIA Report (Appendix I).</p> <p>Ashlea Strong, EAP, Lidwala Environmental</p>
<p>3. Biodiversity Related Impact Comments/ Issues</p>		
<p>It was asked as how thick the topsoil that is removed when is establishing an ash disposal facility. This question relates to agricultural soil classification.</p>	<p>Struthers, Martin Chairman: Environmental Protection Agency KSW: 21 November 2012</p>	<p>When Tutuka Power Station establishes an ash disposal facility they remove about 25 to 30 cm of topsoil.</p> <p>William Mogwase, Eskom Tutuka Power Station</p>
<p>When Eskom establish an ash disposal facility, does it have an impact on the topsoil; will the topsoil be removed before the ash is disposed of on that site; and will the ash disposal facility be lined.</p>	<p>Venter, Jan DARDLEA: Soil Conservationist KSW: 21 November 2012</p>	<p>Before Eskom can dispose of the ash, the topsoil is removed, and stockpiled. In terms of the new legislation, the Authorities, e.g. DWA and DEA, tend to require that waste facilities should be lined, but they make a decision on each case based on its merits.</p> <p>Ashlea Strong, EAP, Lidwala Environmental</p> <p>Topsoil is used to rehabilitate the ash disposal facility as they continue with the ashing process.</p> <p>William Mogwase, Eskom Tutuka Power Station</p>
<p>It was suggest that the impact on fauna and flora be investigated during the EIA process.</p>	<p>Vosloo, Thys ThysVoslooFamily Trust E-mail: 3 October 2012</p>	<p>Appendix I addresses potential fauna and flora impactts. A full biodiversity study will be undertaken during the EIA phase.</p>

Issue/Comment	Raised By	Response
		<p>The Biodiversity study has been conducted and the results and findings are included as part of the Final EIA Report (Appendix M).</p> <p>Ashlea Strong, EAP, Lidwala Environmental</p>
4. Social and Socio-economic Related Impact Comments/ Issues		
<p>Following up on such meetings has proven to be a complicated exercise. Except if you are exposed to Tutuka Power Station, you are working there, you are part of an organisation that has dealings with the power station or unless if you are health conscience and you do research. Mr Ngubeni stated that the majority of the community here in Thuthukani are saying that this is a health issue and they don't have information about it but they are convinced that Eskom is doing something about it. Mr Ngubeni further stated the community wants to know if this process will create jobs.</p>	<p>Ngubeni, Thokozani Resident: Thutukani PM: 02 September 2014</p>	<p>With EIAs the team sometimes tends to focus more on the biophysical impacts, like the plants and animals and etc. and not so strongly on the social impacts. Aspects such as jobs, health, visual impacts are part of the social impacts that are also part of this assessment. Unfortunately the team haven't had an opportunity yet to present those aspects that have been assessed in the process. The team were asked if the social impact assessment talks about job opportunities and what the figure is.</p> <p>Nicolene Venter, Public Participatin Practitioner, Zitholele Consulting</p> <p>The question will be addressed in the minutes as the team present is not certain of the contents of the social impact assessment.</p> <p>Danie Brummer, EAP, Lidwala Environmental</p> <p>The further planning of redesigning and disposing of more ash will not in itself create more jobs. However the community has to remember that the fact that Eskom will be running the power station for 60 years instead of 25 years means that the station will provide jobs to the people of this community for another 25 years. If the power station wasn't here, people wouldn't be here tonight because, the school wouldn't be here. Already 6 people whom he recognises at the meeting that work at the power station, whose families are being fed from the power station are recognised. So as long as Eskom continues with the disposal of ash and the power station keeps running for 60 years then that means people will still have jobs. It was reiterated that this process will not create jobs in itself because it is a continuation of the current process just slightly in a different manner.</p> <p>Ryno Lacock, Tutuka Power Station</p> <p>Post meeting note:</p>

Issue/Comment	Raised By	Response
		<p>The EAP feels that the question regarding job opportunities for this proposed project was adequately responded to by Mr Ryno Lacock to at the Public Meeting.</p> <p>Danie Brummer, EAP, Lidwala Environmental</p>
<p>Regarding the economical impact that the existing ash facility has on farming activities in the area. References were made to implements rusting, trekker filters need to be replaced during planting and harvesting time, additional staff needs to be employed to clean the dust that is settling within the house, etc. They need to ensure that their farms stays economically viable but it is extremely difficult as they had to make provision for the impacts that the power station cause on their farms and the implements.</p> <p>To date the landowners had carried this cost and it is believed that Eskom now needs to carry the burden and compensate the landowners for these additional expenditures that occur due to the ash.</p>	<p>Theron, Wouter Landowner Farms: Dwars-in-die-Weg/Rietspruit/Hoogenhout FGM: 02 September 2014</p>	<p>It is recommend that Eskom engage with the landowners outside of this meeting, and if the problems have been brought to the power station's attention then he would like to bring his manager to assist in resolving the issues so that the two entities can run together.</p> <p>Tobile Bokwe, Eskom Holdings SOC Limited</p> <p>All present agreed to TB's recommendation. Ilse Coop (IC) will secure a date with the landowners for this meeting.</p> <p>Nicolene Venter, Public Participation Practitioner, Zitholele Consulting</p>
<p>Eskom should also look at the economics because the problems the Department experienced with rehabilitation is that currently natural grazing is the cheapest food source for animals. The moment one goes into rehabilitation it's not natural grazing anymore becomes artificial grazing. When one has artificial grazing that is when fertiliser is required and this increased the cost compared to the low cost of the natural grazing. The team will have to look at those ratios in the economics part of the studies.</p>	<p>Venter, Jan DARDLEA: Soil Conservationist KSW: 02 September 2014</p>	<p>Comment noted.</p>
<p>The following comments were made: Eskom has acknowledged the environmental impacts of the ash disposal facility and as well as the gas emissions from the chimneys. When the power station was constructed Eskom had a social responsibility to the community of Thuthukani. Thuthukani used to have ambulances and clinics but those things have been taken away. Some of the kids are asthmatic and some of the parents have taken their children out of Thuthukani because of their asthmatics conditions because of the pollution, in his opinion, resulting from the ash dump. Eskom wants to expand, which means its more exposure. The children as well as the adults will get sick, and asked what</p>	<p>Xaba, Thomas Resident: Thuthukani PM: 02 September 2014</p>	<p>The Eskom team present is not in apposition to responde to the comments and it was agreed that it would be taken forward and then responded to in the minutes.</p> <p>Eskom is confident that what it intends and plan to do with this ash disposal facility expansion project will not leave people worse off than they are now. Whether it is agreed or disagreed to the expansion it will not make a difference in the current conditions. The only difference it will make will be that it will improve the current situation.</p> <p>Ryno Lacock, Tutuka Power Station</p>

Issue/Comment	Raised By	Response
social commitment Eskom has, towards the people of Thuthukani because the hospital is 30km away.		
5. By-products from disposable ash Related Comments / Issues		
Can concrete be made from the ash and if so why can't it be used to fix gravel roads?	Celliers, Johan Chairman: TAUSA (Mpumalanga) KSW: 21 November 2012	Eskom has just established a contract with a consultant who specialises in waste, to investigate whether there are uses for the ash. Once these results are available, it will be made available to the attendees. It was also mentioned that this study is being undertaken to inform the Eskom-Mpumalanga Forum. Tobile Bokwe, Eskom Sustainability Division The Majuba Power Station Team confirmed that they currently sell approximately 10% of their fly ash to external companies for alternative uses.
In an event whereby the members of the community decide to start a co-op and want to make use of the ash for a certain project. Will Eskom grant the community access to the ash?	Mosia, Cllr Thuthukani PM: 02 September 2014	Eskom is open to be approached about that, however it is not so simple because firstly the kind of ash that you need for possible uses is not exactly the mixture it gets deposited in. The way that Tutuka power station is designed is that they mix the fine ash with the course ash. The course ash comes out of the boiler. The fine ash comes out of the precipitator filters and that's being conditioned and mixed together on the same conveyer belt stream to go out. At the power stations where they are actually utilising the ash, either as a cement additive or as a compound for brick they need to separate that ash and to separate it is a difficult process. So they need to build a plant on the power station to extract the ash from the process earlier than from the dump itself, so it's not so easy because the composition of the ash might not be suitable for those uses, such as making bricks. In principle, yes Eskom is open to be approached but technically it's not so easy. Ryno Lacock, Tutuka Power Station An additional problem that will be experienced with the ash is that ash is classified as waste so one will need a certain authorisation to use the ash. Danie Brummer, EAP, Lidwala
Is there is alternative use for the ash, like use it to produce another product instead of getting more land space just to dump the ash.	Dlamini, Nelson Resident: Thuthukani PM: 02 September 2014	Ash can be used to make bricks and be added to cement as an additive and these products are currently being done at Matla, Kendal and Lethabo Power Stations. The attendees were informed

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		<p>that the power station puts out 13 000 tons of ash per day, which, as an example can fill up a classroom of this size 20 to 50 times. So it wouldn't make any difference. South African does not have enough use for cement/bricks in the country to make the ash deposits less or go away and that the most economical way is to put the ash in one place and contain it. There is other technical solution available at the moment. RL shared that there are thoughts of putting the ash into mined out areas, however that will create other problems at it would mean that while they are mining the ash will have to be disposed of somewhere else and once mining seized then the ash can be disposed of the ash in the hole. This however can cause groundwater impacts. There Is no easy solution with regards to the disposing of the ash.</p> <p>Ryno Lacock, Tutuka Power Station</p>
6. Coal Stockpiles Related Comments / Issues		
<p>It was asked whether the area where coal is discarded is also lined.</p>	<p>Venter, Jan DARDLEA: Soil Conservationist KSW: 21 November 2012</p>	<p>Tutuka Power Station is in the planning process to line waste facilities, as informed by WULs and Duty of Care from Eskom.</p> <p>Tobile Bokwe, Eskom Sustainability Division</p>
7. Construction and Maintenance Related Comments/ Issues		
<p>In terms of Tailings Dams and Ash Disposal Facilities – Dam Safety Requirements in terms of Chapter 12 of the National Water Act, 1998, the following:</p> <ol style="list-style-type: none"> 1. If the operational storage of the free water on top of a tailings dam / mine residue deposit or ash dam does not exceed 50 000 m3, the particular tailings dam or ash dam is not registered or classified as a dam with a safety risk. 2. The requirement that the free water on top of the facility must be reduced to below 50 000 m3, or a more stringent requirement, must be clearly specified in the Operation Manual and /or Code of Practice of the tailings dam / mine residue deposit or ash dam and should be actively enforced throughout the life of the dam. If not, the tailings dam / mine residue deposit or ash dam must be registered as a dam with a safety risk in terms of dam safety legislation. It will then be classified and it must then comply with all the requirements of the dam safety legislation in Chapter 12 	<p>Van den Berg, Leo Department of Water Affairs: Dam Safety Office E-mail: 28 September 2012</p>	<p>Comment noted and forwarded to the Client for their attention as well as to the Legal Specialist for inclusion in the full legal review.</p> <p>Ashlea Strong, EAP, Lidwala Environmental</p> <p>The Legal specialist Me J Howarth has been consulted regarding this matter. She confirmed that based on the information available and based on the fact that this is a dry Ash Disposal Facility it is not classified as a dam with a safety risk. Some of the Ash Water Return dams might be classified as such.</p> <p>Danie Brummer, EAP, Lidwala Environmental</p>

Issue/Comment	Raised By	Response
<p>of the Water Act and the requirements of dam safety regulations issued in terms of this chapter.</p> <p>3. If the tailings dam / mine residue deposit or ash dam is part of a mining operation, it must at all times comply with all the applicable legislation administered by the Department of Mineral Resources (DMR). The DMR requires that every tailings dam / mine residue deposit must have a Code of Practice. A guideline for such a Code of Practice has been developed by DMR.</p> <p>4. Pollution control dams associated with ash disposal and tailings facilities must however comply with the dam safety requirements of Chapter 12 of the National Water Act if they comply with the size requirements of a dam with a safety risk. Only dams with a maximum wall height that exceeds 5,0 m and with a storage capacity of more than 50 000 m³, or any other dam declared as a dam with a safety risk) are subject to the dam safety legislation in Chapter 12 of the National Water Act and the Dam Safety Regulations in Government Notice R. 139 of 24 February 2012.</p> <p>5. For more information about dam safety you can visit the Dam Safety Office website (part of the Department of Water Affairs website at: http://www.dwa.gov.za/DSO/)</p>		
8. Disposal of Ash Related Comments / Issues		
<p>It was asked if ash be back-ashed into a mining area.</p>	<p>Celliers, Johan Chairman: TAUSA (Mpumalanga) KSW: 21 November 2012</p>	<p>Suggestions such as this that could reduce the footprint of an ash disposal facility and are always appreciated, but this specific question has its challenges. Typical challenges include liability with respect to groundwater pollution between the mining houses and Eskom, and these are never sorted out. Eskom will continue to keep this option under investigation to ensure the reduction of footprint.</p> <p>Tobile Bokwe, Eskom Sustainability Division</p>
9. EIA Process Related Impact Comments/ Issues		
<p>What is meant by low, medium and sensitive areas?</p>	<p>Riekert, Linda Landowner Farm: Mooimeisiesfontein FGM: 02 September 2014</p>	<p>The sensitivity of the areas and its rating is not linked to one specific study i.e. biodiversity but a result of all the specialist studies undertaken.</p> <p>Danie Brummer, EAP, Lidwala Environmental</p>

Issue/Comment	Raised By	Response
<p>It was asked how they as landowners can be expected to provide comments on the Report if they had not received it and requested whether a hard copy can be made available to the landowners in the area.</p>	<p>Steyn, Ben Landowner Farm: Mooimeisiesfontein FGM: 02 September 2014</p>	<p>Notifications to all the landowners, and all registered I&APs on the database, were sent on 18 July 2014 that the DEIR is available for review from 21 July to 01 September 2014. Also included in the letter was the information as to where hard copies are available for review i.e. public library and Tutuka Power Station (reception area) and that it is also electronically available on Lidwala's website and on CD and that the CD will be posted to those who request it.</p> <p>Nicolene Venter, Public Participation Practitioner, Zitholele Consulting</p> <p>The team agreed and it was confirmed that a hard copy of the DEIR and its Appendices at the house of Mr Hennie du Preez.</p> <p>Post-meeting note: The Reports was delivered in the afternoon of Wednesday 03 September 2014.</p> <p>Nicolene Venter, Public Participation Practitioner, Zitholele Consulting</p>
<p>It was asked whether his understanding of the rating table is correct that agriculture carries less weight than the three (3) bats identified in the area.</p> <p>The delegates present express their agitation regarding the fact that three (3) bats in the area carries more weight than agriculture. Though agriculture people get work and feed the nation and they do not agree with the outcome of the study as it is extremely unbelievable that bats get preference above agriculture.</p> <p>informed the project team that they do not accept the assessment that was done and request that the team proceed with their presentation as it seems to be a waste of time to argue the point.</p>	<p>Theron, Wouter Landowner Farms: Dwars-in-die-Weg/Rietspruit/Hoogenhout FGM: 02 September 2014</p>	<p>That is the outcome of the specialists' importance rankings during the scoping phase.</p> <p>The conclusion has not been made by Lidwala but by Eskom, Lidwala and the I&Aps as well as the specialists. I&Ps submitted their inputs during the scoping phase and the assessing calculations were done by taking these parties evaluations into consideration. Lidwala's input is only a 3rd of the overall assessments. It is not Lidwala that made the decision that bats is more important than agriculture but a cumulative calculation.</p> <p>Danie Brummer, EAP, Lidwala Environmental</p> <p>It was agreed that feedback would be provided in the draft minutes which will be provided as a post-meeting note as to how the environmental team determined the agricultural potential vs bats and how the environmental team derived to the conclusion as presented.</p> <p>Nicolene Venter, Public Participation Practitioner, Lidwala Environmental</p>

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		<p>Post-meeting note: The methodology and rating table as documented in the DEIR have been e-mailed to the attendees on 29 October 2014. Nicolene Venter, Public Participation Practitioner, Lidwala Environmental</p>
It was stated that the National Weather Service is not included in the studies as the power station has an impact on the weather conditions in the area.		Some of the results is included in the groundwater studies. Danie Brummer, EAP, Lidwala Environmental
Express his mistrust in the project as it was indicated last year that there would be finality regarding the project in August 2013 and believe that the landowners are led around by their noses.	Van der Merwe, Fanie Landowner Farms: Rouxland/Dwars-in-die-Weg/Uitkyk FGM: 02 September 2014	It needs to be noted that during EIAs time frames shift as new information becomes available, technical constraints identified that needs to be investigated, etc and all these aspects have an impact on projects' time frames. All dates communicated at meetings and in public documents / letters are reflected as "envisaged" and/or "proposed" dates. Danie Brummer, EAP, Lidwala Environmental
Cumulative impacts should be assessed during the EIA as there are a number of projects taking place in the area. e.g. Tutuka and proposed prospecting activity	Venter, Jan DARDLEA: Soil Conservationist KSW: 21 November 2012	Cumulative impacts are being taken into account as it is a requirement in terms of EIA legislation. e.g. existing infrastructure, future applications, etc. It is accepted that the limitation is on what is known about future planning. Ashlea Strong, EAP, Lidwala Environmental All cumulative impacts have been taken as part of all the studies undertaken during the EIA phase - (Tutuka Continuous Ash Disposal Facility EIA report 2014) Danie Brummer, EAP, Lidwala Environmental
10. Erosion Related Comments/ Issues		
Looking at the diagram presented, it is noted that the surface of the ash disposal facility is flat and ask whether it will remain flat. If so, it would look unnatural and will also cause erosion.	Mells, Hendrik Chairman: Environmental Protection Agency KSW: 21 November 2012	It is correct that a flat surface would cause erosion problems due to water seepage. It is expected that the concept design would provide a design that would be more visually acceptable, avoid standing water, and would allow collection of any run-off water. Tobile Bokwe, Eskom Sustainability Division
11. Health Impact Related Comments/ Issues		
It was asked if heavy metals are present in the ash and if the ash is toxic.	Mells, Hendrik Chairman: Environmental Protection Agency	Samples from the most recent ash were taken and the preliminary results will be in the Draft Environmental Impact (DEIR).

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	KSW: 21 November 2012	<p>Ashlea Strong, EAP, Lidwala Environmental</p> <p>Some heavy metals were found in the ash. Please refer to the Ash Classification Report (Appendix K of the FEIR). The ash is toxic but it must be remembered that toxicity is a function of the receptor. The toxicity is classified as per the DEA Norms and Standards for Ash Classification – 2013.</p> <p>Danie Brummer, EAP, Lidwala Environmental</p>
12. Land-use Related Comments/ Issues		
When Eskom rehabilitate ash disposal facilities, do they look at the land use?	Venter, Jan DARDLEA: Soil Conservationist KSW: 21 November 2012	<p>This issue will be addressed under the Land Capability/Agricultural Potential study during the impact phase.</p> <p>Ashlea Strong, Lidwala Environmental</p> <p>According to the Tutuka Rehabilitation plan (Forms part of the Tutuka operational plan – Appendix U) rehabilitation takes place in such a manner as to return the ecological state of the environment back to its original land use (as far as possible).</p> <p>Danie Brummer, EAP, Lidwala Environmental</p>
Rehabilitation should be done in such a way that the same land capability is established after rehabilitation has taken place.		<p>Comment noted.</p> <p>The rehabilitation plan is described in the EMP (Appendix D of the FEIR) as well as the Operational Management plan from Eskom (Appendix U of the FEIR).</p> <p>Danie Brummer, EAP, Lidwala Environmental</p>
13. Noise Impact Related Comments/ Issues		
It was suggested that Noise be investigated during the EIA process.	Vosloo, Thys ThysVoslooFamily Trust E-mail: 3 October 2012	<p>A Noise study will be undertaken during the EIA phase.</p> <p>The Noise study has been conducted and the results and findings are included as part of the Final EIA Report (Appendix T).</p> <p>Danie Brummer, EAP, Lidwala Environmental</p>
14. Rehabilitation Related Comments/ Issues		
Does Lidwala have access to information of ash disposal facilities which were closed in the past and the impacts they have on the environment and has Lidwala looked at existing information on Eskom's business?	Du Plessis, D Secretary: TAUSA KSW: 21 November 2012	Lidwala is not aware of any ash disposal facilities that have been closed.

Issue/Comment	Raised By	Response
		<p>Information was received from Eskom regarding their existing ashing facilities and processes and Eskom will continue to forward the required information as and when needed.</p> <p>Ashlea Strong, EAP, Lidwala Environmental</p>
<p>When the top soil is removed it is left outside for a long period of time and this sterilizes the soil. Also, when excavation is done, the topsoil is removed horizontally and tipped overturned over and during rehabilitation it is not replaced in the correct soil condition order.</p>	<p>Venter, Jan DARDLEA: Soil Conservationist KSW: 21 November 2012</p>	<p>The stockpiling of topsoil is for a short period of time (up to a month), by which time the soil is used for rehabilitation.</p> <p>William Mogwase, Eskom Tutuka Power Station</p>
<p>It was commented that it is believed that Eskom manages its stock pile in such a manner as to prevent erosion.</p>		<p>Attendee was thanked for this comment, and it was well received.</p> <p>William Mogwase, Eskom Tutuka Power Station</p>
<p>What is the process that Eskom uses to place top soil on top of the ash?</p>	<p>Venter, Jan DARDLEA: Soil Conservationist KSW: 02 September 2014</p>	<p>Tutuka Power Station (PS) harvest topsoil from the front end of the Ash Disposal Facility (ADF) and this topsoil is then placed on top and on the sides of the ADF for rehabilitation.</p> <p>Ryno Lacock, Tutuka Power Station</p>
<p>What is the thickness of the soil layers?</p>		<p>The thickness of the topsoil is 300mm and is harvested from the front end of the ADF. Ash is not dumped on top of the topsoil, topsoil is placed on top of existing ash because its 25m down and you can't use it again if placed underneath the ash.</p> <p>Ryno Lacock, Tutuka Power Station</p>
<p>What type of soil is it?</p>		<p>Refer to the Soils and Agricultural Report as appended to the DEIR.</p> <p>Danie Brummer, EAP, Lidwala Environmental</p>
<p>Where is Eskom getting the topsoil from?</p>		<p>They just keep on picking up in-front of the depositing wall and transport it around and put it back on top. They basically straighten it up at the bottom and put it on the top</p> <p>Ryno Lacock, Tutuka Power Station</p>
<p>What is the thickness of the top soil that is taken from the front end of the ADF and placed at the back of the ADF?</p>		<p>It is the same thickness (300mm) that is placed at the back. If one digs too deep then one will be digging out clay.</p> <p>In relation to the presentation, the area was pointed out where graas has been planted grass and those blocks are being mowed. This process is working fairly well and the grass established on the rehabilitated blocks are a mixture of 4 seeds that are being used and it's well compatible with the environment and soil.</p> <p>Ryno Lacock, Tutuka Power Station</p>

Issue/Comment	Raised By	Response
<p>The concern is raised regarding the soil map of the ADF area as presented (<i>please refer to the attached presentation</i>), it shows that there are different soil types. JV stated that the soil inside is the arcadia soil type which is high in clay and the soil outside is the Avalon synclare valley soils which is yellow soils. Looking at the horizons they are completely different from the ones inside. It was pointed out that the soil maps included in the DEIR differ from those that the DARDLEA has available. The two different type of soils namely arcadia soil and Avalon were pointed out to the team.</p>		<p>The Agricultural Potential Specialist will be requested to liaise with the DARDLEA regarding the soil types identified and reported by him in comparison to that of the DARDLEA. Danie Brummer, EAP, Lidwala Environmental</p> <p>Post Meeting Note: The information in the Agricultural Impact assessment is more detailed than the information available to DARDLEA which accounts for the difference. Danie Brummer, EAP, Lidwala Environmental</p>
<p>If soil is taken from the front of the ADF and moved to the back, then the horizons of the soil don't meet. The soil at the top and the C horizon doesn't measure up with the original soil horizon that was there as soil is taken and mixed with a different type of soil that has got a completely different function.</p>		<p>Eskom is using the same type of soil which is clay like. Egard Janse van Renburg, Tutuka Power Station</p> <p>The Power Station is moving the soil 50 metres back and 25 metres up. It is not known how detrimental that is but noted that they are not bringing the soil from somewhere far away, or from another borrow pit somewhere else. Ryno Lacock, Tutuka Power Station</p>
<p>It was commented that when looking at the picture that was done on the ADF area via remote and satellite remote sensing it shows different soil types. Did Garry Peterson do a soil map on this area as part of his assessment and so can the soil map please be forwarded to DEDARLEA so that a comparison of the two maps can be made.</p>		<p>It would not be economically viable for the Power Station to transport soil from anywhere else and that the system that they are currently using is more feasible as they are just removing soil from the front end of the ADF and placing it on top of the ADF. Ryno Lacock, Tutuka Power Station</p> <p>Post-meeting note: A CD was provided to the delegate that contained the various maps indicate the soil types and conditions. Nicolene Venter, Public Participation Practitioner, Zitholele Consulting</p>
<p>It was stated that (<i>Referring to the presentation</i>) taking soil from the front end of the ADF and placing it at the back, B and C will stay the same but with an ash layer in between them</p>		<p>It was asked for clarification purposes whether DARDLEA would expect the functionality of horizon A, B and C to remain the same after you've had ash in between the two layers. Tobile Bokwe, Eskom Holdings SOC Limited</p>
<p>The functionality of the horizon will be completely different. JV further commented that if a thicker layer was placed on top of the ADF it would be more feasible for the rehabilitation purposes.</p>		<p>The Power Station has been doing this process of rehabilitation for many years and the grass that grows on the ADF grows very well. Ryno Lacock, Tutuka Power Station</p>

Issue/Comment	Raised By	Response
15. Technical Related Comments/ Issues		
<p>wanted to know what the current life span of the Power Station is.</p>	<p>Lottering, D Lekwa Local Municipality FGM: 22 November 2012</p>	<p>The current life span of the Power Station is 40 years and has a 5 year contingency plan, from now. From 1990 to 2050, plus 5 years contingency for the ash disposal facility, then the end date is 2055. Egard van Rensburg, Eskom Tutuka Power Station</p>
<p>The project team was informed that there are a number of developments planned for Thuthukani township and that the team needs to take note of these planned developments.</p>		<p>The EIA team will ensure that the relevant information is sourced from those developments by specialists. Ashlea Strong, EAP, Lidwala Environmental</p>
<p>It was commented that there are different regulations that Eskom must adhere to e.g. Eskom has to adhere to sewerage, air quality standards, etc, and if Eskom does not adhere to these standards they are penalised.</p>	<p>Mells, Hendrik Chairman: Environmental Protection Agency KSW: 21 November 2012</p>	<p>Eskom (Generation) has an ISO 14001 EMS Certification. Therefore, should landowners notice any non-compliance; it needs to be communicated with the station. The attendees were also provided with the name and contact details of Eskom's Environmental Manager, Ms Deidre Herbst, if there are any issues that they have reported to the station, and are not getting attention, they are most welcome to give her a call. Tobile Bokwe, Eskom Sustainability Division</p>
<p>It was asked for clarification purposes whether the studies were 8km, as first mentioned or 12km as mentioned secondly.</p>	<p>Riekert, Linda Landowner Farm: Mooimeisiesfontein FGM: 02 September 2014</p>	<p>It was an oversight and confirmed that the secondary study area was 8km around the Tutuka Power Station. Danie Brummer, EAP, Lidwala Environmental</p>
<p>Were the studies done or must it still be done as his property falls within the 8km radius and he was not aware of the studies being conducted.</p>	<p>Theron, Wouter Landowner Farms: Dwars-in-die-Weg/Rietspruit/Hoogenhout FGM: 02 September 2014</p>	<p>It was already done and that most of the studies were done on desk-top level during the scoping phase, and these studies were only conducted to identify suitable sites for the newly proposed ADF. These sites were assessed in depth during the EIA phase. Danie Brummer, EAP, Lidwala Environmental</p>
<p>Wanted to know if the current ash disposal facility has a buffer zone. It was commented that generally that buffer zone is inside property boundaries of an adjoining landowner's property and that limits the usage of that portion of land and also any expansions. Roshcon is currently in the process to cover the standby ash disposal facility top surface with a top soil to reduce the open ash surface. Roshcon also investigate to use a binding agent in the water to spray this water on the side slopes of the ash disposal facility.</p>	<p>Van Heerden, Kobus Landowner FGM: 22 November 2012</p>	<p>There is no buffer zone. The EIA study would determine if a buffer zone is required. The ash disposal facility expansion design has no buffer zone. If buffer zone is required, then additional land should be purchased. Egard van Rensburg, Eskom Tutuka Power Station</p>

Issue/Comment	Raised By	Response
16. Water (Ground and Surface) Related Impact Comments/ Issues		
<p>It was commented that Tutuka Power Station's ash sites are moving over a wetland.</p>	<p>Mells, Hendrik Chairman: Environmental Protection Agency KSW: 21 November 2012</p>	<p>That is exactly the reason why alternatives sites have been identified and what will be assessed in the Impact Phase. Ashlea Strong, Lidwala Environmental</p> <p><i>The Ecological state of all the wetlands in the study area has been evaluated and recommendations provided by the specialist. Please refer</i></p>
<p>In terms of Tailings Dams and Ash Disposal Facilities – Dam Safety Requirements in terms of Chapter 12 of the National Water Act, 1998, the following:</p> <p>It must also comply with the requirements in Chapter 4 of the National Water Act with respect to the use of water. Pollution control dams and tailings dam / mine residue deposit at mines must also comply with the Regulations on use of water for mining and related activities aimed at the protection of water Resources (Government Gazette 20119, Notice 704), 4 June 1999.</p>	<p>Van den Berg, Leo Department of Water Affairs: Dam Safety Office E-mail: 28 September 2012</p>	<p>Comment noted and forwarded to the Client for their attention as well as to the Legal Specialist for inclusion in the full legal review.</p> <p>To be defined as a dam as intended in this act, the dam must have a capacity to store in excess of 50000m³ of water and must have a dam wall higher than 5 meters to contain the water. This facility does not meet either of the above requirements (J Howarth – Legal Specialist, Pers. Comm).</p> <p>Ashlea Strong, EAP, Lidwala Environmental</p>
<p>Expressed his frustration regarding the groundwater quality that keeps declining and on his own cost tests have been done and these are available should the project team needs it. He stated that according to the studies conducted it seems that agriculture is seen as a gimmick. He informed the project team that his time is being wasted and left the meeting.</p>	<p>Van der Merwe, Fanie Landowner Farms: Rouxland/Dwars-in-die-Weg/Uitkyk FGM: 02 September 2014</p>	<p>Comment noted.</p>
<p>It was asked whether there is existing data available that shows the current water quality on his farm.</p>	<p>Van Heerden, Kobus Landowner FGM: 22 November 2012</p>	<p>Eskom has boreholes around the area and data is collected and this data will be made available to the specialists working on the project, to inform the team. William Mogwase, Eskom Tutuka Power Station</p> <p>The surface and groundwater specialist would make use of Tutuka Power Station's existing data during his detailed assessment in the Impact Phase, as well as ground-truthing the site/s. Ashlea Strong, EAP, Lidwala Environmental</p>
<p>What is the source of the water for the dust suppression system?</p>	<p>Venter, Jan DARDLEA KSW: 02 September 2014</p>	<p>RL responded that the dust suppression system is ash water and brine. RL stated that Eskom, and Tutuka Power Station, has a Zero Liquid Effluent Discharge (ZLED) policy. RL also noted that</p>

Issue/Comment	Raised By	Response
		<p>in the future raw water and surface water will be used and less of brine water will be used for dust suppression. Ryno Lacock, Tutuka Power Station</p>
<p>It was suggested that Water Pollution be investigated during the EIA process.</p>	<p>Vosloo, Thys ThysVoslooFamily Trust E-mail: 3 October 2012</p>	<p>Appendix L addresses potential Ground Water impacts. A full ground water and surface water study will be undertaken during the EIA phase. Ashlea Strong, EAP, Lidwala Environmental</p> <p>The Ground Water Assessment has been conducted and the results and findings are included as part of the Final EIA report (Appendix N). Danie Brummer, EAP, Lidwala Environmental</p>
17. Tutuka Power Station Existing Operations Related Comments/ Issues		
<p>It is believed that the landowners' issues are with the Tutuka Power Station's existing dust and groundwater management and not with the continuation of the ash facility.</p>	<p>Lacock, Ryno Power Station Manager: Tutuka Power Station FGM: 02 September 2014</p>	<p>Acknowledged that it is correct, they have major concerns and issues with the management of the existing ash facility. But also stated that he will appeal, even to the president's office if need be because the farmers come from a line of losing out. BS stated that he is looking out for his own interest. BS stated that he understands the whole story (need for the project) but asked why he should sacrifice his own land. Ben Steyn, Landowner</p> <p>It was clarified that the DEIR is the document that the Department of Environmental Affairs will use to make a decision and that in order for the department to apply their minds fully they need to have something in writing from the landowners. TB noted that the person reviewing the document is just a case officer who is the front of a higher hierarchy. TB urged the landowners to have a look at the report and write their comments extensively.</p> <p>The existing ADF does not have a liner and that the new ADF will have a liner as is required by the Waste Management Act. Without being biased TB commented that the new ADF will be a better infrastructure. Tobile Bokwe, Eskom Holdings SOC Limited</p>

Issue/Comment	Raised By	Response
<p>It is his understanding that Eskom is talking about the extension of the TT02 and asked what mechanism is going to be implemented to control the dust at TT02 because at the present moment there is nothing in place to control the dust.</p>	<p>Mthimunye, Mninwa Resident: Thutukani PM: 02 September 2014</p>	<p>The dust suppression system will be implemented. Egard Janse van Rensburg, Tutuka Power Station</p>
<p>It was commented that he doesn't agree with the statement that the footprint of the proposed new ADF was licenced. BS stated that a footprint is never licenced but it's the operating plan that is licenced and the operating plan for the power station was originally for 35 years and another 5 years. BS further stated that the legislation has changed significantly since then, amongst those changes is the liner issue.</p> <p>It was noted that you put the liner down, you don't get seepage into the groundwater and you don't get contamination of the underground water, and that your surface runoff will disappear. It was mentioned that it's not a simple issue as saying: there will be a liner or there won't be a liner.</p> <p>It was also noted that if Eskom had a permit then they wouldn't go through all of this trouble for getting permits and licences as this EIA process would not be required. BS commented that it is unfortunately so that for a number of years there has been significant pollution from the existing ash dam. BS asked Eskom the question that if they can't control what they have now. How are they going to control what they will have in the future?</p>	<p>Steyn, Ben Landowner Farm: Mooimeisiesfontein FGM: 02 September 2014</p>	<p>RL responded by saying that licencing and permitting worked differently in those days, but it's not that we were outside the law. We did what we had to do and what was available to us and appropriate at that point in time. Now that Environmental legislation has changed we need to adjust to that. Therefore we now need licencing and permission. The original footprint of the ADF was never formally permitted or licenced because there were no permits or licences, now we have to get a licence and a permit therefore we have to go through this EIA process. Ryno Lacock, Tutuka Power Station</p>
<p>Appreciation was expressed towards Tutuka Power Station for their greening efforts.</p>	<p>Theron, Wouter Landowner Farms: Dwars-in-die-Weg/Rietspruit/Hoogenhout FGM: 02 September 2014</p>	<p>Comment noted by the project team.</p>
<p>What is the extent of the current ADF area?</p>	<p>Venter, Jan DARDLEA KSW: 02 September 2014</p>	<p>It's about 530ha, however 400ha is already covered. Egard Janse van Rensburg</p>
<p>Is the conveyer belt a closed system, because always on the conveyer belt you've got contamination that takes place, is the area closed off?</p>	<p>Venter, Jan DARDLEA: Soil Conservationist KSW: 02 September 2014</p>	<p>The conveyer belt is a closed system, there are small open sections but it is an enclosed system. And that the source of the dust suppression system is brine water. Tutuka Power Station has a zero liquid effluent discharge policy. In the future raw water</p>

Issue/Comment	Raised By	Response
<p>It was requested that the dust suppression and water quality/quantity results for both the existing and proposed ADF be forwarded to the DARDLEA.</p> <p>It was commented that in a case where these soils were surveyed by Garry Peterson, he would like to see the report or results and maybe Mr Patersen might give good advice in terms of what mitigation measures can be taken and also shed light on what would be the best practise to rehabilitate these soils.</p>		<p>and surface water will be used and less of brine water will be used for dust suppression.</p> <p>Ryno Lacock, Tutuka Power Station</p> <p>Information requested was forwarded on Wednesday 29 October 2014. It should be noted that due to the fact that the proposed ADF is not yet in existence no monitoring results (dust or water) are available.</p> <p>Nicolene Venter, Public Participation Practitioner, Zitholele Consulting</p>

<p>Eskom talked about the initial design of the Tutuka Power Station was for 35 years and an additional 5 years for contingency. In Ryno's presentation it was also mentioned that Eskom extracts 99.8% of ash at Tutuka Power Station. What he would like to know is seeing that the power station is old, has Eskom done an assessment or an analysis just to verify whether the power station still meets the design efficiency in terms of the extraction of ash because he knows for a fact that the ash gets deposited beyond the power station, entering the Power Station from the East. However it has an impact on the people of Thuthukani (<i>looking at the content of the statement made by Mr Xaba, the team assumes he is referring to the emergency site</i>). Reference was made to a person who has a car that is not parked in a garage or a covered area but is parked outside, the amount of ash deposits on the car is a good indication of the amount of ash and smoke in the area.</p> <p>What means has Eskom taken to see what is the extent the ash impacted on the community of Thuthukani or to what extent does the ash migrate from the ash disposal plant to Thuthukani?</p>	<p>Xaba, Thomas Resident: Thuthukani PM: 02 September 2014</p>	<p>The dust that goes out of the chimneys is dispersed all over the area, depending on the wind direction. If the wind blows predominantly from the north or predominantly from the North West it blows the ash to the other side far away from Thuthukani and when the wind turns around and blows in the direction of Thuthukani, the dust will settle in the Thuthukani area. There are dust monitoring points all around the power station where Eskom is collecting dust in dust buckets. Eskom does standardised sampling from these buckets and it is monitored and compares with the overall minimal standards as per the environmental legislation. The Power Station has to adhere to the minimum requirements as stipulated by law.</p> <p>Part of the study that was done also looked at wind strength and wind direction through the course of the year to see which areas are mostly affected. Eskom knows that the areas to the south west of the power station are mostly affected (privately owned farm lands). It needs to be noted that when the wind blows on the Highveld, dust is from everywhere, i.e. from Sasol, Secunda, mining operations in the area, etc. What Eskom is trying to do with these two projects is that: from the FFP project, by changing the filters plant is that what comes out of the chimneys the community will not be able to see it anymore and that it will almost have no effect to the community. With the expansion of the ash disposal facility, the improved dust suppression system will enable Eskom to suppress dust better so that it can no longer affect the people of this surroundings. The attendees were reminded that should they be interested, they can download the DEIR from Lidwala's website (http://www.lidwala.com/eiar-tutuka/) The air quality study that was conducted is available and the wind direction and strength is indicated. Page 24 and 25 will be attached to the draft minutes.</p> <p>Ryno Lacock, Tutuka Power Station</p> <p>A hard copy of the report is also available at the public library in Standerton.</p> <p>Bongi Mhlanga, Public Participation Practitioner, Lidwala Environmental</p>
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Post-meeting note:

The power station life has been extended from 40 years to 65 years including the 5 years contingency. The replacement of the existing precipitators with fabric filter plant would reduce the amount of ash particles from the smoke stacks.

Tutuka Power Station

Issue/Comment	Raised By	Response
<p>The following statements were made: He doesn't want Eskom to fool the community of Thuthukani just because they are not exposed and/or don't have access to the Power Station. But he is working there and he knows what is happening at the power station on a daily basis. Seeing that this is a public meeting the community of Thuthukani must get a true reflection of what is currently happening at the power station. The issue of the TT02 is important because it disposes to the settling points. It was explained that because the coal plant is also disposing to those two points. The design philosophy behind those two settling points was that there will only be one working at a time until it packs up, with ash coal slimes and then they divert to the next one until it also packs up, while the other one is drying out. So that we can drage and dispose but that has never happened at Tutuka for a long time. When he left Tutuka and went to the union in 2009, that was the last time they draged. Upon his return last year he found those points fully packed with reeds fully grown, and birds had built up their nests there, and when it rains the water goes through the ash and ends up in the river streams on the neighbouring farms. Eskom is urged that when they come to Thuthukani, it should present a true reflection of what is happening at the power station and not mislead the community members.</p>		<p>The statements made are acknowledged but the team present will not be able to respond to it and that is therefore noted accordingly.</p> <p>Ryno Lacock, Tutuka Power Station</p> <p>Post meeting note:</p> <p>In the meetings held with farmers, there has not been a single submission about ash being washed into their properties. Instead all ash related issues are waterborne, so the source of Mr Xaba's assertion is not known. It should be noted that Eskom operates through a Zero Liquid Effluent Discharge (ZLED) philosophy, by which Eskom operations are managed such that no polluted water leaves the station premises.</p>
18. General Comments/ Issues		
<p>It was commented that it is sometimes difficult to work through these Reports on the websites as they are not properly named, especially the Appendices and one needs to open them all to find the one that you are looking for.</p>	<p>Celliers, Johan Chairman: TAUSA (Mpumalanga) KSW: 21 November 2012</p>	<p>Assurance was provided that this proposed project's Report is properly indexed with a Table of Context and the Appendices clearly indicates which specialists' report it is. This demarcation is clearly presented even on the websites.</p> <p>Ashlea Strong, Lidwala Environmental</p>
<p>It was commented that it is Lidwala Environmental responsibility to advise Eskom as to why they are not the most famous neighbour and that they must, at all times, adhere to environmental standards. Eskom is damaging the country with their environmental impacts.</p>		<p>There are different regulations that Eskom must adhere to e.g. Eskom has to adhere to sewerage, air quality standards, etc, and if Eskom does not adhere to these standards they are penalised.</p> <p>William Mogwase, Eskom Tutuka Power Station</p> <p>Eskom (Generation) has an ISO Certification. Therefore, should landowners notice any non-compliance; it needs to be communicated with the station.</p>

Issue/Comment	Raised By	Response
		<p>The attendees were provided with the name and contact details of Eskom's Environmental Manager, Ms Deidre Herbst, and said if there are any issues that you have reported to the station, and are not getting attention, you are most welcome to give her a call.</p> <p>Tobile Bokwe, Eskom Sustainability Division</p>
<p>What would be the impacts of dumping ash for a further 20 years on the same land that was initially projected to be used for 40 years? Eskom should remember that the dumping site area is also part of ward 12 meaning that the people of Thuthukani are also affected. Maybe Eskom wants to save money and avoid the difficulty, logistics or the legalities of purchasing private land for Eskom to use as the dumping site. A bigger area is needed so as to accommodate the new life span of the power station.</p>	<p>Faduke, Mthokozisi Resident: Thuthukani PM: 02 September 2014</p>	<p>The stacker puts the ash down on the front stacker and when it's filled up, turns around and puts the ash at the back. Once the area has been filled, then it is rehabilitated by putting top soil on top. In this process where Eskom now needs to put in more ash in the same footprint and in the same space, they have to make it higher and the way to make it higher is that there is a second machine that comes behind the first machine and this machine puts more ash down on a higher level, first on the front side and then on back side and then they cover it with top soil, so ultimately, the only difference that people will see afterwards is that the whole place will be much higher than what it normally would be.</p> <p>The challenge now will be that they will have a larger exposed surface area, while they are busy depositing the ash therefore the extended dust suppression system that Eskom wants to implement is now very important. So that they can spray that whole area effectively to make sure that dust does not blow off all around. RL also stated that in order to put more water down and prevent more water going down into the ground water that is why Eskom needs to have the liner placed underneath. RL stated that this whole study is about making it environmental acceptable to do what Eskom has to do with regards to the project. There are only two alternatives: The one is to shut the power station down prematurely and take 10% of South Africans electricity away, and then the country will have to deal with things like load shedding. Or alternatively Eskom can have the current operation plus another operation like the current one at Tutuka Power Station at another location, but then there will be two areas that will be contaminated. Those are the alternatives and of all those alternatives this one seems to have the lowest impacts.</p> <p>Ryno Lacock, Tutuka Power Station</p>

Issue/Comment	Raised By	Response
		<p>Post meeting note: Having a separate facility in another vicinity will not affect any changes to the challenges experienced with the current facility. The new facility will have a different, and improved, design and management philosophy.</p>
<p>It was enquired as to whether Eskom is looking at other energy sources than coal.</p>	<p>Mells, Hendrik Chairman: Environmental Protection Agency KSW: 21 November 2012</p>	<p>Eskom does have a Research and Development Department and Eskom is looking at renewable energy i.e. wind farm, hydro and solar. Tobile Bokwe, Eskom Sustainability Division</p>
<p>What is the process involved for the underground coal gasification?</p>		<p>The project team is not able to answer the question as that project does not form part of this EIA. It was committed to providing him with the contact details of the team dealing with the UCG project Ashlea Strong, Lidwala Environmental</p> <p>The contact details of SSI (now Royal Haskoning) were forwarded to the attendee on 21 November 2012. Nicolene Venter, Public Participation Practitioner, Imaginative Africa</p>
<p>The project team was informed that the Association does not have a major concern regarding the proposed expansion of the ash disposal facilities, but the Association's other main issue is mining. The heavy metals that end up in the water systems, for e.g the Vaal River, and this is unacceptable and a great concern. He enquired whether the project team is aware of the negative effects heavy metals have on humans i.e. it affects ones brain, behaviour and emotions. Women become infertile, people get brain damaged. The biggest irrigation system is in the Vaal River. If the water is polluted it affects the agriculture sector, hence food production which in the end we as humans take in.</p>		<p>Comment noted.</p>
<p>It was commented by saying: if this is a public meeting, then it should have been arranged properly and held at a venue that will be big enough to accommodate the entire public. An announcement should have been made to inform the entire public to ensure that the public can have an input on the issues presented. Mr Mthimunya also stated that he has a problem that</p>	<p>Mthimunya, Mninwa Resident: Thuthukani PM: 02 September 2014</p>	<p>CIlr Mosia provided feedback (see below). It is also important to note that there was no power at the School Hall that was booked for the Public Meeting and alternative arrangements had to be made. Bongi Mhlanga, Public Participation Practitioner, Lidwala Environmental</p>

Issue/Comment	Raised By	Response
the few people who have attended the public meeting are regarded as the public.		
The project team was informed that the Tutuka Power Station does not fall in the Olifants River catchment. The forum will therefore not be a stakeholder on this project.	Nieuwoudt, Marianne Coordinator: Olifants River Forum Coordinator E-mail:10 October 2012	Comment noted.
The concern was raised that the Officials who are responsible for the licencing of the project are not present at the focus group meeting, and that the landowners will have to depend on Eskom to convey their messages to the department. He enquired as to why the DEA is not present at the meeting.	Steyn, Ben Landowner Farm: Mooimeisiesfontein FGM: 02 September 2014	The DEA has not been invited to the FGM as this FGM is to provide the surrounding landowners at Tutuka PS an opportunity to submit comments on the DEIR, ask questions for clarification and raise concerns regarding the proposed project as they, as landowners, might have the same issues / concerns. NV mentioned for clarification purposes that it is not Eskom who will be submitting their concerns to the DEA, but the EAP, Lidwala SA. NV made it known to the landowners that the DEA looks at the Comment and Response Report and how the EAP addressed the comments. Nicolene Venter, Public Participation Practitioner, Zitholele
It was requested that a meeting be conducted between DEA, ESKOM, and the Landowners to provide them the opportunity to verbally submit their objections regarding the proposed project. He stated that it is a concern that Eskom will be submitting their concerns to the DEA.		All comments, concerns and objections received are included in the CRR and Mr Steyn's letter is included in the PP appendices. It was also pointed out that the EIA and PP process is an independent process and that comments, concerns and issues raised by stakeholders are captured and addressed by the EAP and PP team and not by Eskom. Nicolene Venter, Public Participation Practitioner, Zitholele A meeting has been secured with the DEA, during the Case Officer's site visit, for Tuesday 14 October 2014. Mr Steyn submitted his apologies for not attending the meeting. Nicolene Venter, Public Participation Practitioner, Zitholele
Landowners are losing more and more, and referred to the prospecting right application that he signed, and through that lost the underground mining rights on his farm.	Theron, Wouter Landowner Farms: Dwars-in-die-Weg/Rietspruit/Hoogenhout FGM: 02 September 2014	Comment is acknowledged and it needs to be noted that the project team cannot respond to it as it is not part of the scope for this proposed project. Nicolene Venter, Public Participation Practitioner, Zitholele

Issue/Comment	Raised By	Response
<p>The project team was informed that landowners are being approached for prospecting on their farms and wanted to know if they should allow those companies to prospect.</p>	<p>Van Heerden, Kobus Landowner FGM: 22 November 2012</p>	<p>Eskom cannot tell the landowners to allow prospecting or not, that decision will have to be made by the landowner on his/her discretion. It was also explained that if Eskom wants to make use of land for ashing and if there is a mineral right has been registered with DMR then discussions will take place between Eskom and the mineral rights owner. Tobile Bokwe, Eskom Sustainability Division</p> <p>It was requested that the details of the companies that are doing the prospecting on the properties to be forwarded to the public participation team. Ashlea Strong, EAP, Lidwala Environmental</p> <p>Information not received up to FEIR phase.</p>
<p>The project team was informed that he and Mr Lottering are attending the meeting as representatives of their Departments. As previously mentioned the Head of Departments are unfortunately detained at the IDP meeting The team was advised that the District Municipality needs to be informed of the proposed project (contact person, Mr Dan Hlanyane) as all Environmental Impact Assessment Reports are sent to him for comments</p>	<p>Van Wyk, J Lekwa Local Municipality FGM: 22 November 2012</p>	<p>The District Municipality (Mr Hlanyane in person) attended the Focus Group Meeting held with Officials from the PixleykaSeme Local Municipality, held earlier in the week. Nicolene Venter, Imaginative Africa</p>
<p>JV indicated that he will send through formal comments, including the ones raised at the meeting, to Lidwala before the end of the review period.</p> <p>He requested the following additional information:</p> <ul style="list-style-type: none"> • Shapefiles of the current ash dam; • Shapefiles of the expansion; and • The soil map that was done with the symbology that comes with the map (shapefile), the detailed raw data plus the GPS points of where the observation was done <p>JV added that looking at the picture that he's got and the soil map that was done there is a big difference between the two. Based on the fact that the image that he has is based on the satellite remote sensing the DARDLEA will take the ground truthing</p>	<p>Venter, Jan DARDLEA: Soil Conservationist KSW: 02 September 2014</p>	<p>The requested shape files were e-mailed to DARDLEA's representative on 09 October 2014. Nicolene Venter, Public Participation Practitioner, Zitholele Consulting</p> <p>Written comments received from DARDLEA on 28 October 2014 and are included in Appendix G.1 of the Final EIR. Nicolene Venter, Public Participation Practitioner, Zitholele Consulting</p>

Issue/Comment	Raised By	Response
<p>undertaken by the Agricultural Potential Specialist as a true reflection of the area.</p>		
<p>Situated in the local municipal area of Lekwa Local Municipality in the Gert Sibande District, is supported and subject to the following conditions:</p> <p>(a) National mining legislation does not absolve the mining & petroleum industry from also complying with provincial and municipal land use planning legislation as confirmed in case law "<i>Maccsand (Pty) City of Cape Town, 2012</i>", therefore in the event that a prospecting right be granted in terms of the MPRA, the necessary rezoning / consent use / land use right must be obtained from the local municipality in terms of the applicable land use scheme;</p> <p>(b) Written permission must be obtained from the local municipality in terms of the land use rights as contained in their land use scheme, as mentioned in (b) above;</p> <p>(c) Applications on areas within the approved (DAFF) urban edge are not supported, except if the land use zoning has catered for the proposed activity in advance. Correct and ample mitigation measures must be in place prior to the onset of the activity.</p>	<p>Venter, Jan DARDLEA: Soil Conservationist Letter: 29 October 2014</p>	<p>Prospecting and Re-zoning are not applicable to this project. Danie Brummer, EAP, Lidwala Environmental</p>
<p>(d) Activities impacting negatively or which may disturb any agriculture activities are not permitted e.g. cultivated fields, irrigation infrastructure (draglines, quick coupling, hydrants, micro-irrigation, centre pivots, irrigations sub service mainlines), grazing, Silo's, Animal Kraal's or associated structures etc. In such cases the specific area in question must be spatially (GPS coordinates) delineated and written approval must be obtained from the Provincial Department of Agriculture e.g. Accounting Official of the Provincial Department of Agriculture, Rural Development and Land and Environmental Affairs (DARDLEA) in conjunction with the agriculture extension official as well as the Agriculture Municipal Manager, Tribal Authority in cases of Communal Land and the relevant owner / lessee / lesser / land user prior to the commencement of the proposed activity. This condition is for purposes of safeguarding any government</p>		<p>Eskom to take note. Should be a separate application to DARDLEA if applicable to this activity. Danie Brummer, EAP, Lidwala Environmental</p>

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funding which may have incurred on the said area or nearby affected areas.		
(e) Any proposed activity must have photos which are geo-tagged, date and time stamped prior to commencing with any activity and after completion of the said activity. The photos must be made electronically available to all relevant authorities at the start of any activity. The name and contact details (All Hours) of the contractor must also be communicated to the accounting official of the Provincial Department of Agriculture or delegated official prior to commencement.		Eskom to take note Danie Brummer, EAP, Lidwala Environmental
(f) Any of the proposed activities must not at any stage impact negatively on areas which are zoned for agriculture use e.g. natural veld and planted pasture etc. Open fires is prohibited in all cases. All necessary precautions must be taken prior to any activities preventing the possibility of any veld fires which could emanate from any machinery or person involved in any related activities.		Conditions have been included in the EMPr - Eskom to take note. Danie Brummer, EAP, Lidwala Environmental
(g) The relevant bodies which is part and partial or associated with the proposed activities must comply with all the legal and precautionary requirements as indicated in the "The National Veld and Forest Fire Act No. 101 of 1998".		Eskom to take note. Danie Brummer, EAP, Lidwala Environmental
(h) The natural resources are regarded as scarce resources which cannot be renewed and must be preserved in an environmental responsible manner.		
(i) Proposed activities may not impact negatively on any natural resources such as water, soil and the environment.		Conditions have been included in the EMPr - Eskom to take note. Danie Brummer, EAP, Lidwala Environmental
(j) If high potential and unique agricultural soils are present, it should be protected in terms of the Conservation of Agricultural Resource Act, 1983 (Act 43 of 1983);		No high potential soils have been identified on or within the imeediade vicinity of the development footprint. Danie Brummer, EAP, Lidwala Environmental
(k) No buildings or structures may be constructed within the proposed areas unless the local municipality has granted the necessary approval in terms of the National Building Regulations and Building Standards Act, 1977 (Act 103 of 1977).		Eskom to take note. Danie Brummer, EAP, Lidwala Environmental
(l) The National Department of Agriculture, Fisheries and Forestry and the Department of Agriculture, Rural		Eskom to take note.

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<p>Development and Land and Environmental Affairs reserves the right to altered or amend its viewpoint based on forthcoming studies, documentation and information which may become available as the process progresses.</p>		<p>Danie Brummer, EAP, Lidwala Environmental</p>
<p>(m) For purposes of the Environmental Management Plan:</p> <ul style="list-style-type: none"> A soil survey study 150 m Grid, raw field data e.g. GPS points of soil survey classification points and soil map e.g. describing soil profile with the various horizons and thickness thereof, effective depth of soil and organic content must be electronically package in a spatial format such as shape files. <p>All relevant attribute data must be supplied electronically to the Mpumalanga Department of Agriculture, Rural Development and Land and Environmental Affairs (DARDLEA) or delegated official together with the Environmental Management Plan.</p>		<p>Eskom to take note, data will be obtained from the soil specialist upon application to DARDLEA (refer to DARDLEA: Soil Conservationist Letter: 29 October 2014 point (d) above.</p> <p>Danie Brummer, EAP, Lidwala Environmental</p>
<ul style="list-style-type: none"> Methods of stockpiling top soil must promote the possibility of soil rehabilitation ensuring agriculture land capability potential (DAFF standard) and not only land use. 		<p>Eskom to take note.</p> <p>Danie Brummer, EAP, Lidwala Environmental</p>
<ul style="list-style-type: none"> Dust suppression plays a major role in view of the impact which it may have on the surrounding area especially on the agriculture activities. Prevailing wind direction must be monitored allowing for mitigation measures thus minimizing the risk of dust pollution. 		<p>Eskom to take note.</p> <p>Danie Brummer, EAP, Lidwala Environmental</p>
<p>DEIR - BACKGROUND INFORMATION [extracts from DEIR]</p> <p>ADDITIONAL COMMENTS:</p> <ul style="list-style-type: none"> Mitigation arrangements for site establishment, vehicles travelling, ash disposal vehicles or maintenance areas, must be sealed off and regarded as a potential area of contamination. 		<p>Conditions have been included in the EMPr - Eskom to take note.</p> <p>Danie Brummer, EAP, Lidwala Environmental</p>
<ul style="list-style-type: none"> Mitigation measures must be put in place ensuring that the soils along the length of the conveyer belt are not contaminated and that any run-off water must be treated as grey water and treated as a closed system which forms part 		<p>Conveyor belt will run alongs the existing ADF facility for the entire length. Will form part of the existing closed system</p> <p>Danie Brummer, EAP, Lidwala Environmental</p>

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<p>of the bigger closed system encompassing the power plant and related activities. The grey water must be treated as per Waste Act No. 59 of 2008 guidelines.</p>		
<ul style="list-style-type: none"> The emergency dump site must be provided with mitigated measures preventing possible contamination. 		<p>Conditions have been included in the EMPr - Eskom to take note. Danie Brummer, EAP, Lidwala Environmental</p>
<ul style="list-style-type: none"> Testing boreholes points surrounding the Ash disposal area must be identified (gps coordinates) and established allowing for monitoring of possible seepages. 		<p>Eskom to take note. Danie Brummer, EAP, Lidwala Environmental</p>
<p>GIS INFORMATION:</p> <ul style="list-style-type: none"> Satellite Imagery & Proposed Alternatives (DARDLEA provided a map) 		
<ul style="list-style-type: none"> Unexplained Visual Issues Unexplained white in print is clearly visible on the satellite imagery, which needs to be clarified. The impact on the natural resources must be assessed by the relevant specialists and mitigated based on the outcome and explanation. 		<p>White line in the image that were referred to is the dust from the ADF. The dust impacts have been extensively assessed in the Air Quality specialist study Appendix I and the recommendations and mitigation measures have been included in the EMPr. Danie Brummer, EAP, Lidwala Environmental</p>
<ul style="list-style-type: none"> Topography and rehabilitation rational and methods: <p>Available information derived from our GIS information indicates that the soil potential report is not aligning with various aspects. Preference is always given to a detail soil survey exercise which was conducted as per appendices.</p> <p>Therefore more detail information is required regarding the soil information as obtained through specialist studies. Based on the extent of the proposed ash disposal area a more detail assessment will be required and it is proposed that the study be conducted on a 150m x 150m grid.</p> <p>The outcome will allow for a better alignment of the various soil types and delineation of the areas of concern e.g. wetland areas, soil types etc.</p>	<p>Please refer to the soils specialist study included as an Appendix to the EIA – Appendix P. Danie Brummer, EAP, Lidwala Environmental</p>	

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<p>In addition a possible concern could be the position within the topography of the rehabilitated area, by utilising soils which are possibly situated on a different position and fulfils different functions within the topography.</p>		
<ul style="list-style-type: none"> • The following information is required : <ul style="list-style-type: none"> ➤ Locality (GPS coordinates) of borehole monitoring points and associated timeframes for monitoring. 		<p>Please refer to the Groundwater Specialist report Appendix N. Danie Brummer, EAP, Lidwala Environmental</p>
<ul style="list-style-type: none"> ➤ Locality (GPS coordinates) of dust monitors and the dust suppression results. 		<p>Please refer to the attached report.....</p>
<ul style="list-style-type: none"> ➤ Analysis of the white in print and associated impact on natural resource and accompanied chemical impact on surrounding area. 		<p>Please refer to the EIA report and the Air Quality specialist report Appendix I for the assessment of impacts of the dust. Danie Brummer, EAP, Lidwala Environmental</p>
<ul style="list-style-type: none"> ➤ Spatially informed soil map with associated symbology together with the raw detail observation data and gps coordinates for each of the observation points. 		<p>Please refer to the Agricultural potential/soil specialist report Appendix P. Danie Brummer, EAP, Lidwala Environmental</p>
<ul style="list-style-type: none"> ➤ Detail processes, explaining the proposed topsoil storage, detail rehabilitation activities and thickness of the various horizons allowing assessing of soil capability pre- and post-rehabilitation. 		<p>Please refer to the Tutuka Operations manual and Rehabilitation plan Appendix U. Danie Brummer, EAP, Lidwala Environmental</p>
<p>It was asked whether the officials from the Department of Labour will be the responsible officials who will be submitting written comments on the DEIR.</p>	<p>Venter, Nicolene Public Participation Practitioner Zitholele Consulting KSW: 02 September 2014</p>	<p>The Department will have a look at the report together with their colleagues and if there are any inputs from their colleagues they will forward them to Lidwala SA. Siphiwe Makhanye, Department of Labour</p>
<p>It was noted that Mr Mtimunye's comments have partially covered his concerns. It was stated that as a resident of Thuthukani, he has observed the impacts of Tutuka Power Station on the entire Thuthukani community. It was also commented that, the Cllr's introduction mentioned that he reports to various structures in the community which consist of various groups, and this is a problem to him. The question: was posed as to where do those structures report to because there are public meetings held or conducted in Thuthukani. They only conduct or hold organisational meetings yet the impact of the Tutuka ash plant doesn't only have an impact on organisations but also have an impact on the entire Thuthukani community.</p>	<p>Xaba, Thomas Resident: Thuthukani PM: 02 September 2014</p>	<p>The following was clarified: There is no number or general membership that constitutes a public. Even if there are three people it's also regarded as the public. This is not the first time that Lidwala presented this proposed project to the community and it's also not the last time, whatever they are presenting and the members of the public will attest to that. Note that different structures work in different ways. Lidwala requested that should loud hailing be used, then one of their team members should be present and be part of the loud hailing process, so as to facilitate what is being said. As this proposed project is not a municipal project, loud hailing is not a requirement. Lidwala is present to present the proposed project and the various environmental impacts to Thuthukani's residents that the community are</p>

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		<p>afforded an opportunity to provide their inputs. If a follow up meeting is required it will be conducted as the community is at liberty to request a follow up meeting.</p> <p>Any member of the community can go to the municipality and request access to the municipality's records of all the different wards files. They can check if there were any public meetings conducted in that specific ward, the purpose of those public meetings and what the attendance of those meetings were. Cllr Mosia also mentioned that in April there was a community meeting conducted whereby the Executive Mayor, Cllr Caroline Matsidiso Morajane was invited to discuss the budget for the whole municipality and of the ward. The Cllr Mosia said that if they speak of ward 12, they are not only speaking about Thuthukani but also the surrounded 32 farms and they have to rotate amongst those farms to tell them anything about what is going to happen within the ward.</p> <p>This meeting is conducted by Lidwala SA and Eskom (Tutuka Power Station) and the purpose of the meeting is to report back to the community regarding the proposed new Ash Disposal Facility (ADF) and the associated environmental impacts. Questions for clarification, where needed will be asked. This is not his meeting, however it is still a public meeting. Hence he is handing over to the public to ask whatever it is that they would like to ask.</p> <p>Regarding the different structures they had arranged from the side of the ward committee, which was elected constitutionally by the majority of the people, that the meeting will be attended by members representing different disciplines in the community. He added that the meeting conducted today is to clarify things that were requested in the previous meeting that was held at this venue, and stated that Lidwala and Eskom is there to answer and respond to questions that were previously asked by the community members.</p>

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		<p>If anyone has anything to say or has a query regarding the operations of the ward, the community is at liberty to attend the ward meetings. He asked the community to wait for their own ward meeting to take place where they can bring up and deal with all of the ward's issues.</p> <p><i>Cllr Mosia, Lekwa Local Municipality</i></p> <p>Regarding the issue of the two projects that Lidwala SA is doing on behalf of Eskom (Tutuka Power Station) the first one is the EIA for the proposed new ADF (reason for this meeting) and the FFP project (environmental authorisation already received).</p> <p><i>Bongi Mhlanga, Public Participation Practitioner, Lidwala Environmental</i></p>
<p>It was asked whether the presentation is also part of the DEIR Report.</p>		<p>The presentation is a summary of what is in the DEIR report.</p> <p><i>Bongi Mhlanga, Public Participation Practitioner, Lidwala Environmental</i></p> <p>The presentation will be appended in the minutes.</p> <p><i>Nicolene Venter, Public Participation Practitioner, Zitholele Consulting</i></p>