Integrated Environmental Authorisation

(Environmental Impact Assessment, Water Use License and Waste Management License Applications) for the Proposed 60 Year Ash Disposal Facility and associated infrastructure at Kusile Power Station

(DEA Ref No 12/12/20/2412 (NEAS Reference: DEA/EIA/0000514/2011)

Comments and Responses Report

Version 3

This Issues and Responses Report (Version 3) captures the issues raised by stakeholders during the Announcement Phase, Scoping Phase and comments submitted on the EIA Newsletter distributed in the Impact Phase of the Integrated Environmental Authorisation process (Environmental Impact Assessment (EIA), Water Use License and Waste Management License Applications) for the proposed 60 Year Ash Disposal Facility (ADF) at Kusile Power Station.

Comments raised during the Draft Environmental Impact Assessment Report's (DEIR) review and comment period will be captured and responded to in the Comments and Responses Report (CRR), Version 4, which will form part of the Final Environmental Impact Assessment Report.

All comments raised has been categorised according to:

- 1. EIA Phase
- 2. Impact
- 3. Alphabetically according to surname

Abbreviations:

EA Environmental Authorisation EIA Environmental Impact Assessment EMPr Environmental Management Programme PPP Public Participation Practitioner

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4. IMPACT PHASE PROCESS COMMENTS

| NO. | COMMENTS, QUESTIONS AND ISSUES | COMMENTATOR(S) | SOURCE(S) | RESPONSE(S) |
|-----|--|---|--|--|
| 2 | 4.1. Site Alternatives Related Comme | nts | | |
| 1 | Telephone enquiry as to which site has been identified as the EIA preferred Site. | BRIEL, Rudie Commercial Manager: Eagles Pride Hatchery Telephone: 26 February 2014 | Fax on 21 October 2013. | Graag bevestig ek ons telefoniese gesprek van vanmiddag waarin jy versoek het of 'n besluit rakende die gekose terrein vir die 60 Jaar Asprojek vir Kusile Kragstasie al geneem is. Soos genoem, blyk dit op hierdie stadium of terrein A die mees geskikste terrein is, maar |
| | Summary of telephone conversation confirmed as correct. | E-mail: 27 February 2014 | | die bevestiging rondom my antwoord sal dalk eers deur die loop van die week bevestig kan word. Ek sluit Mathys Vosloo, projekbestuurder vir die OIE by hierdie kommunikasie in. |
| | | | | Ek bevestig ook dat jy genoem het dat jy dringend moet weet wat die besluit rondom die terrein is aangesien uitbreidings aan die infrastruktuur van Eagles Pride gedoen moet doen en aangesien julle eiendom aangrensend tot terrein B is, sal die vestiging van 'n asfasiliteit Eagles Pride se besigheid nadelig beindvloed. |
| | | | | Bevestig asseblief of bogenoemde opsimming van ons gesprek korrek is. Indien nie, is jy meer as welkom om korreksies aan te bring. |
| | | | | Nicolene Venter, PPP (e-mail: 26 February 2014) |
| 2 | Daar is 4 gebiede op die kortlys en ons wag vir Omgewingssake. Kan ek 'n kopie kry van die verslag soos gestuur na Omgewingssake? Gedeelte 10 is geregistreer in die naam van Bio-Select CC en | MOLL, Andreas Landowner: Farm Jakhalsfonteint (Bio-Select) | E-mail: 12 February 2013 E-mail: 11 February 2013 | Soos belowe, hiermee terugvoer na die spesialiste werkswinkel wat ons verlede week gehou het. Dié werkswinkel was toe nie om die voorgestelde alternatiewe te bespreek nie maar om aan die spesialiste addisionele |
| | ek is die enigste lid van Bio-Select CC. | | | inligting te gee wat hulle in aanmerking moet |

Hanna van Aswegen van Kortfontein (nie Jakhalsfontein 21) is die skoolhoof by Balmoral Laerskool. Ek het nie die nommer nie maar jy kan die skoolnommer maklik vind.

Het jy 'n tekening/kaart oor waar gedeelte 21 gelee is? Dan kan ek help.

neem met hulle detail studies en die evalueringsmetode.

Die werkswinkel waar die alternatiewe bespreek sal word vind huidiglik teen einde Maart plaas – sou die datum verander, sal ek jou weer laat weet. Dit is die verwagting dat die Konsep Omgewingsimpakverslag kort daarna aan die publiek, en julle as grondeienaars, beskikbaar gestel sal word vir insae en kommentaar.

Ek sal weer met jou in verbinding tree sodra die verslag reg is vir verspreiding.

Nicolene Venter, PPP (e-mail 06 March 2013)

Soos belowe, hiermee terugvoer na die spesialiste werkswinkel wat ons verlede week gehou het. Dié werkswinkel was toe nie om die voorgestelde alternatiewe te bespreek nie maar om aan die spesialiste addisionele inligting te gee wat hulle in aanmerking moet neem met hulle detail studies en die evalueringsmetode.

Die werkswinkel waar die alternatiewe bespreek sal word vind huidiglik teen einde Maart plaas – sou die datum verander, sal ek jou weer laat weet. Dit is die verwagting dat die Konsep Omgewingsimpakverslag kort daarna aan die publiek, en julle as grondeienaars, beskikbaar gestel sal word vir insae en kommentaar.

Ek sal weer met jou in verbinding tree sodra die verslag reg is vir verspreiding.

Nicolene Venter, PPP (e-mail: 03 June 2013)

Jy is korrek, daar is 4 areas (A (hier is ook area G1 en G2), B, C, F – ek stuur vir jou die Locality Map per LARGEFILESASAP (of een van die programme) – hy is sowat 12MB groot.

| | | Die verslag is ook op Zitholele se webwerf (http://www.zitholele.co.za/kusile-ash) beskikbaar of as jy verkies kan ons vir jou 'n CD/DVD stuur met die verslag op – dit is ook heelwat MBs groot. Laat my asseblief weet wat jy verkies. Voorsien my asb ook van jou posbus en fisiese adres vir aflewering sou jy 'n CD/DVD verlang. Nicolene Venter, PPP (e-mail 12 February 2013) |
|---|---|--|
| | | Post-entry note: CD was posted on 13 February 2013 |
| 3 | Stuur gerus aan, ek wil graag weet wat die stand van sake is. Ek is maar bekommerd. | Soos belowe, find asseblief aangeheg die publieke dokumente rakende die voorgestelde breiding van aswegdoenfasiliteite by die Kusile-kragstasie uitwat tot dusver versprei is: Bekendstellings Fase: Inligtingsbrief Studie-area kaart Lys van plase/eiendomme wat moontlik deur die projek geraak mag word Bewys van advertensies geplaas (ek was selektief en heg net Beeld en Streeknuus aan. Die advertensie was ook in die volgende koerante geadverteen Corridor Gazette Die Springs Advertiser Echo Ekasi News Mpumalanga News Ridge Times The Herald Wittbank Nuus Bestekopname Fase Konsepverslag Aankondiging dat die Konsep Omgewingsimpakverslag |

| 4 | Concerned about alternative C. | MOTAUNG, Lindiwe Snr Environmental Advisor Eskom Holdings SOC Limited | EIA Newsletter Comment Form | beskikbaar is vir kommentaar Brief of belangegroepe te herinner aan die publieke vergadering Finaleverslag Aankondiging dat die Finale Konsep Omgewingsimpakverslag aan die Departement Omgewingsake ingedien is vir besluitneming Sal jy asseblief bevestig dat die plaas Jakhalsfontein 528, Ged 10) in jou naam geregistreer is. En, het jy dalk die kontakinligting (selfoonnommer en e-pos adres) van jou bure of Jakhalsfontein 528, Ged 21, Hanna van Aswegen? Ons het net 'n landlyn nommer (013) 680 1081 en kom nie deur na die nommer nie. Ons sal jou op hoogte hou en uitnooi na die volgende reeks vergaderings wat beplan word. Op hierdie stadium, moet asseblief nie huiwer om ons te kontak indien jy enige additionele inligting verlang nie. Nicolene Venter, PPP (e-mail 02 December 2013) With reference to your EIA Newsletter Comment Sheet received (refer to attached PDF), you included a comment in the Farm name and portion number if you are a potentially affected landowner or own property |
|---|--------------------------------|---|--------------------------------|--|
| | | | | adjacent to the proposed sites informing us that you are concerned regarding alternative C. We are in the process of finalising the Comments and Responses Report for inclusion into the Draft Environmental Impact Assessment Report and we would appreciate it |
| | | | | if you can please be so kind as to elaborate what your concern regarding Site C is. Currently we cannot respond to your concern. |

| | | <u> </u> | Г | I |
|---|---|---|----------------------------|---|
| | | | | It will be appreciated if we can receive your written concern before the end of business day on Monday 21 July 2014. Nicolene Venter, PPP (e-mail: 20 July 2014) |
| 5 | We act on behalf of Before Sunset Properties 36 (Pty) Ltd & Nooitgedacht Farm who is the owner of substantial portions of land in the subject area, including the Remaining Extent of Portion 9 (A Portion of Portion 1) of the Farm Nooitgedacht 525 Registration Division JR Gauteng I presume, based on us having received the correspondence from you, that we are registered as an "Interested and Affected Party" in the Environmental Authorisation Process. If not, it is important that we be included as such. With regard to the proposed alternatives for the extension of the Ash Disposal Facility, "option B" is close to our property and could potentially have negative impacts from an air quality, water quality and visual perspective. "Option C" being visible from the N4 highway could possibly negatively affect the value of property in the wider area. The best options from our point of view, appears to be options A, G or F. Confirmation received that the landowner information as per database is correct. | SWEKE, Desmond Settlement Planning Services | E-mail: 06 January 2014 | Acknowledge receipt of e-mail dated 06 January 2013. The team will respond to your site alternative comments shortly. Confirmation provided that the following stakeholder is registered on the project database as a landowner of the Farm Nooitgedacht: David Singer Landowner Before Sunset Properties 36 (Pty) Ltd & Nooitgedacht Farm (contact details provided as per Maximizer). It will be appreciated if the above-mentioned information can be confirmed as correct. It was noticed that Setplan, acting on behlaf of Before Sunset Properties 36 (Pty) Ltd & Nooitgedacht Farm, is not regeistered on the project database and we can confirm that you, as representative from Setplan, has now been registered on the project database. We also confirm that Setplan will receive all future correspondence relating to this proposed project. Nicolene Venter, PPP (e-mail: 08 January 2014) |
| | | | | Assessment of the site alternatives is not only based on air quality, water quality and visual aspects. A number of specialist studies were undertaken to assess the suitability of the alternative sites. We can confirm at this point that the cumulative impacts suggest that Site A would be the best site with least environmental, technical, and socio-economic impacts for an Ash Disposal Facility. |
| | | | | Mathys Vosloo, EAP |
| 6 | Verneem namens Mnr van Rensburg of daar al uitsluitsel oor die | SMIT, Sonja | E-mailed: 20 June | Met verwysing na die telefoniese gesprek van |

| | terreinalternatiewe vir die asgat is. | On behalf of HvR Boerdery | 2014 | 25 Junie 2014 rakende die OIE status van die Kusile Aswegdoeningsfasiliteit en Afvalbestuurlisensie projek word dit bevestig dat die impakfase reeds begin het waartydens die onderskeie alternatiewe terreine in detail ondersoek word om die mees geskikste terrein (omgewing sowel as tegnies) te identifiseer. Grondeienaar sal op hoogte hou van enige verwikkelinge in die verband. Nicolene Venter, PPP (e-mail: 26 June 2014) A number of specialist studies were undertaken to assess the suitability of the alternative sites. We can confirm at this point that the cumulative impacts suggest that Site A would be the best site with least environmental, technical, and socio-economic impacts for an Ash Disposal Facility. Mathys Vosloo, EAP |
|---|--|---|---|---|
| | 4.2. Social and Socio-economic Relate | | | |
| 1 | Ek word geraak op gedeelte 10, Jakhalsfontein, wat 'n "possible affected property" is. Op hierdie eiendom is 70% van my organiese bessies en die pakhuis. My woonhuis en die ander 30% organises Bessies is op Gedeelte 1, Jakhalsfontein, wat aangresend is aan Gedeelte 10. Indien ek geraak word deur die ashoop word beiede bedeeltes geraak en word beide gekoop! | MOLL, Andreas Landowner: Farm Jakhalsfonteint (Bio-Select) | EIA Newsletter Comment Form: 13 December 2013 | In the event that Site B is identified as the most suitable scenario, negotiation with Eskom regarding land purchases must be undertaken. This is however not part of the EIA process but will be part of negotiation process that will start during the EIA process, however will only be concluded after environmental authorisation has been granted. Mathys Vosloo, EAP |
| 2 | Our main farming operation is with pigs. L van Dalen Boerdery is a permanent employer of LHW van Dalen and a number of employees, which will be unemployed should the farm be sold. | VAN DALEN, Leanert Landowner: Farm Witklip | Letter: 07 January 2014 | As per my acknowledgement date 07 January 2014 of Leo's Engineering's Comment Sheet and letter received as a response to our EIA Newsletter distributed in December 2013, I can now inform you that the EIA team is closer to making a decision regarding the preferred site for the ADF. Once finalisation has been received, we will communicate this information to stakeholders |

L van Dalen Boerdery is currently in an upgrading and expanding process for the cages, etc.

Loss of income will be for three (3) years due to the fact that pigs must be sold and new cages built once a new farm is selected for breeding purposes and income will be needed primarily to do so.

such as yourself. A formal response to your letter will be attended to shortly.

Please do not hesitate to contact me should you have any further queries or need clarification regarding the EIA Process

Nicolene Venter, PPP (e-mail: 26 February 2014)

Please receive herewith acknowledgement of the comments received from Mr L van Dalen. The team will respond in due course.

Nicolene Venter, PPP (e-mail: 07 January 2014)

A number of specialist studies were undertaken to assess the suitability of the alternative sites. We can confirm at this point that the cumulative impacts suggest that Site A would be the best site with least environmental, technical, and socio-economic impacts for an Ash Disposal Facility.

Mathys Vosloo, EAP

In the event that Site B is authorised by the DEA, an appeal process will follow during which further submission can be made to the minister.

However, we can confirm at this point that the cumulative impacts suggest that Site A would be the best site with least environmental, technical, and socio-economic impacts for an Ash Disposal Facility. The EAP will thus recommend Site A as the preffered site alternative.

Mathys Vosloo, EAP

In the event that Site B is authorised by the DEA, an appeal process will follow during which further submission can be made to the minister.

However, we can confirm at this point that the cumulative impacts suggest that Site A would be the best site with least environmental, technical, and socio-economic impacts for an

| | | | | Ash Disposal Facility. The EAP will thus recommend Site A as the preffered site alternative. Mathys Vosloo, EAP |
|---|--|---|-------------------------|---|
| 3 | With reference to the telephonic conversation with Patiswa Mnqokoyi on the 17 th October 2013 the following <i>Refer to poings 3.1 to 3.4 below</i> | DU PLESSIS, Louise Lawyers for Human Rights: Land and Housing Unit | Fax: 21 October 2013 | Zitholele Consulting will be releasing the Draft Environmental Impact Assessment Report (DEIR) on Friday 25 July 2014 for public review and comments. |
| | | | | To ensure that we address all issues raised during the public participation process, we would like to confirm a meeting date during the DEIR review period which is from Tuesday 29 July 2014 until Monday 08 September 2014. The reason for this request is that I am not sure whether your Firm responded to my email dated 04 November 2013 (see below), but I recall not receiving a confirmation date. If you did respond, would you please be so kind as to forward the e-mail to me again so that it can be included in our correspondence Appendix to the DEIR. |
| | | | | We also kindly request a copy of the correspondence dated 3 October 2013. |
| | | | | I can also confirm that through the detailed environmental assessment undertaken, Site A has been identified as the preferred site (property owned by Eskom) and Site F, one of the site alternatives proposed during the scoping phase and which was located on the Farms Bossemanskraal 538 (Ptns 5, 7, 8, 9, 10 & 12), Witpoort 563 (Ptns 1, 4, 8, 13 &16) and Dwaalfontein 565 (Ptns 1 &2) was discarded. |
| | | | | As per the correspondence received from Lawyers for Human Rights, Land and Housing Unit, acting on behalf of the Maphosa Family, the Maphosa Family has a land claim on the |

| | | | Farm Bossemanskraal 538JR. |
|-----|---|-----------------------|--|
| | | | For easy reference, please find attached a PDF document which includes your Firms correspondence and our e-mail communications. Nicolene Venter, PPP (e-mail: 20 July 2014) |
| | | | As per our e-mail correspondences below, we |
| 3.1 | Take note that we have previously sent through correspondence to you on the 3 rd of October 2013, but as of yet have not received any response. As per the telephone conversation, Zitholele Consulting | | would like to confirm that the purpose of the meeting with HR, Lawyers for Human Rights, Land and Housing Unit, is to discuss the EIA process to date and present the 5 sites (6) |
| | indicated that they shall revert back to us with regards to our meeting request and the contents of our previous corresponde on Monday 14 October 2013. | | disposal scenarios) currently under environmental investigation after which a most suitable site will be recommended for decision- |
| 3.3 | We propose that we meet and discuss the planned land use of the farm. | | making to the Department of Environmental Affairs. Should HR need to discuss |
| 3.4 | We are still awaiting your response to our proposal; kindly revert back to us on a proposed date or dates when you will be available to meet with us. | | compensation matters, Zitholele Consulting will unfortunately not be able to answer those questions and it is believed that it is too early in the process for these type of discussions. |
| | | | Currently, with the environmental information available, we can inform you that the indication is that Site F, on the farm Bossemanskraal 538 JR is likely not be a recommended site. |
| | | | As previously requested, please confirm whether the Bossemanskraal 538 JR, as a whole, is part of the Claim in Restitution. If not, please provide us with a list of the portion numbers that forms part of the Land Claim. |
| | | | We would like to propose a date and time for the week of 11 November 2013 and it will be appreciated if you can indicate whether the meeting can be held at your offices in Pretoria. Nicolene Venter, PPP (e-mail: 04 November 2014) |
| 4 | We represent the Maphosa – family who has a land claim on the | Fax: 09 July 2013 | With reference to your letter dated 21 October |

| 4.4 | farm Bossemanskraal 538JR, some of the family members still occupy the farm as labour tenants. | | | 2013 in which Lawyers for Human Rights requested a meeting with the project team for |
|-----|---|---|----------------------------|--|
| 4.1 | Our clients also have a pending application in the Land Claims Court. | | | the proposed abovementioned project, Zitholele Consulting request that you please |
| 4.2 | Our clients brought it to our attention that a decision was made by the commission that the farm is not restorable because of Eskom's planned activities. Our clients were never given an opportunity to address the commission. | | | provide us with three proposed meeting dates (and times) within the next three weeks, and I will co-ordinate dates with Eskom project team members and that of the EIA team. |
| 4.4 | We propose that we meet and discuss the planned land use of the farm in order for us to advise our clients. Kindly advise us when you will be available for such a meeting. | | | Also, please indicate where would be a convenient place to hold this meeting: |
| 7.7 | Trindiy advise us when you will be available for such a meeting. | | | your offices; Eskom Megawatt Park, Sunninghill; or Zitholele's offices in Midrand. |
| | | | | I will forward you in a separate e-mail a map indicating the sites under environmental assessment and the farm Bossemanskraal (Maphosa Family). Would you please be so kind as to provide us with the portion number. <i>Nicolene Venter, PPP (e-mail: 25 October 2014)</i> |
| | 4.3. Water Related Comments | | | |
| 1 | The drinking water is of good quality and any mining operations will have great impact. | VAN DALEN, Lenert Landowner: Farm Witklip | Letter: 07 January 2014 | There are existing mining operations upstream on the Kusile Power Station. With site A being identified as the preferred site alternative, impacts on water resources close to the Kusile Power Station is possible. The surface water quality at and upstream of the preferred site alternative A has been found to be impacted already by agricultural and industrial activities adjacent and upstream of the preferred site by the hydrology and water quality specialist report (see Appendix F for all water related specialist studies). Therefore a comprehensive |

| | | | | impacts can successfully be implemented thereby minimising the potential impact on water resources adjacent to preferred site alternative A. Mathys Vosloo, EAP |
|---|---|---|----------------------------|---|
| 4 | 4.4. Agricultural Related Comments | | | |
| 2 | There are a number of farming operations in the surrounding areas that will be affected & BHS dam is close to as well. Our top soil on the farm is of high quality, we plant maize and the average we harvest is 8 tons per Ha which is very good. There will be a loss of income before we can harvest and then | VAN DALEN, Lenert Landowner: Farm Witklip | Letter: 07 January 2014 | Site alternative A has been identified as the preferred alternative. All the properties affected by site A is owned by Eskom, therefore there will be no direct impacts on existing farming operations. A comprehensive Environmental |
| 3 | plant again for food as well as income. ± 800 pigs as well as a number of cattle on the farm cannot be re-located due to stress. | | | Management Programme will also be implemented to avoide or at the very least minimise any potential indirect impacts on agricultural activities in the vicinity of the ash disposal facility. In the event the competent authority reject the EAP's recommended site — Site A — and authorise another site alternative, then the land owner negotiation process will commence. Construction of the ADF should only commence once successful negotiations has been concluded with all affected land owners. <i>Mathys Vosloo, EAP</i> |
| 4 | 4.5. Mining Right Related Comments | | | |
| 1 | Mining and prospecting rights were disowned by government and allocated to whoever applied successfully. The landowner has no knowledge of who these rights were allocated to. | FOURIE, John (SEE: Team Leader Finance | E-mail:05 March 2014 | It is my understanding that the landowner should know or be informed of who owns the mining right to his property, and a consultation process is followed for prospecting and mining right applications. There, also the landowner is informed by the consultancy who is conducting the consultation process of the application? Clarification welcome. |
| | | | | Nicolene Venter, PPP (e-mail 05 March 2014) |

| 4 | 4.6. GIS / Maps Related Comments / | Requests | | |
|---|---|---|-----------------------------|---|
| 1 | Requested a locality map of the proposed sites in relation to their company's property. | | 1 | With reference to my e-mail below, I would like to follow-up whether you had an opportunity to provide us with your company's property details. I require the information so that I can send you the relevant map. Nicolene Venter, PPP (e-mail: 29 May 2014) |
| | | | | Would you be so kind as to provide us with your company's property details - you are most welcome to complete the attached form which will assist us. Thanking you in advance for the information. Nicolene Venter, PPP (e-mail: 12 May 2014) |
| 2 | Requested dgn/dxf files of the site alternatives for the ash dumps. | SMITH, Cindy Enviornmental Specialist: Anglo-American | E-mail: 29 May 2014 | The requested information was e-mail on 30 May 2014. Mathys Vosloo, EAP |
| 4 | 1.7. Communication | | | |
| 1 | Is dit nie die week van die nuus nie? | MOLL, Andreas Landowner: Farm Jakhalsfonteint (Bio-Select) | E-mail: 24 June 2014 | Die finalisering van die verslag (Konsep Omgewingsimpakverslag – DEIR) het ietwat langer geneem as verwag en is in die laaste fase van finalisering. |
| | | | | Ek sal jou persoonlik in kennis stel sodra die verslag gereed is – ek sal jou ook kontak wanneer ons na vergaderingsdatums kyk, veral die fokusgroepvergadering met grondeienaars. <i>Nicolene Venter, PPP (e-mail 24 June 2014)</i> |
| 2 | Kindly note that the Sub-Directorate: Environment and Recreation does not accept documents via email due to tracking purposes. Furthermore, the entry point is the Regional Office and not Head Office directly. Kindly liaise with the Regional Office fur further assistance. | MUTHRAPARSAD, Namisha DWA | E-mail: 18 December 2013 | The DWA Regional Office (Mpumalanga) is registered on this proposed project as a commenting authority and Reports have been and will be delivered to them for comment. DWA National is also registered on the project database to ensure that they are informed regarding the proposed project. |

| | | | | Nicolene Venter, PPP |
|---|--|---|-----------------------------|---|
| 3 | Dankie vir die OIE Nuusbrief ontvang. Versoek afskrif van die omgewingsimpakstudie wat gedoen is. | PIENAAR, Hennie Alcedo Boerdery | E-mail: 26 February 2014 | Finale Bestekopnameverslag kan van die internet afgelaai word by http://www.zitholele.co.za/kusile-ash , aangesien die dokument te groot is om per epos te stuur. Indien u nie kan aflaai nie, kontak ons gerus en ons stuur 'n CD. Leoni Lubbe, Administrator (e-mail 26 February 2014) |
| 4 | We have signed that there are no applications against the property but we have attached a letter in our contract when purchasing the farm should this be of any importance/relevancy; | VAN DALEN, Lenert | E-mail: 12 March 2014 | Document has been forwarded to Eskom. Nicolene Venter, PPP |
| 5 | Requested to be removed from project database as he rented the farm Kortfontein from Miss Hanna van Aswegen and the rent expired. | WOHLITZ, Ernst Property Owner: Farm Kortfontein | E-mail: 05 March 2014 | Request acknowledged and removed from project database. Nicolene Venter, PPP |
| | 4.8. General Comments | | | |
| 1 | Het SMS ontvang vir die Aansoek om Afvalbestuurlisensie vir Kusile Kragstasie. Ek sal graag aan die Impakstudie wil deelneem. Graag wil ek ook aan jou vra om vir my meer inligting te stuur as dit in jou vermoee is oor die kontrak wat hul nou het om kos pakkies aan die kontrakteurs asook die werkers van Kusile te maak. | JANSE VAN VUUREN, Pieter | E-mail: 15 February 2013 | Hiermee die inligting rakende die kospakkies: 0828838605 of e-pos / MbonisBN@eskom.co.za, kusilecanteen@eskom.co.za Nicolene Venter, PPP (e-mail: 19 February 2014) Dankie dat jy jou e-pos adres vir ons deurgestuur het – ons het dié ook op die projek databasis aangebring. Vind asseblief aangeheg die Agtergrondinligtingsdokument wat jou meer inligting rakende die voorgestelde projek gee. Ek sal kyk of ek vir jou die inligting rakende die kospakkies aan die kontrakteurs kan bekom en sal dit dan vir jou deurstuur. Nicolene Venter, PPP (e-mail: 19 February 2014) |

5. SCOPING PHASE PROCESS COMMENTS

| NO. | COMMENTS, QUESTIONS AND ISSUES | COMMENTATOR(S) | SOURCE(S) | RESPONSE(S) | | |
|-----|--|---|--|---|--|--|
| Ţ | 5.1. Draft and Final Scoping Report Comments | | | | | |
| 1 | We have a grain and pig farming business that needs expansion, which is costly. If renovated, will be compensated? We cannot put everything on hold until a definite decision is made. | Mr Lenert Van Dalen, L Van Dalen Boerdery | Comment sheet on final scoping report sent on 23 August 2012 | The environmental impact assessment will only be finalised by next year. Only then can answers be provided to you. However, you cannot stop your expansion plans. When Eskom has to buy a person's property, Eskom has a policy of compensating for the property as well as any improvements on the property. Willie Howell, EAP (2012) Site alternative A has been identified as the preferred alternative. All the properties affected by site A is owned by Eskom, therefore there will be no direct impacts on existing farming operations. A comprehensive Environmental Management Programme will also be implemented to avoide or at the very least minimise any potential indirect impacts on agricultural activities in the vicinity of the ash disposal facility. In the event the competent authority reject the EAP's recommended site — Site A — and authorise another site alternative, then the land owner negotiation process will commence. Construction of the ADF should only commence once successful negotiations has been concluded with all affected land owners. | | |
| | | | F 11 4 00 | Mathys Vosloo, EAP (2014) | | |
| 2 | After reviewing the Final Scoping Report plan of study it was noticed that no economic study will be done during the environmental impact assessment phase. We hereby request | Shangoni Management Services on behalf of | Email sent on 20 September 2012 | The economic impact and sustainability assessment, including a social impacte assessment will be included in the | | |

| | that an economic study is included to highlight the economical | Eagles Pride | | Environmental Impact Assessment phase of |
|---|---|--|------------------------------|--|
| | impacts on the farmers. | Hatchery (Pty) | | the project. |
| | | | | The Sustainability, soil and land capability, and social impact assessments found that the impact on site B would be high. Site A was thus recommended from this perspective. |
| | | | | Site alternative A has been identified as the preferred alternative. All the properties affected by site A is owned by Eskom, therefore there will be no direct impacts on existing farming operations. A comprehensive Environmental Management Programme will also be implemented to avoide or at the very least minimise any potential indirect impacts on agricultural activities in the vicinity of the ash disposal facility. In the event the competent authority reject the EAP's recommended site — Site A — and authorise another site alternative, then the land owner negotiation process will commence. Construction of the ADF should only commence once successful negotiations has been concluded with all affected land owners. <i>Mathys Vosloo, EAP</i> |
| 3 | After reviewing the application for the Final Scoping Report the Department made the following findings: a) The Department acknowledged the receipt of the Final Scoping Report for the proposed extension of the ash disposal facility at the Kusile Power Station, Bronkhorstspruit b) The report indicated that the full list of water uses to be identified during the early stages of the EIA phase. c) The report indicated that the optimal goal in building a waste disposal facility and associated infrastructure is to effectively minimise the negative environmental and social while ensuring safety, reliability and cost savings for the facility. d) The report indicated that Kusile Power Station will generate contracts / tenders that make these waste streams available to other parties who may available for these waste streams. | Mr Livhuwani Siphuma, City of Tshwane Environmental Management Department- Environmental Management and Parks Division | E-mail: 10 September 2012 | Zitholele Consulting take note of the fact that the City of Tshwane noted and acknowledges the findings as listed in their e-mail. |

| | e) The report indicated that New Largo is the only possible | | | |
|---|---|---------------------------------|--|---|
| | solution that may be large enough, but currently not approved or operational. | | | |
| | f) The report indicated that the land owners along the | | | |
| | alignment of the linear infrastructure that may be required for | | | |
| | each of the alternative have also been notified. g) The Site Identification Report suggested that Sites A, B, C, | | | |
| | A+G and F+G combined be taken forward to the Scoping | | | |
| | and EIR phase of this project. | | | |
| 4 | The Department supports the Final Scoping Report subject to recommendations issued by the Department dated 22/02/2012: | | | The methodology and matrix for the site alternatives can be reviewed in the DEIR, |
| | a) The Department noted that the sites selected for | | | Chapter 5, page 45. |
| | investigation during the EIA phase and recommends that a | | | It can be confirmed that should an EA be |
| | thorough investigation be conducted for the selected sites. b) The proposed activity must be constructed according to the | | | granted that construction will be undertaken as per the approved EMPr. |
| | finalised and approved EMP. The EMP should include all the | | | Mathys Vosloo, EAP |
| | above recommendations. The approved EMP is a legally | | | |
| | binding document. An Environmental Control Officer (ECO) | | | |
| | should be appointed for the proposed construction phase of the development to enforce the approved EMP. The | | | |
| | appointment ECO details should be included within the EMP. | | | |
| 5 | It is mentioned in the Scoping Report that there is a possibility of | Mrs Annamie | Focus group | At present the New Largo operation is not |
| | disposing the ash in the open-cast void created by New Largo. Why is this not a sufficient solution? | Duvenhage, Bronkhorstspruit and | meeting on 20 July 2012 at 10:00 to | approved, and a billion Rand decision cannot be based on a possibility. Assuming that New |
| | This is the fact a sumstant solution. | Wilge River | present information | Largo is approved it would be many years |
| | | Conservancy | regarding the | before a pit of a suitable size is available |
| | | | inclusion of Site F | before feasibility studies could be undertaken |
| | | | as a feasible alternative to be | to quantify the feasibility of in-pit disposal. Studies undertaken on other operations of a |
| | | | taken forward to the | similar nature have been inconclusive. |
| | | | EIA phase of the | Furthermore, the Department of Water Affairs |
| | | | project | has rejected the possibility of in-pit ashing |
| | | | | based on the fact that no liner system can be successfully installed along vertical surfaces as |
| | | | | would be required for the sides of the pit or |
| | | | | void targeted to be disposed in. |
| | | | | Options that could be considered and that have |
| | | | | been done before is to have an ash disposal facility on top of an open cast pit with |
| | | | | compacted material in the pit for rehabilitation |

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| | | | | i.e. to install the ash disposal facility on an area |
| | | | | of open cast mining that has been |
| | | | | appropriately backfilled and compacted; rather |
| | | | | than in an opencast pit. |
| | | | | Thus ash disposal can be shifted to a new |
| | | | | location on New Largo in the future, should |
| | | | | feasibility studies show that it is possible. This |
| | | | | option is also only available for Areas A, F and |
| | | | | G. None of the other areas identified (Areas B, |
| | | | | D, E, H1-3 and I) allow for this later change in |
| | | | | disposal operations, because of the significant |
| | | | | cost to move all the supporting infrastructure, |
| | | | | such as conveyor belts, electricity, roads etc. |
| 6 | Some of the Key Concerns noted for the Draft Scoping Report | Dr James Meyer, | E-mail: 2 August | No reference to pollutant constituants during |
| | that remain applicable include: | Consultant for | 2012 | the Draft Scoping Phase as no specialist |
| | Nowhere in the Draft Scoping Report is specific reference to | TOPIGS SA (Pty) Ltd | | studies has been undertaken yet. |
| | these constituents noted, and although it may be argued that | | | · |
| | they are included by implication, it is argued that in order for | | | Water related specialist studies has identified |
| | meaningful public participation and acceptable EIA terms of | | | background (status quo) water quality levels |
| | reference to be formulated, they should appear prominently | | | subsequent to sampling of surface and ground |
| | in the report with clear assurances that they will be | | | water in and adjacent to the proposed site |
| | established in terms of baseline values, potential hazardous | | | alternative A. Surface water and groundwater |
| | waste streams and monitored accordingly. Failure to do this | | | sampling results can be considered in the |
| | transparently may result in various environmental and water | | | respective specialist studies provided in full in |
| | licenses and authorizations to be granted without specific | | | Appendix F. |
| | reference to the primary pollutants relevant. | | | Constituants of the ash, which represents a |
| | It is argued that any water used in the process of | | | sample from the nearby Kendal Power Station, |
| | transporting, placing and storage of the waste streams (fly | | | has been determined and can be viewed in the |
| | ash and coarse ash) should form a significant and critical | | | Ash classification report in Appendix G. The |
| | part of the Draft Scoping Report and be included therein as | | | ash has been classified as a low hazardous |
| | part of the environment and subsequent EIA issues. | | | waste and subsequebtly a class C barrier |
| | Monitoring descriptions must be detailed for storm water | | | system must be installed for the ash disposal |
| | drainage and monitoring boreholes, listing at the very least | | | facility. |
| | · · · · · · · · · · · · · · · · · · · | | | laomy. |
| | those prohibited discharges typically used for Special Limits | | | The transportation and disposal of ash to a |
| | by DWA. | | | disposal facility has been addressed in terms |
| 1 | Clearer indications should be given regarding the handling of waste from human effluent and other hazardous wastes | | | of the impacts associated with the activity, |
| | | | | engineering requirements and designs |
| 1 | associated with the construction phase, both of the ash dump | | | undertaken to minimise to impact of the activity |
| | and conveyor systems. It is already noted by Kusile that Phola | | | on the receiving environment, and mitigation |
| | Sewage plant cannot cope with the current load, yet Kusile will | | | on the receiving environment, and mitigation |

| | show a significant increase in staff entering the site per day over time (increase from 8500 currently to over 10000 by 2013 – EMC data). It is vital that any additional construction activities be managed with due regard for the existing impacts and subsequent sensitivities of the receiving environment. | | | measures recommended to further minimise the impact of ash on the environment. Monitoring descriptions has been included in the Draft EMPr, which can be viewed in Appendix I of the DEIR. The scope of this project is only relevant to the development of the ash disposal facility. Existing sanitation issues associated with the construction of the Kusile Power Station is thus not part of the scope of this project. The management of human waste during the construction and operational phases of the ash disposal facility will be managed through chemical toilets serviced by an accredited service provider. No permanent facilities which will require tie-in into the existing sewerage systems of Phola will be constructed. Mathys Vosloo, EAP |
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| ! | 5.2. Site Alternatives | | | |
| 1 | We would like to point out that the proposed site "B" is in Gauteng, whereas the power station is being built in Mpumalanga. Apart from the obvious administrative challenges that this cross-border operation may face, we also believe that your consultation process as proposed, will not comply with Government Notice R.543 of June 2010, Chapter 2. In the | Van Rensburg, Jordaan & Olivier Attorneys (on behalf of Hans van Rensburg Boerdery cc) | E-mail: 11 January 2012 | The Gauteng Department of Agriculture and Rural Development is a commenting authority on this assessment and have been included in all communication. Andre Venter, PPP |
| 2 | Background Information Document of September 2011, mention is made only of the relevant government departments in Mpumalanga, for instance the Mpumalanga Department of Economic Development, Environment and Tourism. No mention is made of the same authority in Gauteng. We believe that, especially in the light of the serious economic impact this facility will have on agriculture and the environment in Gauteng, as will be discussed in more detail later, failure to consult with the relevant departments in Gauteng, will render the process defective and therefor invalid. Although we did not have access to information about the other | Van Rensburg, | E-mail: 11 January | The potential impact on agriculture and all |

cost of this facility at site B will be substantially higher than that of the other proposed sites. This conclusion is based both on the high value of the land on which the site is located, and on the fact that a corridor will have to be created and maintained if this site is chosen, as is evident from your map. This site is the furthest from the power station and that alone indicates a much higher operating cost than, say, Sites "A" and "C" which is right next to the site. This should be a major concern as the project already seems to be more costly than anticipated. We hope that a study will be done to calculate the additional cost over the lifespan of the power station, should this site be chosen, and that this will be taken into account when deciding on the viability of site "B". To us, this site simply does not make economic sense.

Furthermore we are concerned about the impact on the local farming community, and especially the irrigation and chicken component thereof. Gauteng has relatively little irrigation land and food production is paramount to the survival of the country. It is, in our opinion, even more important than the provision of electricity.

Lastly, it would be disastrous if the Gauteng water supply is affected by the proposed facility, and this alone should be reason enough to abandon this site as a possible choice.

Attorneys (on behalf of Hans van Rensburg Boerdery cc) the EIA phase of this study. Please see and comment on the proposed Terms of Reference for these studies to ensure all elements of concern will be addressed. At completion of the specialist studies, the public will be given an opportunity to confirm acceptability of proposed mitigation strategies and plans.

In addition to the specialist studies mentioned above, the engineering team will undertake a cost comparison of the various scenario's including the cost of the conveyor, roads and pipelines to the proposed facility.

Willie Howell, EAP (2012)

It is confirmed that the development of site B would be the most costly option to implement, as was found by the Sustainability assessment undertaken as part of the DEIR.

It is acknowledged that the development of the ash disposal facility on Site B would have a significant impact on agricultural activities.

It is debatable whether food production is even more important than electricity generation. This statement eminates from the assumption tha there will always be sufficient electricity. However, if key power generation projects such as this one does not continue, there is a real possibility load shedding will become a more permanent impact on our everyday activities. Therefore it is very likely that food security will be impacted if electricity supply is interrupted.

All potential impacts on surface and groundwater resources has been assessed in the DEIR and can be mitigated to acceptable levels.

Mathys Vosloo, EAP

| 2 | What will happen if all four proposed alternative sites for the ash disposal facility are given restrictive conditions and the approved area becomes too small for a 60 year lifespan? | Dr James Meyer, Water Research Commission, Pretoria | Public meeting on 15 February 2012 at 14:00 to discuss and review the Draft Scoping Report. | This could shorten the lifespan of the power station or the ash disposal facility will be spread over more than one site. Willie Howell, EAP (2012) |
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| 3 | Can we ask that Site C be removed from the list of alternative sites as there are people currently residing on the property? | Mr Zweli Mpofu, Bravo Cooperative, Hartbeestfontein. | Public meeting on 15 February 2012 at 14:00 to discuss and review the Draft Scoping Report. | Unfortunately all the sites will have some form of impact to the local residents, and a particular site cannot be left out at this early stage of the project prior to undertaking detailed studies, especially social to determine the impact to all the sites. As part of the studies highlighted for the EIA, please refer to the scope of work for the social study to ensure that all your concerns will be addressed. Willie Howell, EAP (2012) |
| 4 | I live at Site B, but I am trying to be objective and look at this development as a South African. It makes no sense to move the whole development somewhere else, because an ash disposal facility will always have a negative impact on its immediate environment. | Mr Christiaan Gerber, Witklip | Public meeting on 15 February 2012 at 18:00 to discuss and review the Draft Scoping Report. | The comment made that a ash disposal facility should be as close to a power station as possible is noted. Willie Howell, EAP (2012) |
| 5 | The cost of a project of this size is important and must be kept as low as possible. Does it make sense to have a site, such as Site B, so far away from the power station? | Mr Christiaan Gerber, Witklip | Public meeting on 15 February 2012 at 18:00 to discuss and review the Draft Scoping Report. | When the site selection was done, the current four alternatives were the four most feasible sites both when the financial costs of this development were included and excluded from the calculations. During the site selection process, both the environmental and social investigations also came out with the current four alternatives. At this early stage in the project all the feasible alternatives are considered, as it is unknown what additional factors might influence cost at the other sites. |
| 6 | What about looking at sites on the other side of the N4 highway? | Mr Christiaan Gerber, Witklip | Public meeting on 15 February 2012 at 18:00 to discuss and review the Draft Scoping Report. | Building a conveyor belt under or over a highway is very challenging from engineering perspective. The area to the north of the N4 is also not flat enough and there is a long ridge which makes it unsuitable for an ash disposal facility. Willie Howell, EAP (2012) |

| 7 | Why did the Scoping Report not state that the previous sites selected were not feasible and why were the implications not addressed? | Mrs Annamie Duvenhage, Bronkhorstspruit and Wilge River Conservancy | Focus group meeting on 20 July 2012 at 10:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | The sites identified in the Scoping Report were identified using available information (such as published resources, other studies, and desktop information). The available information at present allows us to evaluate sites at a very high level. We have identified the top rated sites i.e. sites most likely to be feasible, for more detailed investigations. Willie Howell, EAP (2012) |
|----|--|---|---|--|
| 8 | When will the preferred site be pinpointed? | Mrs Annamie Duvenhage, Bronkhorstspruit and Wilge River Conservancy | Focus group meeting on 20 July 2012 at 10:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | The EIA process is expected to be done by next year. The EIA will either receive environmental authorisation or not and if successful, then another year can be expected before construction starts. The preferred alternative will be identified during the Draft Environmental Impact Report. Willie Howell, EAP (2012) |
| 9 | Our site (Site F) was never included until now; can we assume that this will be the chosen site? | Mrs Marietjie Boshof, Landowner | Focus group meeting on 26 July 2012 at 09:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | Site F had to be included as an option. Should it be chosen, it will have to be in combination with another site due to its small size. Site F was an option when the sites were selected, but just not included at that time. After the sites have been ranked, Site F came up as a viable "combination" option and it was brought back into consideration. It does not mean that this will be the chosen site, but it had to be included. Only when the specialist studies have been done can the best site be identified and recommended by the EIA process. Willie Howell, EAP (2012) |
| 10 | Is Site F the only site that cannot be used on its own? | Mr Hentie Boshof, Landowner | Focus group meeting on 26 July 2012 at 09:00 to present information regarding the | No, Site A + G and Site F + G will be used in combination, should these options come out as the best options in the specialist studies. Combination sites will be shown on a map at the next meeting. |

| | | | inclusion of Site F | Willie Howell, EAP (2012) |
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| | | | as a feasible | |
| | | | alternative to be | |
| | | | taken forward to the | |
| | | | EIA phase of the | |
| | | | project | |
| 11 | Why can't the ash facility be built on Site A as originally | Mr Leon Van Dyk | Focus group | There are a number of factors to consider for |
| | planned? I feel that we were placed under a misconception | - | meeting on 26 July | the site selection process such as: |
| | since Site F was not included from the start. The ash dump will | | 2012 at 09:00 to | The need for a 60 year ash disposal |
| | have long term effects, especially on farming. | | present information | facility; |
| | 3 , 1 , 3 | | regarding the | Technical and social matters and |
| | | | inclusion of Site F | implications; and |
| | | | as a feasible | Legislation and its changes. |
| | | | alternative to be | More sites needed to be included for the |
| | | | taken forward to the | process to continue forward. Site A is closer to |
| | | | EIA phase of the | the Kusile power station but it also has the |
| | | | project | highest rankings in all fields. It will only be clear |
| | | | project | , |
| | | | | which site is most suitable after the specialist |
| | | | | studies. |
| 4.0 | | | _ | Willie Howell, EAP (2012) |
| 12 | When will we know which area is affected? | Mrs Tersia van | Focus group | The EIA process will take another year to get |
| | | Vuuren, | meeting on 26 July | the necessary authorisation and to allow time |
| | | MANYATHELA | 2012 at 09:00 to | for the specialist studies to be done. The |
| | | AVENTURES | present information | preferred alternative will be identified during |
| | | Witpoort | regarding the | the Draft Environmental Impact Report. |
| | | | inclusion of Site F | Willie Howell, EAP (2012) |
| | | | as a feasible | |
| | | | alternative to be | |
| | | | taken forward to the | |
| | | | EIA phase of the | |
| | | | project | |
| 13 | If Site F is selected as the preferred alternative, what will happen | Mrs Carol Wentzel, | Focus group | It may be lost as part of the impact on the site. |
| | to the pan on this site? | Bronkhorstspruit and | meeting on 3 | However, appropriate authorisation processes |
| | | Wilge River | August 2012 at | will be followed prior to this pan being |
| | | Conservancy | 09:00 to present | sacrificed. |
| | | | information | Willie Howell, EAP (2012) |
| | | | regarding the | |
| | | | inclusion of Site F | |
| | | | as a feasible | |
| | | | alternative to be | |

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| | | | taken forward to the | |
| | | | EIA phase of the | |
| | | | project | |
| 14 | I would appreciate correspondence in Afrikaans if the farm, | A. Van Asweging | E-mail: 27 | An intensive study by specialist will be |
| | Kortfontein's wetlands, will be affected by environmental | Belmoral Primary | September 2012 | performed on all the wetlands near the |
| | activities. | School | | alternative sites. You will be kept up to date on |
| | | | | this process in Afrikaans. |
| | | | | Willie Howell, EAP (2012) |
| | | | | |
| | 5.3. Technical Comments | | | |
| 1 | Why did you move from a 500 m buffer around houses and other | Mr Karel Rajchrt, | Public meeting on | The buffer zone was purely a technical |
| | structures to a 100 m buffer? There should be a big enough | Witklip | 15 February 2012 at | exercise to find out what structures are on the |
| | distance between houses and an ash disposal facility, because | | 14:00 to discuss | four alternative sites. There will definitely be an |
| | nobody wants to live near it. | | and review the Draft | impact with an ash disposal facility of this size, |
| | · | | Scoping Report. | no matter where it is placed in the landscape, |
| | | | | but through the EIA and the specialist studies |
| | | | | we will endeavour to identify the most suitable |
| | | | | site. |
| | | | | Willie Howell, EAP (2012) |
| 2 | We need to discuss the exact route of the NMMP pipeline which | Mr Robbie van | Public meeting on | Noted and Mr. Van Bulderen indicated that he |
| _ | runs past your proposed developments. | Bulderen, Transnet | 15 February 2012 at | would send the final route alignment of the |
| | Tuno puot your proposou devolopmento. | Pipelines | 14:00 to discuss | pipeline to Zitholele. |
| | | Прешес | and review the Draft | • • |
| | | | Scoping Report. | Willie Howell, EAF (2012) |
| 3 | What happens if the EIA is rejected? | Mr Hans van | Public meeting on | Then the project cannot continue. This could |
| 3 | What happens if the LIA is rejected: | Rensburg, Witklip | 15 February 2012 at | be catastrophic for the power generation of the |
| | | Rensburg, Witklip | 14:00 to discuss | country as the Kusile Power Station will not be |
| | | | | |
| | | | and review the Draft | · · · · · · · · · · · · · · · · · · · |
| | This project is of a stirmal interest and the sectors the DEA will not | Ma A dais and a set | Scoping Report. | Willie Howell, EAP (2012) |
| 4 | This project is of national interest and therefore the DEA will not | Mr Adriaan Loots, | Public meeting on | The DEA is the only authorising authority for |
| | reject this EIA. Will it not be better if an independent body take a | Jakhalsfontein | 15 February 2012 at | this project and makes its decision based on |
| | decision on the EIA? | | 18:00 to discuss | the study that Zitholele Consulting is |
| | | | and review the Draft | undertaking. It is a legal requirement that |
| | | | Scoping Report. | Zitholele remains independent from the |
| | | | | applicant. |
| | | | | Willie Howell, EAP (2012) |
| 5 | How wide will the footprint of the ash disposal facility be | | | This will be determined by the engineering |
| | measured? Will there be a wide enough buffer zone around the | | | specialist studies during the next phase. At this |
| | boundary of the facility. | | | stage the preliminary sizes vary from 1300 - |
| | | | | 1600 ha. |

| | | | | In terms of the buffer zone, this will also be determined by the various specialist studies (air, noise, social). Once these studies have indicated the required buffer zone Eskom will have to negotiate with the landowners on how that buffer will be maintained. Willie Howell, EAP (2012) |
|---|--|---------------------|------------------|---|
| 6 | Recommendations made by the City of Tshwane: | Mr Livhuvani | Letter on 22 | Thank you, all these recommendations will be |
| | a) Measures should be put into place to ensure that no | Siphuma, Executive | February 2012 in | taken into consideration at the relevant phases |
| | nuisance by way of noise, dust and smoke are caused to | Director: | response to the | on this EIA. The comments related to the |
| | the public and surrounding environment. During site | Environmental | Draft Scoping | various specialist studies have been included |
| | preparation and during the operation of the activity. These | Management, City of | Report. | in the Scope of Works for the specialists. In |
| | measures should form part of the EMP. | Tshwane | | addition the requirements for management |
| | b) An Emergency /Fire Response Plan approved by a qualified | | | plans will be included in the EMP once the |
| | risk consultant must be included in the EIA report. | | | specialist studies have been completed. |
| | The applicant must take note of the applications of the Air Quality Act, No 39 of 2004 and follow the requirements | | | Willie Howell, EAP (2012) |
| | thereof. | | | |
| | d) A detailed storm water management plan must be compiled | | | |
| | that ensures that storm water generated on site is | | | |
| | discharged in such a way that the receiving environment is | | | |
| | not adversely impacted upon. This plan should form part of | | | |
| | the EMP. | | | |
| | e) It is the responsibility of the applicant to comply with the | | | |
| | water use legislation and apply for water use licenses and | | | |
| | authorisation from the Department of Water Affairs where | | | |
| | necessary. | | | |
| | f) Adequate storm water management should be implemented | | | |
| | as part of the proposed activity to prevent erosion and | | | |
| | sedimentation of the surrounding water resources. Sheet runoff from access roads should be curtailed and runoff | | | |
| | from exposed surfaces should be slowed down by the | | | |
| | strategic placement of berms. | | | |
| | g) During construction, erosion berms should be installed to | | | |
| | prevent gully formation. The following points should serve to | | | |
| | guide the placement of erosion berms: | | | |
| | • Where the track has a slope of less than 2%, berms | | | |
| | must be installed every 50 metres; | | | |
| | • Where the track slopes between 2 and 10%, berms | | | |
| | must be installed every 25 metres; | | | |

| 7 | Where the track slopes between 10 and 15%, berms must be installed every 20 metres; and where the track slope is greater than 15%, every 10 metres. h) All areas affected by the proposed activity must be rehabilitated immediately after the completion of the proposed activity. The following should be included within the rehabilitation method and indicated within the EMP: All areas of disturbed and compacted soils need to reprofiled and compaction alleviated; Disturbed areas must be re-seeded with a combination of different indigenous grass species; Rehabilitation shall be done to a coverage of at least 80% indigenous species of the rehabilitated area; and On-going removal of alien vegetation from the area must take place at least three months after the completion of the structures to prevent the uncontrollable recruitment of species. Are there not plans for a 10 year ash dump facility at Kusile? | Mrs Annamie Duvenhage, Bronkhorstspruit and Wilge River Conservancy | Focus group meeting on 20 July 2012 at 10:00 to present information regarding the inclusion of Site F as a feasible | There is a co-disposal facility, not an ash dump facility already planned and approved. The co-disposal facility is designed to accept ash and gypsum from the first unit of the power station for a 5 year period. Thereafter it will receive the gypsum for the remaining life of the power station. This structure will, thus, take 60-years' |
|---|--|---|---|--|
| | | | as a feasible alternative to be taken forward to the EIA phase of the project | station. This structure will, thus, take 60-years' worth of gypsum from the power station. Willie Howell, EAP (2012) |
| 8 | Why does a big ash facility need to be built, why can the ash not be used for other purposes, such as making bricks? | Mrs Annamie Duvenhage, Bronkhorstspruit and Wilge River Conservancy | Focus group meeting on 20 July 2012 at 10:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | Kusile, and Eskom at large, is undertaking investigative projects to find companies to utilise the ash and gypsum. The volumes of ash are just too large, and currently there are not enough other uses to take all the ash. Eskom already has markets where ash is sold, but only manages to disperse 5% of its ash through sales. Thus a facility will still need to be built. Willie Howell, EAP (2012) |
| 9 | Where will the water for the Kusile power station be sourced? | Mr Andries van | Focus group | The water for Kusile will be coming from the |

| | | Т., | T | |
|----|--|------------------------|----------------------|---|
| | | Vuuren | meeting on 20 July | integrated water supply system, through a |
| | | MANYATHELA | 2012 at 10:00 to | pipeline from Kendal power station. |
| | | AVENTURES | present information | Willie Howell, EAP (2012) |
| 10 | What happens to the excess water? | Witpoort | regarding the | There is no excess water as it is a dry ash |
| | | | inclusion of Site F | disposal facility. In the unlikely event that |
| | | | as a feasible | excess water is generated for whatever |
| | | | alternative to be | reason, such water will be used for ash control |
| | | | taken forward to the | and the clean water will be put back into the |
| | | | EIA phase of the | nearby streams. |
| | | | project | Willie Howell, EAP (2012) |
| 11 | What is going to happen to the wildlife in the area? | | | A terrestrial assessment will be done. Any red |
| | | | | data species identified will be relocated. |
| | | | | Animals tend to move themselves when things |
| | | | | get too noisy, however plants need to be |
| | | | | moved manually and are then stored in a |
| | | | | nursery before being used in rehabilitation. |
| | | | | This process also requires approval by |
| | | | | provincial authorities. |
| | | | | Willie Howell, EAP (2012) |
| 12 | How long does it take for the specialist studies to be done? | Mrs Marietjie Boshoff, | Focus group | Specialist studies need to be done during a wet |
| | | Landowner | meeting on 26 July | / dry period and a report needs to be written. It |
| | | | 2012 at 09:00 to | can thus take up to a year. Specialist studies |
| | | | present information | for this project are anticipated to finish by |
| | | | regarding the | February 2013. |
| | | | inclusion of Site F | Willie Howell, EAP (2012) |
| | | | as a feasible | |
| | | | alternative to be | |
| | | | taken forward to the | |
| | | | EIA phase of the | |
| | | | project | |
| 13 | When will we know which site(s) are selected? | Mr Hentie Boshoff, | Focus group | All stakeholders will be informed as soon as |
| | • | Landowner | meeting on 26 July | the specialist studies are done, through the |
| | | | 2012 at 09:00 to | draft Environmental Impact Report. The |
| | | | present information | specialist studies will determine which site(s) |
| | | | regarding the | are selected and this will then be submitted to |
| | | | inclusion of Site F | the Department of Environmental Affairs (DEA) |
| | | | as a feasible | that must take the final decision. |
| | | | alternative to be | Willie Howell, EAP (2012) |
| | | | taken forward to the | Timo Totali, Eri (E012) |
| | | | EIA phase of the | |
| | | | EIA priase or the | |

| | | T | T | |
|----|--|---------------------------------------|--|---|
| | | | project | |
| 14 | I know that water and ground sampling have been done; can it be made available to us? | Mr Leon Van Dyk | Focus group meeting on 26 July 2012 at 09:00 to present information regarding the inclusion of Site F as a feasible | The reports should be done by the end of next year. The specialist studies will also be available to you. The decision for the information to be distributed is up to Eskom, but it should not be a problem. Willie Howell, EAP (2012) |
| 15 | How is the environmental monitoring done for pollution and waste management? | | alternative to be taken forward to the EIA phase of the project | All environmental requirements will be stated in the Environmental Management Programme (EMP) and monitoring should be done accordingly. The EMP considers all environmental factors and legislation. Willie Howell, EAP (2012) |
| 16 | Are you aware that there are land claims on Site F? It has been published in the Government Gazette. | Mr Karel Rajchert, Witklip | Focus group meeting on 26 July 2012 at 09:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | Noted. However Eskom is busy with land rights and negotiations. Willie Howell, EAP (2012) |
| 17 | What will happen if the ash facility was built and 30 years down the line Eskom realises that they made a mistake with the site regarding water and wind impacts. What happens then? | Mr Hennie Pienaar, Alcedo Boerdery | Focus group meeting on 3 August 2012 at 09:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | This question has two answers one from an environmental perspective and one from a technical perspective. From an environmental perspective all relevant concerns and issues are investigated. This is why it is important for the public to partake in these meetings to raise issues. But if this does in fact happen the responsibility will be on Eskom to fix the problem. From a technical side it is important to understand that everything is not designed and built in one day. The construction will be split up into developmental phases. As we continue from one phase to the next and data changes or technology changes we implement that into the new phase and design. As the phases |

| | | | | progress from one to the other a new Waste Management Licence application is required in which the DEA can decide not to grant it due to environmental impacts. Decisions in the past were purely made with regards to cost whereas all decisions now are based on a wide variety of specialist studies. Willie Howell, EAP (2012) |
|----|---|--|--|--|
| 18 | How does the specialist study work, is it only done for one day? How effective is that? | Mr Karel Rajchrt, Witklip | Focus group meeting on 3 August 2012 at 09:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | The specialists will undertake representative field visits to inform the integrity of their reports. This process is well planned and effective. Some of the specialist studies need to be done during summer and winter and will require multiple visits. Willie Howell, EAP (2012) |
| 19 | If the lining for the ash dump cracks, will there be a disaster management plan in place? | Mrs Carol Wentzel, Bronkhorstspruit and Wilge River Conservancy | Focus group meeting on 3 August 2012 at 09:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | The design for the liner will be finalised in the next stage. The plastic liner that is used for the ash dumps has a lifespan of 1000 years. This plastic liner is used with a clay liner underneath it, which makes it very effective. The only substance that can attack the plastic is petrochemicals, but this will not be on the site, even if there were petrochemicals on site it would have no affect on the clay liner. Another option would be to have detection systems. These detection systems will inform Eskom as soon as there is a shortfall in the liner and actions can be taken to ensure that waste management is implemented before the waste reaches any water bodies. Willie Howell, EAP (2012) |
| 20 | What happens after the 60 years with regards to rehabilitation? | Mrs Carol Wentzel, | Focus group | The rehabilitation process should be |
| | Who will take responsibility then and can the ash dump be fully rehabilitated? | Bronkhorstspruit and Wilge River | meeting on 3 August 2012 at | concurrent. After 5 years, preparation is made for the next rehabilitation process to be |
| | TEHADIII.A.EU! | Conservancy | 09:00 to present | implemented. Rehabilitation of the ash dump |

| 21 | Although not directly detailed but nonetheless relevant the issue of the disposal of gypsum from Kusile Power Station remains uncertain. Clarity regarding the use of the co-disposal site currently available and impacts thereof on the proposed sites is required as is the future handling requirements thereof. | Dr James Meyer, Consultant for TOPIGS SA (Pty) Ltd | information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project E-mail: 2 August 2012 | will continue until a closure certificate is issued, which follows an authorisation process. The closure certificate has conditions, hence even after the closure certificate is issued, Eskom will still be responsible and liable for the ash dump. The ash dump can fully be rehabilitated and self-sustaining. Willie Howell, EAP (2012) There is a co-disposal facility, not an ash dump facility already planned and approved. The co-disposal facility is designed to accept ash and gypsum from the first unit of the power station for a 5 year period. Thereafter it will receive the gypsum for the remaining life of the power station. Willie Howell, EAP (2012) |
|----|--|--|---|--|
| 22 | When will the final decision be made on which site is selected? | H. van Aswegen Belmoral Primay School | E-mail: 27 September 2012 | The Environmental Impact Study is a long process and the specialist studies will only be done by middle next year (2013). Only after the specialist studies has been collated will a comparative assessment be undertaken to determine the most feasible site. Willie Howell, EAP (2012) |
| -, | 5.4. Water | | | |
| 1 | This development will be an ecological disaster for the Wilge River. | Mr Andre Roets Landowner: Farm: Nooitgedacht | Reply sheet on 5 October 2011 | The potential ecological consequences will be fully investigated during the next phase of this study. Please see and comment on the proposed Terms of Reference for this study to ensure all elements of concern will be addressed. At completion of the specialist studies, the public will be given an opportunity to confirm acceptability of proposed mitigation strategies and plans. Willie Howell, EAP (2012) |
| 2 | Investigate the following: Impact on water quality and the impact on the Wilge River; The impact of Site C on adjacent land value, groundwater, the N14, R104 and dust that will be generated, must be investigated. | Dr Paul Meulenbeld, DWA | Reply sheet on 10 October 2011 | This will be fully investigated during the next phase of this study. Also, please refer to the Terms of Reference for the water quality specialist studies, and give comments. |

| 3 | Documentation relevant to Water Research Commission | Dr James Meyer, | E-mail: 1 | Please see and comment on the proposed |
|---|--|----------------------|----------------------|---|
| | Endocrine Disrupting Chemical (WRC EDC) projects and | Water Research | November 2011 | Terms of Reference for this study to ensure all |
| | agricultural water use in the area must be investigated. | Commission, Pretoria | | elements of concern will be addressed. At |
| | | | | completion of the specialist studies, the public |
| | | | | will be given an opportunity to confirm |
| | | | | acceptability of proposed mitigation strategies |
| | | | | and plans. |
| | | | | Willie Howell, EAP (2012) |
| 4 | How will water running off the conveyor belt and the ash | Mr Robbie van | Public meeting on | Sufficient prevention systems will be in place to |
| | disposal facility be prevented from contaminating the ground | Bulderen, Transnet | 15 February 2012 at | collect all polluted water (clean and dirty water |
| | water resources? | Pipelines | 14:00 to discuss | channels next to conveyors). This will be |
| | Mater 1999anses. | · ipoiiiioo | and review the Draft | pumped to a collection pond where it will be |
| | | | Scoping Report. | cleaned. Another system will collect clean rain |
| | | | Ocoping Roport. | water. |
| | | | | The ash disposal facility will be designed to |
| | | | | prevent any seepage. A barrier made from clay |
| | | | | and plastic materials will form the foundation of |
| | | | | the ash disposal facility. |
| | | | | Willie Howell, EAP (2012) |
| | We would like to one the personnel will of the only disposel | Mr Ctofon Vormond | Dublic modeling on | |
| 5 | We would like to see the perceived risk of the ash disposal | Mr Stefan Vermaak, | Public meeting on | This Draft Scoping Report we present here |
| | facility to the water quality that is very vital to the agricultural | Topigs | 15 February 2012 at | today is a desktop study of the current |
| | industry adjacent to Kusile Power Station. | | 14:00 to discuss | situation. |
| | You should also discuss all the risks in your study, what could go | | and review the Draft | However in order to accurately detail the |
| | wrong and how that can be mitigated. | | Scoping Report. | impact of this proposed project, various |
| | Eskom already told me water quality cannot be guaranteed 15 | | | specialist studies will be undertaken and we |
| | years from now. | | | will ensure that your concerns are addressed |
| | | | | through these studies. In terms of water the |
| | | | | studies will include a surface water and a |
| | | | | ground water study. Furthermore air quality |
| | | | | and the resultant health impacts will also be |
| | | | | investigated. |
| | | | | Willie Howell, EAP (2012) |
| | | | | |
| | | | | Potential surface and groundwater impacts has |
| | | | | been investigated by the relevant specialist |
| | | | | studies (see Appendix F), and is summarised |
| | | | | in the DEIR. Surface water runoff will be |
| | | | | impacted on a very monor scale. Surface water |
| | | | | quality impacts already exist from agricultural |
| | | | | and industrial activities within the Kusile Power |
| | | | | and maderial destricts within the radio I ower |

| 6 | At the next public meeting the water quality and air quality specialists must also be available for discussion. | | | Station sub-catchment. Additional project impacts will be minor as engineering design and proposed mitigation measures can be successfully implemented to prevent project impacts on surface water. Potential groundwater impacts can also be effectively mitigated to within acceptable limits, should the impact occur. Mathys Vosloo, EAP These two specialists will be at the next meeting. Willie Howell, EAP (2012) |
|----|--|---|---|--|
| 7 | Why is ground water not prominently highlighted in Sections 6, 7 and 9 of the Draft Scoping Report? | Dr James Meyer, Water Research Commission, Pretoria | Public meeting on 15 February 2012 at 14:00 to discuss and review the Draft | This suggestion will be taken further and ground water will be elevated to a higher priority for these Sections. Willie Howell, EAP (2012) |
| 8 | Could you also do a baseline study on ground water? | | Scoping Report. | This will be done during the next phase of this EIA as part of the relevant specialist study. Willie Howell, EAP (2012) A groundwater inmpact assessment was undertaken during the EIA phase and can be reviewed in Appendix F of this DEIR. Mathys Vosloo, EAP |
| 9 | The elements monitored and assessed in the groundwater assessment should focus on the elements of concern particularly the elements related to coal. | | | This will be included in the scope of works for the water assessments to be undertaken in the next phase of the study. Willie Howell, EAP (2012) A groundwater inmpact assessment was undertaken during the EIA phase and can be reviewed in Appendix F of this DEIR. Mathys Vosloo, EAP |
| 10 | Do you need a Water Use License Application (WULA)? | Mr Hans van Rensburg, Witklip | Public meeting on 15 February 2012 at 14:00 to discuss and review the Draft Scoping Report. | Yes, an amendment to Kusile Power Station's existing WULA is needed for the ash disposal facility. A WULA is a living document and will be amended when new developments are planned that may have an impact on water resources. An application for an amendment can only be made once the EIA process is finalised and one of the four alternatives has |

| | | | | been chosen as the ash disposal facility. Eskom is currently negotiating with the DWA to find out if a separate WULA is necessary or if an amendment to the existing WULA can be done. The DWA must also approve the design of the ash disposal facility. Willie Howell, EAP (2012) The WULA process has been undertaken concurrently with the EIA process. Extensivce consultation with the Department of Water Affairs has been undertaken from the site selection and Scoping phase to the specialist findings in the DEIR phase. The WULA will be completed after completion of the EIA process. Mathys Vosloo, EAP |
|----|--|-------------------------------------|---|---|
| 11 | In which direction does the water flow on Site B. | Mr Adriaan Loots, Jakhalsfontein | Public meeting on 15 February 2012 at 18:00 to discuss and review the Draft Scoping Report. | From the desktop info it appears as if Site B is on a watershed and that the water could flow in two directions (north and south). This will be investigated during the next phase of the study. Willie Howell, EAP (2012) |
| 12 | What happens if the ash facility leaches into the groundwater? | Ms Ria Loots, Jakhalsfontein | Public meeting on 15 February 2012 at 18:00 to discuss and review the Draft Scoping Report. | This should not happen, because a barrier will first be built on which the ash will be placed. The barrier will prevent leaching, with any potential leachate being collected inside the system. However, should there be a problem, Eskom be able to prove to the DWA that the problem has been solved and what measures have been taken to prevent this from happening again. There will also be monitoring systems in place to detect any leaks before it can become a problem. There will also be an independent Environmental Control Officer (ECO) on site that must report all problems to the authorities. The Kusile Power Station has an Environmental Monitoring Committee that can be attended by any neighbour or stakeholder. |

| 13 | Ground water is vital to the farming community and no leaks or leeching must take place. When a leak is detected, then it is already too late, because the water has already been polluted. | Mr Adriaan Loots, Jakhalsfontein | Public meeting on 15 February 2012 at 18:00 to discuss and review the Draft Scoping Report. | This committee is also attended by the DEA and the DWA. Willie Howell, EAP (2012) In the event a leak does occur, this will be identified very early on through the leachate detection system installed as part of the barrier. Mitigation measures that can be implemented include pollution cut-off curtains installed vertically below ground to prevent lateral movement of the pollution, and pumping of the groundwater to form a cone of depression which will prevent the pollutants and ground water mixing. Groundwater can then be reintroduced into the afuifer downstream. Mathys Vosloo, EAP The specialist studies will be investigating where monitoring boreholes will be drilled to pick up any problems as soon as possible, should something occur. Eskom is also busy integrating all its monitoring points (ground and surface water as well as air pollution) with that of Anglo American for the whole area. Willie Howell, EAP (2012) In the event a leak does occur, this will be identified very early on through the leachate detection system installed as part of the barrier. Mitigation measures that can be implemented include pollution cut-off curtains installed vertically below ground to prevent lateral movement of the pollution, and pumping of the groundwater to form a cone of depression which will prevent the pollutants and ground water mixing. Groundwater can then be reintroduced into the afuifer downstream. Mathys Vosloo, EAP |
|----|---|-------------------------------------|---|---|
| 14 | Draft Scoping Report (DEA Reference Number: 12/12/20/2412) | Dr James Meyer, | Email in response | Please note that although the WULA |
| | states under point 2.1 that: | | to the Draft Scoping | application will be a separate application, the |

| | In terms of Section 24 of the Constitution: | TOPIGS SA (Pty) Ltd | Report on 24 | water related issues will be assessed as part of |
|----|--|---------------------|----------------------|--|
| | "Everyone has the right | | February 2012. | this EIA and that all water-related specialist |
| | ii) to an environment that is not harmful to their wealth or well- | | | studies will be done to the level of detail |
| | being, and | | | required for an IWULA. |
| | iii) to have the environment protected, for the benefit of present | | | Willie Howell, EAP (2012) |
| | and future generations, through reasonable legislative and other | | | |
| | measure that | | | |
| | - prevent pollution and ecological degradation; | | | |
| | - secure ecologically sustainable development and use of natural | | | |
| | resources." | | | |
| | Within the relevant legal framework it may be noted that pollution | | | |
| | control and waste management form an integral part of | | | |
| | sustainable development, with a principle of using utmost | | | |
| | caution when permission is granted for new developments. | | | |
| | Environmental impact assessments form a critical aspect of the | | | |
| | process. | | | |
| | In section 2.5 it is noted that any WULs that may be required in | | | |
| | terms of the NWA will be addressed separately as part of the | | | |
| | overall Integrated Water Use Licensing Process for the Kusile | | | |
| | Power Station and will not be addressed by authorization | | | |
| | process of this EIA. | | | |
| | It is argued that any water used in the process of transporting, | | | |
| | placing and storage of the waste streams (fly ash and coarse | | | |
| | ash) should form a significant and critical part of the Draft | | | |
| | Scoping Report and be included therein as part of the | | | |
| | environment and subsequent EIA issues. | | | |
| 15 | Section 3.4.6 does note some detail regarding storm water | Dr James Meyer, | Email in response | Comment noted and please note changes to |
| ' | drainage and monitoring boreholes, but no monitoring | Consultant for | to the Draft Scoping | the FSR subsequent to the public meeting. |
| | description is provided. | TOPIGS SA (Pty) Ltd | Report on 24 | Willie Howell, EAP (2012) |
| | Section 6 lists "Issues Identified to date", and notes impacts to | 10.100 0/(1 ty) Ltd | February 2012. | Timo Honon, En (2012) |
| | surface water features and air quality amongst other, but | | 1 05/441 2012. | Groundwater, surface water and air quality |
| | nowhere is groundwater listed. | | | impacts has been investigated during the EIA |
| | Section 7 "Receiving Environment" also lists Surface Water (7.5) | | | phase through relevant specialist studies. |
| | but no groundwater or subterranean water impacts are | | | Potential impacts to these environmental |
| | mentioned anywhere. | | | aspects remain a central focus in the DEIR. |
| | It is argued that this should have formed a key part of data | | | Mathys Vosloo, EAP |
| | collection (7.5.1 – no reference to groundwater) as the area | | | manyo 100100, LAI |
| | contains numerous groundwater abstraction points for both | | | |
| | Domestic and Agricultural Water Use (Livestock and Irrigation). | | | |
| | Section 8 "Potential Environmental and Social Impacts" does | | | |
| | occion o i otentiai Environmentai anu oociai impacts dues | | | |

| | however list groundwater in Table 13, yes in Section 9 "Plan of Study for EIA" under 9.2, no water quality specialist is mentioned, neither is groundwater specifically listed. Whilst "surface water assessment" and "geo-hydrology and hydrology assessment" do appear in 9.2 and the following terms of reference issues do mention "water sampling and analysis"; "potential impact to baseline conditions"; and "interconnectedness i.e surface water-groundwater" it is argued that water quality of both surface and groundwater must specifically be investigated from a water quality assessment of all the recognized constituents relevant to the water uses applicable and to the relevant waste stream. The same argument applies to the air quality assessment terms of reference with the specific issues of air quality (descriptive and appropriately determined) for health hazards to both public health, animals and plants (pastures & crops). It is argued that groundwater should be elevated in terms of prominence in the Draft Scoping Report as a key issue that will receive appropriate attention, including groundwater quality in terms of baseline conditions, potential hazardous contamination and monitoring of relevant and appropriate constituents to ensure no adverse impact. | | | |
|----|---|---|---|--|
| 16 | Thank you for doing this study to keep our environment clean. Our municipality cannot keep our water pure and it is contaminated. | Ms Gloria Macuthwane, 1058 Phola Location | Comment sheet on the Draft Scoping Report on 31 January 2012 | This is the reason an Environmental Impact Assessment has been undertaken. Your gratitude has been noted. Willie Howell, EAP (2012) |
| 17 | In relation to the other proposed sites, we believe the impact on the environment would be greater as the proposed area is surrounded by dams and streams. The ash would inevitably find its way into these streams and dams, polluting not only the immediate area but also the area downstream from the affected area. It would in our opinion probably affect the quality of drinking water not to mention the living conditions of the communities nearby. 2. The Kungwini (Bronkhorstspruit) Dam This dam provides drinking water to the town of Bronkhorstspruit but also to a large part of Pretoria. Although the dam is not adjacent to the facility it is nearby and we are concerned of the effect that a 40 to 60m high ash heap may have on the dam, especially in windy conditions. The dam is only 6,3 kilometres | Van Rensburg Jordaan & Olivier Attorneys on behalf of Hans van Rensburg Boerdery cc | E-mail: 11 January 2012 | Your concern is noted and in order to understand the impact that this facility might have a range of specialist studies have been proposed for the EIA phase of the project including ground water, surface water and air quality. These reports will be made available to the public as part of the review of this project during the EIA phase. Please also note that the design of this facility will include barrier systems to prevent surface and ground water contamination. Willie Howell, EAP (2012) The air quality specialist study undertaken |

| | from the proposed site. | | | during the EIA phase has concluded that with |
|----|---|----------------------|---------------------|---|
| | | | | successful implementation of the |
| | | | | recommended mitigation measures, all air |
| | | | | quality impacts can be confined to the |
| | | | | development footprint. |
| | | | | Mathys Vosloo, EAP |
| 18 | When coal is burned, toxins in the coal are released into the | Mr Kobus | E-mail: 30 March | Your comments received has been noted. |
| | smokestack. With modern air pollution controls, airborne toxins | Duvenhage, | 2012 in response to | Willie Howell, EAP (2012) |
| | are captured through filtration systems before they can become | Chairperson of the | Draft Scoping | After extensive consultation with the |
| | airborne, and contained in a fine ash called coal ash, fly ash, or | Bronkhorstspruit and | Report | Department of Water Affairs, the option of in-pit |
| | coal combustion waste. As a result, heavy metals such as | Wilge River | | ashing was rejected based on the fact that |
| | mercury are concentrated in what the EPA (USA Environmental | Conservancy Assoc, | | lining the sides of the void or pit with an |
| | Protection Agency) considers "recycled air pollution control | PO Box 691, | | appropriate barrier system will be impossible. |
| | residue". | Bronkhorstspruit, | | Furthermore, Kusile Power Station is currently |
| | Coal ash contains large quantities of toxic metals, including | 1020. | | under construction and will not become |
| | mercury, arsenic, beryllium, cadmium, chromium, nickel, and | | | operational unless a suitable ash disposal |
| | selenium | | | facility id developed in close vicinity to the |
| | Most often coal waste is disposed of in landfills or "surface | | | power station. After the waste stream analysis |
| | impoundments," which are lined with compacted clay soil, a | | | undertaken during the site identification |
| | plastic sheet, or both. As rain filters through the toxic ash pits | | | process, it was concluded that 95% of the ash |
| | year after year, the toxic metals are leached out and pushed | | | produced will have to be disposed to lindfill. |
| | downward by gravity towards the lining and the soil below. An | | | Therefore, in order for the Kusile Power Station |
| | EPA study found that all liners eventually degrade, crack or tear, | | | to become operational, a suitable ashj disposal |
| | meaning that all landfills eventually leak and release their toxins | | | facility will have to be developed and |
| | into the local environment. | | | engineered in the vicinity of the power station. |
| | The flue-gas desulfurization (FGD) process creates a wet solid | | | Mathys Vosloo, EAP |
| | residue containing calcium sulfide (CaSO3) and calcium sulfate | | | |
| | (CaSO4). Scientific American finds coal ash is more radioactive | | | |
| | than nuclear waste. Although nuclear power retains the stigma | | | |
| | of producing dangerous radiation, "waste produced by coal | | | |
| | plants is actually more radioactive than that generated by their | | | |
| | nuclear counterparts" in addition to known problems such as | | | |
| | polluting the air and causing acid rain. Coal contains small | | | |
| | amounts of uranium and thorium, which are concentrated "up to | | | |
| | 10 times" in coal ash, a waste product of burning coal. | | | |
| | Coal ash can leech radioactivity into the surrounding | | | |
| | groundwater and soil, depending on where it is disposed. | | | |
| | Robert Finkelman, a former US Geological Survey (USGS) | | | |
| | researcher, said that people living around coal plants will | | | |
| | increase the amount of radiation they are exposed to by 5% | | | |

| le every year. In May 2009, the Environmental Integrity Project and Earth Justice released a report finding that the Bush Administration failed to release information suggesting an alamingly high cancer threat for people who live near coal ash waste dumps. According to the study, the Bush Administration only made a portion of the data available, hiding the true extent of the health risks associated with coal ash disposal sites. In 2002, an EPA study showed significant risk of coal ash sumps, but requests for the data under the Freedom of Information Act were either denied or given documents with the estimates of cancer risk blacked out. A 2007 EPA assessment report found that people living near coal ash dump sites have as high as a 1 in 50 chance of getting cancer from drinking water contaminated by arsenic. It also determined that living near such dump sites raises an individual's risk of liver, kidney, lungs and other organ damage resulting from exposure to toxic metals in the ash. All sites identified are either endangered grassland or cultivated agricultural land. The biodiversity of site A is Important and Necessary Site C is right next to a Highly Significant Area Pg 25 "Disposal of the ash waste stream to an open cast void or levelled spoils created by opencast coal mining may be possible, although this would need to be determined at huge expense, there are currently no open-cast voids large enough available within a feasible distance to consider this option further at this juncture. New Largo is the only possible solution that may be large enough, but is currently not approved or operational. This option may be feasible in the distant further, but is currently not considered feasible; and" We demand that a comparative analysis of the impacts, advantages and disadvantages of placing this ash dump facility on mined out areas (rehabilitated) be done, compared to the high | | | | | |
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| large enough, but is currently not approved or operational. This option may be feasible in the distant future, but is currently not considered feasible; and" We demand that a comparative analysis of the impacts, advantages and disadvantages of placing this ash dump facility on mined out areas (rehabilitated) be done, compared to the high potential agricultural soils that is suggested in this scoping report. We reserve our right to comment further. 19 Is the Water Use Licence included in the process? Mrs Annamie Focus group A Water Use Licence is included in several | | | | | |
| large enough, but is currently not approved or operational. This option may be feasible in the distant future, but is currently not considered feasible; and" We demand that a comparative analysis of the impacts, advantages and disadvantages of placing this ash dump facility on mined out areas (rehabilitated) be done, compared to the high potential agricultural soils that is suggested in this scoping report. We reserve our right to comment further. 19 Is the Water Use Licence included in the process? Mrs Annamie Focus group A Water Use Licence is included in several | | juncture. New Largo is the only possible solution that may be | | | |
| option may be feasible in the distant future, but is currently not considered feasible; and" We demand that a comparative analysis of the impacts, advantages and disadvantages of placing this ash dump facility on mined out areas (rehabilitated) be done, compared to the high potential agricultural soils that is suggested in this scoping report. We reserve our right to comment further. 19 Is the Water Use Licence included in the process? Mrs Annamie Focus group A Water Use Licence is included in several | | large enough, but is currently not approved or operational. This | | | |
| considered feasible; and" We demand that a comparative analysis of the impacts, advantages and disadvantages of placing this ash dump facility on mined out areas (rehabilitated) be done, compared to the high potential agricultural soils that is suggested in this scoping report. We reserve our right to comment further. 19 Is the Water Use Licence included in the process? Mrs Annamie Focus group A Water Use Licence is included in several | | | | | |
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| advantages and disadvantages of placing this ash dump facility on mined out areas (rehabilitated) be done, compared to the high potential agricultural soils that is suggested in this scoping report. We reserve our right to comment further. 19 Is the Water Use Licence included in the process? Mrs Annamie Focus group A Water Use Licence is included in several | | We demand that a comparative analysis of the impacts, | | | |
| on mined out areas (rehabilitated) be done, compared to the high potential agricultural soils that is suggested in this scoping report. We reserve our right to comment further. 19 Is the Water Use Licence included in the process? Mrs Annamie Focus group A Water Use Licence is included in several | | | | | |
| high potential agricultural soils that is suggested in this scoping report. We reserve our right to comment further. 19 Is the Water Use Licence included in the process? Mrs Annamie Focus group A Water Use Licence is included in several | | | | | |
| report. We reserve our right to comment further. 19 Is the Water Use Licence included in the process? Mrs Annamie Focus group A Water Use Licence is included in several | | | | | |
| We reserve our right to comment further. 19 Is the Water Use Licence included in the process? Mrs Annamie Focus group A Water Use Licence is included in several | | | | | |
| | | | | | |
| | 19 | Is the Water Use Licence included in the process? | Mrs Annamie | Focus group | A Water Use Licence is included in several |
| | | | Duvenhage | meeting on 3 | activities and managed through authorities. |

| | | Bronkhorstpruit and Wilge River Conservancy | August 2012 at 09:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | The Water Use Licence for the co-disposal stack has recently been granted. The Water Use Licence will be applied for after this process. A separate process is will be followed for the WUL. |
|----|--|--|--|--|
| 20 | Who will do the wetland specialist studies? | Mrs Carol Wentzel Bronkhorstpruit and Wilge River Conservancy | Focus group meeting on 3 August 2012 at 09:00 to present | A specialist from Wetland Consulting Services, Dieter Kassier, will be performing the wetland specialist study. Willie Howell, EAP (2012) |
| 21 | Using contaminated water for the ash stack surely has a bigger impact on our health and environment? | | information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | The air quality study will determine the impact of health issues. But the interaction should not be more dangerous to health and environment as the water being used for the irrigation will already be contaminated with whatever is in the ash disposal facility. The re-use of this water is a means to prevent environmental impacts. Willie Howell, EAP (2012) |
| 22 | Won't the impact of contaminated water usage increase over time? | Mrs Carol Wentzel Bronkhorstpruit and Wilge River Conservancy | Focus group meeting on 3 August 2012 at 09:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | It might but it is unlikely since the water stays in a closed of process of being used, catched and re-used. Willie Howell, EAP (2012) |
| Ţ | 5.5. Pollution (Dust, Fly ash, Air) | | | |
| 1 | The only foreseeable concern that may arise is the fugitive dust. We would like to see that proper modelling has been done to project the possible scenarios arising with the dust. And what | Mr Oscar Olën Afrisam | E-mail: 31 October 2011 | Noted. The potential impact of air pollution will be fully investigated during the EIA phase of this study. |

| | mitigating measures will be put in place to reduce the impact of | | | Willie Howell, EAP (2012) |
|---|--|---------------------|--------------------|--|
| | the dust on surrounding communities. | | | Impact Phase Note: |
| | | | | Please refer to the Air Quality Basic Evaluation |
| | | | | Report included in the DEIR under Appendix F- |
| | | | | Spcialist Reports. |
| | | | | Mathys Vosloo, EAP |
| 2 | As a first step we would like to draw your attention to the | Mr Rico Euripidou, | E-mail: 13 January | The waste classification will be undertaken, |
| | following debate on the eco-toxicology of coal and incinerator | GroundWork, Friends | 2012 | and the relevant mitigation measures will be |
| | ash which we consider meets the criteria as a hazardous waste | of the Earth South | | implemented. In addition to the waste |
| | as there is currently a very live debate here in South Africa, in | Africa | | classification Eskom is currently undertaking a |
| | the USA, The UK and Europe about regulating coal and similar | | | comprehensive health and toxicity assessment |
| | incinerator bottom ash as hazardous waste and the respective | | | of ash produced at several of its current power |
| | regulatory authorities are currently trying to finalise their | | | stations. This study will feed into the waste |
| | regulations. These centre on some major and legitimate | | | classification and also form part of the EIA. |
| | concerns about the use of coal and bottom ash in sludge dams | | | Willie Howell, EAP (2012) |
| | and unbound uses such as the replacement for aggregate and | | | |
| | this summary touches upon some of the arguments. The storage | | | |
| | of post-combustion wastes from coal plants threatens human | | | |
| | health once the toxic residues have migrated into water supplies. | | | |
| | In South Africa specifically the coal ash from this facility will have | | | |
| | to undergo testing and evaluation as per the WASTE | | | |
| | CLASSIFICATION AND MANAGEMENT REGULATIONS AND | | | |
| | STANDARDS in terms of the NEM: Waste Act. All wastes will | | | |
| | have to be classified in terms of these regulations and based on | | | |
| | their classification, risk to health and ecotoxicity this will define | | | |
| | their waste management. | | | |
| | To illustrate a particular major health and ecological incident on | | | |
| | coal ash disposal I have provided you with an example below | | | |
| | illustrating an incident in the USA where it can cause a very | | | |
| | serious environmental and human health risk: | | | |
| | It has now been two years since an earthen dike holding back | | | |
| | 1.1 billion gallons of coal slurry ruptured, unleashing a tsunami | | | |
| | of dark gray sludge from the Tennessee Valley Authority's | | | |
| | Kingston Fossil Plant in Harriman, Tennessee. The wave | | | |
| | destroyed homes, surged into the yards of neighbours, and | | | |
| | caused the nearby ponds and streams to overflow. More than | | | |
| | 300 acres of land were covered in the slurry, and in the weeks | | | |
| | after, the ash would travel as far as 30 miles downstream on the | | | |
| | nearby Emory River. The environmental disaster for the first time | | | |

raised the guestion of why coal-burning power plants are allowed to dump the fly ash waste—the fine, dust-like particles emitted when coal is burned to create power-into vast open pits. The ash, doused with water and left in these containment ponds for years, contains toxic elements like arsenic, mercury, and lead. But for decades, the disposal of the waste was left unregulated in the USA where power plants produce more than 130 million tons of the ash each year, and while 43 percent of it gets recycled into products like cement and wallboard, much of the rest remains on site at coal-fired power plants around the country. In October 2009, the EPA issued a proposed rule [5] that would have designated the ash as hazardous waste that needed special handling and would be regulated at the federal level. Unregulated coal ash disposal poses health risks to humans and the environment, as the toxic materials have been found to leach into groundwater at containment sites.

Following this an assessment prepared for the EPA noted that the cancer risk from drinking water contaminated with arsenic—just one of the many hazardous substances in the ash—is 1,800 times EPA's regulatory limit. The Environmental Integrity Project has been looking extensively at data on contamination, identifying 137 sites [11] where toxic materials have leached into the groundwater. At some sites, they found arsenic and other heavy metals at up to 145 times what is permissible under federal guidelines. If EPA kicks in tougher federal regulations, these sites would be monitored more closely.

There is no doubt that the 'fly ash' is hazardous waste and will need to be treated and disposed of at specialist facilities. Recent research indicates that there are potentially serious health and environmental impacts arising from the landfill disposal of fly ash even in modern containment landfill sites (Macleod, Duarte-Davidson et al. 2006; Macleod, Duarte-Davidson et al. 2007). This shows that the modelled exposure to children around the Wingmoor farm landfill site, one of the major fly ash disposal facilities in the UK, can exceed acceptable intakes of dioxin from the contamination in the fly ash. Whilst the bottom ash is often described as being 'inert' this is incorrect – bottom ash is never classed as 'inert' in the UK. The bottom ash is currently taxed as "inactive" waste for landfill tax purposes although this may be about to change as the default

position in the recent Customs and Excise consultation is that the bottom ash should be taxed at the standard rate of landfill tax.

In practice the designation of bottom ash is either as nonhazardous or hazardous waste. At the end of 2006 the UK Environment Agency indicated that they had tested some bottom ash samples and: "Levels of lead and zinc in a number of isolated compliance monitoring samples have exceeded the hazardous waste threshold for H14." H14 is the hazardous waste criteria for ecotoxicity. Veolia, one of the major incinerator operators, has indicates (Veolia Environmental Services 2007) that when they had tested for metals and then used the recent Environment Agency WM2.2 assessment methodology to determine the whether the wastes were hazardous wastes about 40% of the samples from UK incinerators were found to be hazardous waste under the H14 criteria. This follows increasing concern about the environmental impact of combustion residues in disposal and utilisation, especially for the release of toxic substances such as heavy metals (such as arsenic, cadmium, chromium, copper, mercury, molybdenum, nickel and, particularly in relation to ecotoxicity, lead and zinc) together with soluble salts from the residues (Stegemann, Schneider et al. 1995; Hartenstein and Horvay 1996; Hunsicker, Crockett et al. 1996; Abbas, Moghaddam al. 2003). The content of toxic metals present in the bottom ash from coal and municipal waste incinerators is usually 10-100 times larger than in natural soils (Theis and Gardner 1990). As a result of the toxicity associated with the heavy metals and other contaminants several researchers have concluded that bottom ash should be classified as a hazardous waste because of the ecotoxic properties it exhibits.

Ferrari et al (Ferrari, Radetski et al. 1999) subjected municipal waste incineration bottom ash to a range of ecotoxicity tests in both the leachate and solid phase. Their results clearly demonstrated "a significant increase in all antioxidant stress enzyme activity levels across all plant tests even at the lowest test concentrations (solid phase and leachate)". This was demonstrated to be a good indicator of solid or leachate phase toxicity. As with many other test regimes it is clear from this work that the bottom ash may not prove hazardous in all tests. This

indicates that care must be taken with the test regimes and that selective testing could deliver apparently reassuring, and hence misleading, results. For ash to be demonstrated to be hazardous, however, a single failure of an appropriate test is sufficient.

Ibáñez et al. (Ibáñez, Andrés et al. 2000) found that all four samples of MSW bottom ash from two incinerators (one in an industrial and the other in a rural area) contained chemicals at or above the hazardous waste range. It should be noted that this study was published even before zinc oxide and chloride had to be considered when assessing the hazardous classification of ash.

More recently the work by Lapa et al (Lapa, Barbosa et al. 2002) on the EC Valomat project concluded: "all bottom ashes [including sample B1] should be classified as ecotoxic materials."

Radetski et al (Radetski, Ferrari et al. 2004) then investigated the genotoxic, mutagenic and oxidant stress potentials of municipal solid waste incinerator bottom ash leachates and reported: "The MSWIBA leachates were found to be genotoxic with the Vicia root tip micronucleus assay. These findings were confirmed by Feng et al. (Feng, Wang et al. 2007): In this study, our results clearly demonstrated that MSWIBA leachates had genotoxicity on Vicia faba root cells as other researches did (Radetski, Ferrari et al. 2004). Bekaert et al. (1999[1] demonstrated that the aqueous leachates from a landfill of MSWI ash had a significant genotoxicity on the amphibian erythrocytes.

The United Nations Environment Program (UNEP) (UNEP and Calrecovery Inc 2005) warned in 2005 that whilst ash from incinerators has been reused in civil engineering works: "in industrialised countries, the most prevalent method of management is disposal of the ash in lined landfills to control the risk of underground pollution by soluble toxic chemicals leached out of the ash. UNEP continued: "Both fly ash and bottom ash contain chemical constituents that pose potential serious risks to operating personnel and the public. The chemical constituents of concern include heavy metals, dioxins, and furans". Feng expressed surprise about countries that do not include bottom ash on their hazardous waste lists: However, in many

countries and territories (such as USA, some OECD countries, China), Bottom ash is not included in the List of Hazardous Wastes, being dumped into landfills directly or after maturation (Gau and Jeng, 1998; (Ibáñez, Andrés et al. 2000);(Lapa, Barbosa et al. 2002)). Therefore, we suggested that the comprehensive evaluation of the environmental impacts of BA is necessary before decisions can be made on the utilization, treatment disposal of bottom or Ore et al (Ore, Todorovic et al. 2007) examined the leachate from bottom ash that had been stored outside for six months for weathering (in a similar way to the proposals by Suez) and then used for road construction. They carried out several ecotoxicity tests and found a high initial release of salts and Cu in line with relatively high concentrations in laboratory generated MSWI bottom ash leachates presented in the literature (Meima and Comans 1999; Lapa, Barbosa et al. 2002). A mung bean assay using Phaseolus aureus revealed the toxicity of bottom ash leachate - which continued to the final tests three years later, different albeit due to compounds leaching. Leachates with significantly higher concentrations of Al. Cl. Cr. Cu, K, Na, NO2-N, NH4-N, total N, TOC and SO4 were generated in the road-section built on bottom ash when compared to the road-section built with conventional gravel. Compared to the leachate from gravel, the concentrations of Cl. Cu and NH4-N were three orders of magnitude higher, while those of K, Na and TOC were one order of magnitude higher. After 3 years of observations, while the concentrations of most components had decreased to the level in gravel leachate, the concentrations of Al. Cr and NO2-N in bottom ash leachates were still two orders of magnitude higher. The authors concluded that high concentrations of chloride emitted from the road can lead to increased toxicity to the recipient, e.g. for plants, and the bottom ash reused in a road construction could thus have a toxicological impact on the surroundings. A series of ring tests for ecotoxicity methods have been carried out in Europe (Becker, Donnevert et al. 2007; Moser 2008). These included sampling and testing of incinerator bottom ash from a Dutch incinerator (Cu 6,800 mg/kg; Zn 2,639 mg/kg; Pb 1,623 mg/kg) a high pH (about 10.5). The bottom ash was found to be ecotoxic in these tests even after it had been aged for

| 3 | several months (Römbke, Moser et al.). Very recently the UK Highways Agency (Highways Agency 2009) has banned the use of incinerator bottom ash in foaming cement because of a series of explosions on sites caused by hydrogen when the ash has been used (Mann 2009). The Environment Agency has admitted it does not "have 100% confidence" in its classification of incinerator bottom ash (IBA) as non-hazardous waste (ENDS 2009). It cannot therefore be assumed that the bottom ash would be suitable for re-use – and, properly assessed much of the bottom ash would almost certainly be hazardous waste. Finally it is noted that even when incinerator bottom ash is 'recycled' only part of the ash can be used. In Hampshire, for example, where particular efforts have been made to increase the acceptability of incineration only about 33% of the ash can be utilised according to Project Integra reports[2]. The landfill demand is therefore likely to be higher than suggested by operators. On the basis of the evidence available it is reasonable to conclude that bottom ash should be treated as hazardous waste and that future disposal options represent a potentially high risk and expensive addition to the costs of incineration. I notice that a traffic study will be done. Has this started as yet? Site C is adjacent to the N4 Toll Road. The SANRAL Act, Act 8 of 1998 will apply regarding building lines and services within the building line. A 60m building line is applicable from the road reserve. Dust could be problematic. What measures will be taken to ensure that dust will not blow onto the N4 Toll Road? What dust monitoring will be done? This could be a safety hazard if it causes poor visibility on the N4 Toll Road. Dust is also a nuisance as part of road maintenance, as frequent cleaning of roadside furniture, such as road signs, guard rails and guard rail reflectors would be required. | Ms Carla Davis, Traffic Engineer, Trans African Concessions (Pty) Limited | E-mail: 13 February 2012. | At present we are only in the Draft Scoping Phase so no specialist studies have been completed as yet. Once the DEA has accepted the Scoping Report (2-3 months) we will start with the specialist studies and we will ensure that you get a copy of the traffic report. In addition the air quality assessment will assess the problems related to dust deposition and visibility. Willie Howell, EAP (2012) |
|---|---|---|---|--|
| | , , | | | |
| 4 | How will the dust/ash be controlled to prevent pollution? | Mr Hans van Rensburg, Witklip | Public meeting on 15 February 2012 at 14:00 to discuss and review the Draft Scoping Report. | Dust suppression with water will prevent ash being blown away. Top soil that would have been removed before the ash was placed will be put on top of the ash and vegetation will be planted to anchor it. |

| | | | | More detail on the dust suppression measures is provided in the Environmental Management Programme (EMPr) and air quality reports in the next phase of the EIA. Willie Howell, EAP (2012) Impacts of dust and air quality is discussed in the air quality impact assessment provided in Appendix F of this DEIR. Mathys Vosloo, EAP |
|---|---|----------------------------------|---|---|
| 5 | There is a lot of dust at the Kendal power station. | Mr Hans van Rensburg, Witklip | Public meeting on 15 February 2012 at 14:00 to discuss and review the Draft Scoping Report. | The ash disposal facility at Kendal power station was designed and built with old technology. This facility is a long and thin structure with a large area exposed to the wind. Ideally the Kusile ash disposal facility will be square in shape to reduce exposure to wind. Engineering aspects of the Kusile Ash Disposal Facility, however, be thoroughly investigated during the next phase of this EIA. Mitigation measures will be written into the Environmental Management Programme (EMProg) that must be adhered to during construction and the daily operation of the ash disposal facility. Eskom is also continuously investigating measures of how the dust pollution at Kendal can be reduced. Impact Phase Note: Engineering aspects of the ash disposal facility design was investigated in the EIA phase of the project and can be viewed in Appendix G of this DEIR. The ADF design was optimised to reduce the footprint of the facility while still ensuing capacity to receive the entire 60 years worth of ash produced. |
| 6 | There must be no dust pollution. | Mr Hans van | Public meeting on | Mathys Vosloo, EAP The EIA will recommend various dust |
| | | Rensburg, Witklip | 15 February 2012 at 14:00 to discuss and review the Draft Scoping Report. | management measures; the effective implementation of these measures should reduce the dust. Please refer to the air quality assessment that will be undertaken in the next |

| | | | | phase of the EIA. |
|----|--|----------------------|----------------------|--|
| | | | | Impact Phase Note: |
| | | | | Please refer to the Air Quality Basic Evaluation |
| | | | | Report included in the DEIR under Appendix F- |
| | | | | Spcialist Reports. |
| | | | | Mathys Vosloo, EAP |
| 7 | Why did you use a 75% waste stream and not a full 100% waste | Dr James Meyer, | Public meeting on | A power station never runs at 100% for 60 |
| | stream in your calculations? | Water Research | 15 February 2012 at | years. With downtime for maintenance and |
| | | Commission, Pretoria | 14:00 to discuss | normal demand a figure of 75% is more |
| | | | and review the Draft | realistic. |
| | | | Scoping Report. | Willie Howell, EAP (2012) |
| 8 | What is the wind direction at Kusile Power Station? | Mr Zweli Mpofu, | Public meeting on | The main wind direction is from the north west. |
| | | Bravo Cooperative, | 15 February 2012 at | Willie Howell, EAP (2012) |
| | | Hartbeestfontein. | 14:00 to discuss | |
| | | | and review the Draft | |
| | | | Scoping Report. | |
| 9 | Will the ash disposal facility be kept wet all the time to prevent | Mr Adriaan Loots, | Public meeting on | Various studies will be done to find the most |
| | dust pollution? | Jakhalsfontein | 15 February 2012 at | effective dust suppression method, but water |
| | · | | 18:00 to discuss | suppression is a common method that will be |
| | | | and review the Draft | practiced throughout the life of the facility in |
| | | | Scoping Report. | exposed ash surfaces. |
| | | | goopg . topo | Willie Howell, EAP (2012) |
| 10 | In the Schedule of Government Notice No. 32816 (24 Dec 2009) | Dr James Meyer, | Email in response | Thank you for your comments. The |
| | the National Ambient Air Quality Standards are established | Consultant for | to the Draft Scoping | constituents of concern mentioned in your |
| | (NEM: Act 34 of 2004), with section 2.3 on Ambient air quality | TOPIGS SA (Pty) Ltd | Report on 24 | submission will be added to the scope of work |
| | measurement requirements stating that the assessment of all | | February 2012. | for the relevant specialist study. |
| | ambient pollutant concentrations shall be conducted in terms of | | 1 obradily 2012. | Willie Howell, EAP (2012) |
| | the relevant sections of the National Framework for Air Quality | | | Impacts of the hazardous constituants of ash |
| | Management. Section 3 on National Ambient Air Quality | | | being transported and disposed at the facility |
| | Standards addresses SO ₂ , NO ₂ , Particulate matter, ozone, | | | were investigated in the air quality assessment |
| | benzene, lead and carbon monoxide. | | | undertaken during the EIA phase of the project. |
| | Although the Kusile Power Station is to use FGD to reduce many | | | |
| | The state of the s | | | The air quality specialist report can be |
| | of these hazardous coal combustion products (specifically the | | | scrutinised in Appendix F of this DEIR. |
| | SO ₂ and NO ₂) concern still exists for list of potentially hazardous | | | Mathys Vosloo, EAP |
| | constituents related to coal, combustion thereof, storage of | | | |
| | combustion products and related activities, including transport of | | | |
| | both coal and combustion products. | | | |
| | It is widely published that concern for trace elements in FGD | | | |
| | byproduct (e.g. arsenic, selenium and mercury) limits the | | | |
| | utilization of FGD byproduct and that the release of FGD | | | |

byproduct is a barrier impacting utilization thereof.

It is also widely reported in the literature that trace elements may be captured by fly ash and coarse ash with consequent significant environmental concerns as many are reported to be carcinogenic, toxic and potential endocrine disruptors.

The key carcinogenic elements most frequently cited include arsenic, cadmium, nickel and zinc, whilst toxicity concerns are most often reported for selenium and mercury.

The scientific literature generally reports potentially hazardous trace elements associated with fly ash to be:

- Arsenic
- Aluminium
- Antimony
- Barium
- Beryllium
- Bromide
- Cobalt
- Chromium
- Copper
- Iron
- Lanthanum
- Lead
- Manganese
- Mercury
- Molybdenum
- Nickel
- Selenium
- Silicon
- Strontium
- Tungsten
- Uranium
- Vanadium

In addition many macro elements are cited such as Fluoride, Sulphur and Nitrogen. Other potential hazards include PAHs and VOCs.

Although many technologies to improve emissions quality exist and may be applicable to Kusile Power Station these do not totally remove the hazards and concern for hazardous constituents still exists.

In some cases the removal of hazards from air in an attempt to improve the air quality and reduce air emissions may result in a higher non-airborne hazardous waste requiring disposal.

According to studies published regarding health impacts associated with coal-fired power plants and disposal of coal combustion products concern exists for both air quality and water quality impacts. Numerous environmental studies also observe hazardous substances in a variety of exposure media, from soil to aquatic organisms utilized for human consumption. Public health studies cite 84 separate hazardous air pollutants to be associated with coal-fired power plants.

There is thus a wealth of information in the scientific literature where the environmental aspects of trace elements in coal and coal combustion products (including fly ash) are reviewed and researched.

Critically, it cannot be assumed that Kusile Power Station will automatically monitor the relevant pollutants as the current EMC process omits obvious elements relevant to establishing baseline concentrations that may be adversely affected or impacted by coal-fired power stations.

As noted above, trace elements described in FGD by-products also include recognized potentially hazardous elements such as arsenic, selenium and mercury. Studies note that disposal of the ash may be accompanied by dissolution of calcium that may lower the pH and calcium concentration in the leachate facilitating the release of arsenic and mercury, which may be argued to represent a greater environmental hazard.

It is thus argued that these constituents are known, internationally published and cited, and should be specifically included in any EIA process for the relevant sources, pathways and receptors.

Key Concern:

Nowhere in the Draft Scoping Report is specific reference to these constituents noted, and although it may be argued that they are included by implication, it is argued that in order for meaningful public participation and acceptable EIA terms of reference to be formulated, they should appear prominently in the report with clear assurances that they will be established in terms of baseline values, potential hazardous waste streams and monitored accordingly.

| | Failure to do this transparently may result in various environmental and water licenses and authorizations to be granted without specific reference to the primary pollutants relevant. | | | |
|----|---|--|---|---|
| 11 | Section 3.2.3 describes the waste streams in Table 4. Although some reasons were offered verbally at the public meeting on 15/02/2012 at El Toro (Kendall) it remains unclear how the calculations for the approval of Kusile Power Station Ash Dump could be so underestimated to the point that the current 10 year Ash Dump Facility is only capable of handling 16 % of the waste stream envisaged. Although the calculations for Table 4 state a volume of ash produced at 75% of the waste stream it is assumed this is meant to read of the "potential" waste stream. Despite the preferred approach (see point 1 above) being one that is conservative and one that should thus err on the higher risk side, this is not performed. If the initial projections failed in forming a reasonable estimate of the required ash dump facility size and scope it is unclear how the Draft Scoping Process accommodates the same set of scenario circumstances from occurring again (as verbally explained for the 10 year ash dump). Should the WUL and other EIA restrictions be placed (apparently key reasons for the initial ash dump being inadequate) again in a manner to yield the same outcome, namely that the 60 year ash dump is also insufficient, then the Draft Scoping Report will not be applicable to the Kusile Power Station waste stream relevant, and may run the risk of having yet another additional waste stream burden that will require yet another similar process. It is argued that for the initial authorizations and licenses (specifically WULs) to be valid they should not misrepresent the actual waste stream specifics and that this Draft Scoping Report may be taken as an indication that the current authorizations and licenses were based on misleading calculations and thus require amendments or new compliance notices. | Dr James Meyer, Consultant for TOPIGS SA (Pty) Ltd | Email in response to the Draft Scoping Report on 24 February 2012. | The calculations related to the potential volume of ash to be disposed are based on the best information available at present. We will endeavour through the design process to finalise all these figures to a high level of confidence. In the case of this EIA if the authorities place similar restrictions on the proposed development more than one site will be utilised to ensure that the full life of the station is covered. This objective (to provide a legislated waste disposal facility for the life of the Kusile Power Station) is the main purpose of the design team, hence if any restrictions apply to a particular or all sites, a motivation to use multiple sites will be provided. Willie Howell, EAP (2012) |
| 12 | No mention is made of handling the waste stream from human effluent and other hazardous wastes associated with the construction phase, both of the ash dump and conveyor systems. No indication is given of the number of people involved and | Dr James Meyer, Consultant for TOPIGS SA (Pty) Ltd | Email in response to the Draft Scoping Report on 24 February 2012. | Noted – the issues pertaining to human and construction related wastes will be included in the FSR and highlighted in the relevant specialist studies. The mitigation and management measures |

| | assurances to prevent contamination of the environment (including wetlands, surface and groundwater) by their waste and construction-related hazards. It is argued that this should form part of the EIA process as construction can be assumed to be a process requiring a significant amount of time and people. | | | related to these will also be included in the Environmental Management Programme that will specifically be written for the construction phase of the project. Willie Howell, EAP (2012) The handling the waste stream from human effluent and other hazardous wastes associated with the construction phase, both of the ash disposal facility and conveyor systems has been investigated and addressed in the DEIR and Environmental Management Programme. Mathys Vosloo, EAP |
|----|--|--|---|---|
| 13 | The US EPA notes an increase in sites classified as High Potential Hazard with reference to Coal Combustion Residues and the scientific literature (peer-reviewed journals) dealing with coal combustion products, byproducts and related waste, continue to note a range of environmental concerns affecting a wide range of receptor types, including aquatic, human and animal. To date, key critical data gaps exist in the Kusile EMC Monitoring reports, with no meaningful response to requests for specific constituents (pollutants and hazardous substances) to be monitored to establish current air quality, groundwater quality or surface water quality. It is thus a concern that failure to have the list noted under point 1 included in the EIA process will render those affected by the proposed ash dump open to the same lack of monitoring data which would effectively prevent an assessment of impact. The sources, pathway and receptor approach is fundamental to the assessment of hazards and risks and accepted world-wide, and implied in the relevant NEMA and NWA Acts. Observation in terms of sampling, analytical determination and transparent reporting, of the relevant potentially hazardous constituents should be included for all these aspects (waste stream and other possible sources; pathways as relevant, e.g. air, soil, water, plant; for relevant receptor types). | Dr James Meyer, Consultant for TOPIGS SA (Pty) Ltd | Email in response to the Draft Scoping Report on 24 February 2012. | Noted and the specialist studies scopes have been expanded to include source, pathway receptor analysis on all the relevant studies. Willie Howell, EAP (2012) Monitoring protocols have been proposed for measuring of the relevant pollutants in the relevant specialist studies. See Appendix F for the air quality, groundwater and surface water specialist studies. Mathys Vosloo, EAP |
| 14 | An issue was raised about dust control and how it will be managed. | Mr Warren Kok, Zitholele Consulting | Focus group meeting on 20 July 2012 at 10:00 to | Dust is a problem at ash disposal facilities. Studies will be undertaken to quantify this impact. Typical dust control measures include |

| 15 | Traditional methods of dust control do not work. Other methods must be found. | Mrs Annamie Duvenhage, Bronkhorstspruit and Wilge River Conservancy | present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project Focus group meeting on 20 July 2012 at 10:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | controlled irrigation on the facility, covering with vegetation, etc. Willie Howell, EAP (2012) This is true, and is noted for the record. Willie Howell, EAP (2012) Dust control methods has been included in the engineering designs and include concurrent and continuous rehabilitation of the ash stabalised areas behind the advancing ash stack front, and installation of dust suppression system that will keep the surface of the exposed ash moist to prevent wind blown ash. The air quality report has further recommended planting of trees and vegetation around the ash disposal facility, besides wetting of the ash facility. This approach has shown successful containment of dust and ash during the modelled simulations. See Appendix F for the air quality, groundwater and surface water specialist studies. Mathys Vosloo, EAP |
|----|---|---|--|---|
| 16 | There is no proper monitoring of dust and dust control present at Kusile. | Dr James Meyer, Consultant for TOPIGS SA (Pty) Ltd | Focus group meeting on 20 July 2012 at 10:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | Thank you and this is noted for the record. Specialists will be requested to review this during their detailed investigations, and propose better monitoring of this facility for the EMP. (Post meeting note: Kusile has got a dust monitoring programme, and measures, e.g. water suppression, binding chemical. On a monthly basis, monitoring is done through a dust bucket system. Kusile has an ASTM standard which it is in compliance with). |
| 17 | A big concern is the pollution implications with the ash facility. It is going to pollute the air, water and soil, also have health implications and lead to land degradation and reduce crop | Mrs Annamie Duvenhage, Bronkhorstspruit and | Focus group meeting on 20 July 2012 at 10:00 to | This is noted for the record. Specialist studies will address these concerns and quantify the impact. |

| | production. We are also concerned about the visual impact of the ash dump and the impact to our property values | Wilge River Conservancy | present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | Potential surface and groundwater impacts has been investigated by the relevant specialist studies (see Appendix F), and is summarised in the DEIR. Surface water runoff will be impacted on a very monor scale. Surface water quality impacts already exist from agricultural and industrial activities within the Kusile Power Station sub-catchment. Adfditional project impacts will be minor as engineering design and proposed mitigation measures can be successfully implemented to prevent project impacts on surface water. Potential groundwater impacts can also be effectively mitigated to within acceptable limits, should the impact occur. The social specialist has found that property values may have already been impacted in the study are with the development of the Kusile Power Station and New Largo mine. The impact is rated as moderate-low. Mathys Vosloo, EAP |
|----|---|--|--|--|
| 18 | How is the ash being kept from blowing away? | Mrs Carol Wentzel, Bronkhorstspruit and Wilge River Conservancy | Focus group meeting on 3 August 2012 at 09:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | The ash is managed through irrigation systems using water from the plant. Water generated from the ash stack is used as top up irrigation water. No water will be taken from the nearby streams or rivers. Willie Howell, EAP (2012) |
| 19 | Whilst the issue of air quality and dust suppression is noted in the draft scoping report and during the presentations the specialists have all admitted to the fact that despite the mitigation measures that may be put in place some impact from dust and ash-particle fallout will occur. | Dr James Meyer, Consultant for TOPIGS SA (Pty) Ltd | E-mail: 2 August 2012 | The EIA will recommend various dust management measures. An air quality assessment will be undertaken in the next phase of the EIA. Impact Phase Note: |

It was noted by the specialists that this currently occurs at Kendal ash disposal site.

This is a major concern for not only public health but the agricultural production activities currently underway by the landowners potentially affected.

This affects animal health directly by sensitive pulmonary exposure pathways and related respiratory and subsequent systemic adverse effects, and indirectly by grazing quality. Crop production may obviously also be adversely affected by fallout, product quality and long-term soil effects.

It is proposed that this aspect needs to be addressed more fully and comprehensively by a workshop/specialist/stakeholder interaction where these issues and the issues noted below are dealt with:

National Ambient Air Quality Standards are established (NEM: Act 34 of 2004), with section 2.3 on Ambient air quality measurement requirements stating that the assessment of all ambient pollutant concentrations shall be conducted in terms of the relevant sections of the National Framework for Air Quality Management. Section 3 on National Ambient Air Quality Standards addresses SO₂, NO₂, Particulate matter, ozone, benzene, lead and carbon monoxide but monitoring needs to include a comprehensive list of potentially hazardous constituents related to coal, combustion thereof, storage of combustion products and related activities, including transport of both coal and combustion products. Additional key elements include:

- trace elements in FGD byproduct (e.g. arsenic, selenium and mercury)
- trace elements captured by fly ash and coarse ash with consequent significant environmental concerns as many are reported to be carcinogenic, toxic and potential endocrine disruptors.

The key carcinogenic elements most frequently cited include arsenic, cadmium, nickel and zinc, whilst toxicity concerns are most often reported for selenium and mercury.

Potentially hazardous trace elements associated with fly ash include:

Arsenic; Aluminium; Antimony; Barium; Beryllium; Bromide; Cobalt; Chromium; Copper; Iron; Lanthanum; Lead; Manganese;

Waste byproducts from the FGD process to be installed at the Kusile Power Station falls outside the scope of this EIA, and shall therefore not be responded to.

The Witbank area currently shows elevated air quality impacts. It was however found that air quality impacts associated with the transport and disposal of ash on the ash disposal facility will not elevate the status quo pollution levels. Furthermore, with the successful implementation of the recommended mitigation measures, this impact can be confined to within the development footprint.

Please refer to the Air Quality Basic Evaluation Report included in the DEIR under Appendix F-Specialist Reports.

The draft EMPr (Appendix I) also address the recommendations proposed for dust management.

Mathys Vosloo, EAP

Mercury; Molybdenum; Nickel; Selenium; Silicon; Strontium; Tungsten; Uranium; Vanadium.

Macro elements include Fluoride, Sulphur and Nitrogen. Other potential hazards include PAHs and VOCs.

According to studies published regarding health impacts associated with coal-fired power plants and disposal of coal combustion products concern exists for both air quality and water quality impacts. Numerous environmental studies also observe hazardous substances in a variety of exposure media, from soil to aquatic organisms utilized for human consumption. Public health studies cite 84 separate hazardous air pollutants to be associated with coal-fired power plants. Given the sensitivity of the catchment involved for all the sites in terms of wetlands and surface water, and the reliance on groundwater by many of the affected landowners, water quality impacts need to be monitored for the same constituents noted above for air quality. In addition, as noted in the previous comments submitted, concerns regarding Turbidity, Suspended Solids, COD, Ammonia and microbiological indicator organisms are also valid due to the impacts for construction activities and stormwater runoff. These should thus also be monitored to assess environmental impact on a continuous basis as it is understood that the construction of the ash disposal facility or facilities will not be a single event but rather an ongoing process as storage requirements increase over time.

5.6. Noise

Will there be noise buffer zones?

and review the Draft Scoping Report.

during the next phase and included in this assessment will be recommendations related to noise buffers.

Willie Howell, EAP (2012)

The noise assessment concluded that noise levels will be within acceptable limites and noise impacts can be kept far enough away from noise receptors to successfully mitigate the potential impact. The noise assessment can be viewed in Appendix F.

Mr Adriaan Loots.

Jakhalsfontein

Public meeting on

18:00 to discuss

15 February 2012 at

The noise levels will be in line with that of an

agricultural zone. A noise assessment is one of

the specialist studies that will be undertaken

| | | | | Mathys Vosloo, EAP |
|---|--|--|---|---|
| 2 | What will the noise impact be? | Mrs Annamie Duvenhage Bronkhorstspruit and Wilge River Conservancy | Focus group meeting on 20 July 2012 at 10:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | A noise specialist study has been included in the EIA, and it will determine this and provide mitigation. Impact Phase Note: The noise assessment concluded that noise levels will be within acceptable limites and noise impacts can be kept far enough away from noise receptors to successfully mitigate the potential impact. The noise assessment can be viewed in Appendix F. Mathys Vosloo, EAP |
| ! | 5.7. Agriculture | | | |
| 1 | The proposed Site B takes up most of my farm. The remaining land will not make it economically viable to continue farming. | Mr Hans Jansen van Rensburg Landowner: Farm: Witklip | Reply sheet on 30 September 2011 | Noted. If the site is the preferred and recommended site, through the EIA process, appropriate engagement and negotiations will be held with the landowner, by Eskom once DEA authorises a particular site. Willie Howell, EAP (2012) Site alternative A has been identified as the preferred alternative. All the properties affected by site A is owned by Eskom, therefore there will be no direct impacts on existing farming operations. A comprehensive Environmental Management Programme will also be implemented to avoide or at the very least minimise any potential indirect impacts on agricultural activities in the vicinity of the ash disposal facility. In the event the competent authority reject the EAP's recommended site – Site A – and authorise another site alternative, then the land owner negotiation process will commence. Construction of the ADF should only commence once successful negotiations has been concluded with all affected land owners. Mathys Vosloo, EAP |
| 2 | I farm with organic export berries. This development will mean | Mr Andreas Moll | Reply sheet on 7 | The potential impact on agriculture will be fully |
| | the end of our farming activities and our existence. (A detailed | Landowner: Farm | October 2011 | investigated during the next phase of this |

| | proportation of the forming activities that will be destroyed by | lakhalafantain | | atudy. Diagon and comment on the |
|---|--|------------------|-------------------|--|
| | presentation of the farming activities that will be destroyed by this development can be found in the attached documentation.) | Jakhalsfontein | | study. Please see and comment on the proposed Terms of Reference for this study to |
| | this development can be found in the attached documentation.) | | | |
| | | | | ensure all elements of concern will be |
| | | | | addressed. At completion of the specialist |
| | | | | studies, the public will be given an opportunity |
| | | | | to confirm acceptability of proposed mitigation |
| | | | | strategies and plans. |
| | | | | Willie Howell, EAP (2012) |
| | | | | Site alternative A has been identified as the |
| | | | | preferred alternative. All the properties affected |
| | | | | by site A is owned by Eskom, therefore there |
| | | | | will be no direct impacts on existing farming |
| | | | | operations. A comprehensive Environmental |
| | | | | Management Programme will also be |
| | | | | implemented to avoide or at the very least |
| | | | | minimise any potential indirect impacts on |
| | | | | agricultural activities in the vicinity of the ash |
| | | | | disposal facility. |
| | | | | In the event the competent authority reject the |
| | | | | EAP's recommended site – Site A – and |
| | | | | authorise another site alternative, then the land |
| | | | | owner negotiation process will commence. |
| | | | | Construction of the ADF should only |
| | | | | commence once successful negotiations has |
| | | | | been concluded with all affected land owners. |
| | | | | Mathys Vosloo, EAP |
| 3 | Site B will affect one portion of my farm, but since all three | Mr Hennie | Reply sheet on 22 | Noted. Please note that the potential impact on |
| 3 | portions are being managed as one unit, all three portions will | Terblanche | October 2011 | agriculture will be fully investigated during the |
| | eventually be affected. | Landowner: Farm: | October 2011 | next phase of this study. If the site is the |
| | eventually be affected. | Bossemanskraal | | · · · · · · · · · · · · · · · · · · · |
| | | Bossemanskraai | | preferred and recommended site, through the |
| | | | | EIA process, appropriate engagement and |
| | | | | negotiations will be held with the landowner, by |
| | | | | Eskom. |
| | | | | Willie Howell, EAP (2012) |
| | | | | Impact Phase Note: |
| | | | | Site alternative A has been identified as the |
| | | | | preferred alternative. All the properties affected |
| | | | | by site A is owned by Eskom, therefore there |
| | | | | will be no direct impacts on existing farming |
| | | | | operations. A comprehensive Environmental |

| 4 | Site B will adversely affect agricultural land. There are various | Mr P.J. Schreuder | Reply sheet on 16 | Management Programme will also be implemented to avoide or at the very least minimise any potential indirect impacts on agricultural activities in the vicinity of the ash disposal facility. In the event the competent authority reject the EAP's recommended site – Site A – and authorise another site alternative, then the land owner negotiation process will commence. Construction of the ADF should only commence once successful negotiations has been concluded with all affected land owners. Mathys Vosloo, EAP The potential impact on agriculture and all |
|---|--|-------------------|-------------------|--|
| | wetlands and dams that will be negatively affected by your development. Pollution from the ash disposal facility will affect agricultural operations, the wetlands and dams. There is also an oil pipeline that is not marked on your map. | | October 2011 | water resources will be fully investigated during the next phase of this study. The oil pipeline will be confirmed and the feasibility of the site, with such infrastructure, will be investigated. Willie Howell, EAP (2012) Impact Phase Note: Site alternative A has been identified as the preferred alternative. All the properties affected by site A is owned by Eskom, therefore there will be no direct impacts on existing farming operations. A comprehensive Environmental Management Programme will also be implemented to avoide or at the very least minimise any potential indirect impacts on agricultural activities in the vicinity of the ash disposal facility. In the event the competent authority reject the EAP's recommended site — Site A — and authorise another site alternative, then the land owner negotiation process will commence. Construction of the ADF should only commence once successful negotiations has been concluded with all affected land owners. Mathys Vosloo, EAP |
| 5 | This development will adversely affect agricultural land. | Mr Hennie Pienaar | Reply sheet on 24 | The potential impact on agriculture will be fully |

| | T | A1I- | O-t-b0044 | Linear time to all the second reliable to the |
|---|---|-----------------------------------|-----------------------------------|--|
| | | Alcedo | October 2011 | investigated during the next phase of this study. Please see and comment on the proposed Terms of Reference for this study to ensure all elements of concern will be addressed. At completion of the specialist studies, the public will be given an opportunity to confirm acceptability of proposed mitigation strategies and plans. Willie Howell, EAP (2012) Impact Phase Note: The loss of agricultural land, even on site A which is the preferred site and Eskom owned, will be inevitable. A number of envinmental, social, technical and economic aspects were considered during the comparative assessment of the alternative sites, therefore loss of agricultural land on Site A must be considered acceptable. Please refer to the Soils & Land Capability Report included in the DEIR under Appendix F-Specialist Reports. Mathys Vosloo, EAP |
| 6 | My farm Jakhalsfontein Portion 31 is due north of the proposed Site B. | Mr Adriaan Loots Gala Boerdery | Reply sheet on 18 October 2011 | The potential impact on agriculture and all water resources will be fully investigated during |
| | The farm Jakhalsfontein has a JR number of 528 and not | Cala Booldory | 23.000. 2011 | the next phase of this study. Air pollution will |
| | 258. | | | also be investigated. Please see and comment |
| | I supply vegetables to a variety of businesses such as Woolworths in a 120 km radius. We are dependent on good | | | on the proposed Terms of Reference for this study to ensure all elements of concern will be |
| | quality water to supply high quality vegetables. Our water | | | addressed. At completion of the specialist |
| | originates from your Site B. | | | studies, the public will be given an opportunity |
| | Six new houses with a value of around R2 million are being used to plant the vegetables in. These structures cannot be | | | to confirm acceptability of proposed mitigation strategies and plans. |
| | moved. | | | Willie Howell, EAP (2012) |
| | We provide labour to unemployed people and especially | | | Impact Phase Note: |
| | women from area. If this ash disposal facility is going to be | | | Site alternative A has been identified as the preferred alternative. All the properties affected |
| | built on Site B, many employment opportunities will be lost. The wetlands north of Site B will be adversely affected. This | | | by site A is owned by Eskom, therefore there |
| | water eventually ends up in Loskop Dam, a major irrigation | | | will be no direct impacts on existing farming |
| | source. | | | operations. A comprehensive Environmental |
| 1 | Many animals are directly dependent on the wetlands for | | | Management Programme will also be |

| | survival. • Air pollution will have a negative impact on the vegetable famers next to Site B. • All farming activities next to Site B will be negatively affected. | | | implemented to avoide or at the very least minimise any potential indirect impacts on agricultural activities in the vicinity of the ash disposal facility. In the event the competent authority reject the EAP's recommended site — Site A — and authorise another site alternative, then the land owner negotiation process will commence. Construction of the ADF should only commence once successful negotiations has been concluded with all affected land owners. Mathys Vosloo, EAP |
|---|--|---|----------------------------|--|
| 7 | We farm on Witklip 12 and will be directly affected by Site B. This development will affect a fountain on my property which also provides water to other farmers, such as Eagles Pride Hatchery, as well. Agricultural land in Gauteng is already marginalised. Dumping waste in Gauteng that will be created in Mpumalanga will have a financial impact on Gauteng farmers. | Mr CJ Gerber Landowner: Farm Witklip | E-mail: 26 October 2011 | Noted. The potential impact on agriculture and all water resources will be fully investigated during the next phase of this study. Willie Howell, EAP (2012) Impact Phase Note: Site alternative A has been identified as the preferred alternative. All the properties affected by site A is owned by Eskom, therefore there will be no direct impacts on existing farming operations. A comprehensive Environmental Management Programme will also be implemented to avoide or at the very least minimise any potential indirect impacts on agricultural activities in the vicinity of the ash disposal facility. In the event the competent authority reject the EAP's recommended site — Site A — and authorise another site alternative, then the land owner negotiation process will commence. Construction of the ADF should only commence once successful negotiations has been concluded with all affected land owners. Mathys Vosloo, EAP |
| 8 | With regard to the above proposed site for the establishment of an ash disposal facility, on the farm Witklip 539, Jakhalsfontein 258 and Nooitgedacht 525, as well as the proposed conveyor corridor over various farms including Bossemanskraal 538 JR (the site marked as "Site B" on your map), we would like to make | Van Rensburg Jordaan & Olivier Attorneys on behalf of Hans van Rensburg Boerdery cc | E-mail: 11 January 2012 | Your comment is noted and considered. Willie Howell, EAP (2012) |

| | | 1 | | |
|---|--|------------------------|--------------------|--|
| | the following comments on behalf of our client, who owns the | | | |
| | farm Witklip 539 JR and parts of the farm Bossemanskraal 538 | | | |
| | JR. | | | |
| | Please take note that these comments are based on our initial | | | |
| | assessment of the situation and, as additional information comes | | | |
| | to hand, we may expand on our arguments set out herein. | | | |
| 9 | 1. The farm Witklip | Van Rensburg | E-mail: 11 January | It is noted that the agricultural impact and air |
| | The entire proposed site "B" is situated on prime agricultural | Jordaan & Olivier | 2012 | quality impacts of the proposed development, |
| | land, affecting approximately 250 hectares of irrigated land. | Attorneys on behalf of | | especially Site B is a concern. In order to |
| | Currently crops such as corn, potatoes and peas are produced | Hans van Rensburg | | address this concern an Agricultural Potential |
| | under irrigation. Apart from the area directly affected, the whole | Boerdery cc | | Study has been included in the list of studies to |
| | farming business of our client will be ruined as the farm is | | | be undertaken so that this aspect can be fully |
| | integrated and the remainder of the farm cannot be sustained | | | understood. Please see and comment on the |
| | independently from that part of it. Crops on that land but also on | | | proposed Terms of Reference for this study to |
| | the rest of the farm are irrigated from dams whose water quality | | | ensure all elements of concern will be |
| | will no doubt be affected by the ash. | | | addressed. At completion of the specialist |
| | 2. The farm Bossemanskraal | | | studies, the public will be given an opportunity |
| | Immediately adjacent to, and approximately 1,5 km from the | | | to confirm acceptability of proposed mitigation |
| | proposed site on the farm Bossemanskraal, my client has a | | | strategies and plans. Reference will also be |
| | broiler facility where approximately 1,75 million chickens are | | | made to recommendations from the Kusile |
| | reared every year. We are concerned about the effect the ash | | | power station EIA process, and its |
| | may have on the health of the chickens and also on the quality | | | Environmental Authorisation. |
| | of the product and the safety to consumers. | | | Willie Howell, EAP (2012) |
| | 3. The Conveyor Corridor area | | | Impact Phase Note: |
| | The area earmarked for the conveyor is also agricultural land. | | | Site alternative A has been identified as the |
| | Although it may not affect our client directly we are aware of | | | preferred alternative. All the properties affected |
| | many farmers who may be adversely affected, among which is a | | | by site A is owned by Eskom, therefore there |
| | large-scale pig farm. | | | will be no direct impacts on existing farming |
| | 4. The farm Groenfontein | | | operations. A comprehensive Environmental |
| | One of the major players in the chicken industry in Gauteng, | | | Management Programme will also be |
| | namely Eagles Pride, has one of its' major hatcheries as well as | | | implemented to avoide or at the very least |
| | about 36 broiler houses on the property immediately adjacent to | | | minimise any potential indirect impacts on |
| | the proposed site. They have informed us that they are busy | | | agricultural activities in the vicinity of the ash |
| | conducting their own environmental impact assessment through | | | disposal facility. |
| | their agents and will give their comments in due course. | | | In the event the competent authority reject the |
| | Although we are not authorised to give an opinion on their | | | EAP's recommended site - Site A - and |
| | behalf, we are aware of a number of reasons why the ash will | | | authorise another site alternative, then the land |
| | negatively impact their facility, and possibly to the extent that it | | | owner negotiation process will commence. |
| | may have to close down entirely. These reasons shall also | | | Construction of the ADF should only |
| | apply, to a large extent, to the chicken facility on the farm | | | commence once successful negotiations has |
| - | | | | |

| | Bossemanskraal, belonging to our client. | | | been concluded with all affected land owners. |
|----|--|----------------------------------|---|--|
| | | | | Further, th air quality specialist study concluded that dust and air quality impacts associated with the transport and disposal of ash can be successfully mitigated to within the development footprint, therefore impacts will not be felt as far as Site B. Mathys Vosloo, EAP |
| 10 | Invaluable agricultural land needed for food production will go to waste if it is used for this ash disposal facility. | Mr Christiaan Gerber, Witklip | Public meeting on 15 February 2012 at 18:00 to discuss and review the Draft Scoping Report. | This will be investigated during the specialist studies during the next phase. Willie Howell, EAP (2012) Site alternative A has been identified as the preferred alternative. All the properties affected by site A is owned by Eskom, therefore there will be no direct impacts on existing farming operations. A comprehensive Environmental Management Programme will also be implemented to avoide or at the very least minimise any potential indirect impacts on agricultural activities in the vicinity of the ash disposal facility. In the event the competent authority reject the EAP's recommended site — Site A — and authorise another site alternative, then the land owner negotiation process will commence. Construction of the ADF should only commence once successful negotiations has been concluded with all affected land owners. The loss of agricultural land, even on site A which is the preferred site and Eskom owned, will be inevitable. A number of envinmental, social, technical and economic aspects were considered during the comparative assessment of the alternative sites, therefore loss of agricultural land on Site A must be considered acceptable. Please refer to the Soils & Land Capability Report included in the DEIR under Appendix F- |

| | | | | Specialist Reports. |
|----|--|------------------|------------------|--|
| | | | | Mathys Vosloo, EAP |
| 11 | With regard to the establishment of an ash disposal facility, on | Mr JP Joubert, | E-mail: 29 | The potential impact on agriculture, the |
| | the farms Witpoort 563 JR and Nooitgedacht 564 JR, (the site | Joubert Boerdery | February 2012 in | economy and all water resources will be fully |
| | marked as "Site G" on your map), we would like to make the | | response to the | investigated during the next phase of this |
| | following comments: | | Draft Scoping | study. |
| | Economic farm unit | | Report | Willie Howell, EAP (2012) |
| | We have been farming on this land for many years, and we have | | | |
| | over the years established farming activities on the farms | | | Site alternative A has been identified as the |
| | Witpoort and Nooitgedacht. This forms an economic farming | | | preferred alternative. All the properties affected |
| | unit and, should this proposed site be chosen, it will divide the | | | by site A is owned by Eskom, therefore there |
| | unit in such a way that it will no longer be possible to farm | | | will be no direct impacts on existing farming |
| | economically on the adjoining part of these farms. This will | | | operations. A comprehensive Environmental |
| | mean the end of our farming operation, which will also result in | | | Management Programme will also be |
| | 25 workers losing their income. | | | implemented to avoide or at the very least |
| | Integrity of water resources and air | | | minimise any potential indirect impacts on |
| | The Wilge River and three smaller streams run through this | | | agricultural activities in the vicinity of the ash |
| | proposed area. These water resources are used by the | | | disposal facility. |
| | community and many farmers for irrigation of crops and also as | | | In the event the competent authority reject the |
| | drinking water, especially for cattle. We believe that the | | | EAP's recommended site - Site A - and |
| | presence of the ash heap will pollute these resources to the | | | authorise another site alternative, then the land |
| | extent that it will no longer be suitable for any of these purposes. | | | owner negotiation process will commence. |
| | This will have a wide socio-economic impact on the area as a | | | Construction of the ADF should only |
| | whole. We understand that water is a scarce resource and it is | | | commence once successful negotiations has |
| | difficult to see why this could be deemed a suitable area for an | | | been concluded with all affected land owners. |
| | ash heap of this size. Apart from the water, we are also deeply | | | |
| | concerned about pollution of the air and how it will affect the | | | The loss of agricultural land, even on site A |
| | people working and living in the area. | | | which is the preferred site and Eskom owned, |
| | Financial implications | | | will be inevitable. A number of envinmental, |
| | This proposed area is mainly on fertile agricultural land that is | | | social, technical and economic aspects were |
| | suitable for the production of various crops. Land suited for | | | considered during the comparative assessment |
| | crops is more expensive than land that is suitable only for | | | of the alternative sites, therefore loss of |
| | grazing, and typically more people are employed on such fertile | | | agricultural land on Site A must be considered |
| | land. If this area (Site G) is compared to area Site C, it is | | | acceptable. |
| | evident that Site C consists of a smaller portion of fertile land, | | | Please refer to the Soils & Land Capability |
| | thereby not only rendering that area a cheaper proposition in | | | Report included in the DEIR under Appendix F- |
| | terms of land prices, but also in terms of the number of people | | | Specialist Reports. |
| | who may be adversely affected. Apart from this, we understand | | | |
| | that a portion of this land already belongs to ESKOM. | | | Further, the air quality specialist study |
| | Even more so, Site A is located on land which already belongs | | | concluded that dust and air quality impacts |

| 12 | to ESKOM. Recommendations: We propose that Site C or Site A, being closer to the site of the plant be chosen, as this will not only have a smaller financial impact on the project as a whole but will also not affect as many people, land or water resources. We sincerely believe that it will have a much smaller impact on the local economy too, especially as much of that land already belongs to Eskom. MANYATHELA AVENTURES on the farm Witpoort offers the following activities to its clients: Hunting; Mountain biking; Walking; and Abseiling. Other economic activities on the farm include chicken, game, cattle and sheep farming. It is a known fact that dust/ash from such a facility cannot be fully controlled and that it will pollute neighbouring properties. This pollution will have a serious impact on all the activities we currently have on our property. We understand that Kusile is of national interest. Eskom must, however, look after the interests of its neighbours by doing regular monitoring of the soil, water, air and vegetation to ensure | Mr Andries van Vuuren MANYATHELA AVENTURES Witpoort | E-mail: 1 March 2012 in response to the Draft Scoping Report | associated with the transport and disposal of ash can be successfully mitigated to within the development footprint, therefore impacts will not be felt as far as Site G. Mathys Vosloo, EAP The potential impact on the economy activities on neighbouring properties and all water resources will be fully investigated during the next phase of this study. Eskom does have regular monitoring of the soil, water, air in the area of Kusile Power Station. Willie Howell, EAP (2012) the air quality specialist study concluded that dust and air quality impacts associated with the transport and disposal of ash can be successfully mitigated to within the development footprint, therefore impacts will not be felt as far as Site G. Mathys Vosloo, EAP |
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| 13 | that the surrounding area is not adversely affected. What happens if only portion of the farm is used for the ash | Mr Leon Van Dyk | Focus group | That will be negotiated between Eskom and |
| | facility? | | meeting on 26 July 2012 at 09:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | the landowner. Willie Howell, EAP (2012) |
| 14 | Is the vegetation on the rehabilitated ash dump edible? | Mrs Carol Wentzel, Bronkhorstspruit and Wilge River | Focus group meeting on 3 August 2012 at | It is in fact edible and not toxic, but ultimately you do not want any animals grazing on the rehabilitated ash disposal facility as the |

| | | Conservancy | 09:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | vegetation is removed and the ash will be exposed to the elements. |
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| 16 | Eagles Pride Hatchery (Pty) Ltd currently have chicken farming operations in the form of a hatchery and rearing farms on portions 5 & 23 of Nooitgedacht 525 JR. Family members reside on portions 7 of Nooitgedacht 525 JR and portion 6 of Witklip 539 JR. The area is established in the poultry industry which also supports Hyline and Fairacres who breed with parent stock. After reviewing your Site Selection and Screening Report it is evident that if site B is selected this will have a direct impact on their chicken farming operations. The following impacts are envisaged: • Visual impact from the ash dump and conveyor system, • Loss of agriculture land, • Impact of chicken farming operations (chickens can experience respiratory problems), • Air pollution from ash dumps, • Social impact on residents and workforce of Eagles Pride Hatchery (Pty) Ltd, • Decrease in value of properties, • Impacts on surface water bodies and groundwater on which Eagles Pride Hatchery (Pty) Ltd is dependant. | Shangoni Management Services on behalf of Eagles Pride Hatchery (Pty) | Email sent on 20 September 2012 | The receipt of the email was acknowledged with the following response given: Please advise your client that Alternative B nearest to their property is just one of five alternative sites that will be investigated during this environmental impact assessment. The economic impact on neighbouring farmers will be addressed during the Social Impact Assessment. Willie Howell, EAP (2012) Site alternative A has been identified as the preferred alternative. All the properties affected by site A is owned by Eskom, therefore there will be no direct impacts on existing farming operations. A comprehensive Environmental Management Programme will also be implemented to avoide or at the very least minimise any potential indirect impacts on agricultural activities in the vicinity of the ash disposal facility. In the event the competent authority reject the EAP's recommended site — Site A — and authorise another site alternative, then the land owner negotiation process will commence. Construction of the ADF should only commence once successful negotiations has been concluded with all affected land owners. The loss of agricultural land, even on site A which is the preferred site and Eskom owned, |

| | | | | will be inevitable. A number of envinmental, social, technical and economic aspects were considered during the comparative assessment of the alternative sites, therefore loss of agricultural land on Site A must be considered acceptable. Please refer to the Soils & Land Capability Report included in the DEIR under Appendix F-Specialist Reports. Further, the air quality specialist study concluded that dust and air quality impacts associated with the transport and disposal of ash can be successfully mitigated to within the development footprint, therefore impacts will not be felt as far as Site B. Mathys Vosloo, EAP |
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| į | 5.8. Compensation | | | |
| 1 | Apart from the obvious financial implications for our client and for the other farmers mentioned in section 2 above, the proposed site "B" is, as mentioned, situated on prime and licensed irrigated land. It will be on, or directly affect, approximately 250 hectares of this high-value land, the value of which is approximately R80,000 (Eighty Thousand Rands) per hectare. Apart from this there is the cost of the corridor, which, though we have no estimate of the amount, must be substantial. Apart from the capital cost, it will incur substantial monthly running costs including health and safety costs and security. | Van Rensburg Jordaan & Olivier Attorneys on behalf of Hans van Rensburg Boerdery cc | E-mail: 11 January 2012 | Your comment is noted and the cost of land and the operating of the facility and its conveyors will be part of a cost-benefit analysis done by the technical team. Furthermore, land analysis will follow the recognised evaluation procedures, and appropriate engagement will be undertaken. Willie Howell, EAP (2012) |
| 2 | Once a site has been chosen, will Eskom buy the properties as land is needed or will all the properties on the site be bought out in the beginning? | Mr Christiaan Gerber, Witklip | Public meeting on 15 February 2012 at 18:00 to discuss and review the Draft Scoping Report. | Eskom will buy all the properties on the chosen site at the same time. The property could then be rented out to the previous owner until it is needed for the ash disposal facility. Willie Howell, EAP (2012) |
| 3 | If only a portion of a property falls within a site, will the whole property be bought out, or just the small part inside the site. | Mr Adriaan Loots, Jakhalsfontein | Public meeting on 15 February 2012 at 18:00 to discuss and review the Draft Scoping Report. | This must be discussed between Eskom and the individual owners. Apart from being paid a market-related price, a landowner will also be compensated for improvements on the property. Willie Howell, EAP (2012) |

| 4 | How will the pan on Site F be compensated for? | Mrs Carol Wentzel Bronkhorstpruit and Wilge River Conservancy | Focus group meeting on 3 August 2012 at 09:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the project | If the pan is lost completely, it should be mitigated through off site mitigation or implementation of appropriate offsets for the pan. Mathys Vosloo, EAP |
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| | 5.9. Social | | | |
| 1 | The people in Bronkhorstspruit need employment on Eskom projects. At Kusile Power Station people from other provinces are working, but we cannot find a job with Eskom | Mr Aaron Skhosana Mazolman Partners Network | Reply sheet on 20 October 2011 | Noted. This aspect will be addressed in the project's Social Impact Study. Willie Howell, EAP (2012) The social specialist study undertaken recommends that unskilled and semi-skilled labour that may be require during the construction or operation phases of the project be sourced from the local communities. Mathys Vosloo, EAP |
| 2 | Irrigated crops in general provide higher employment than non-irrigated crops and land used for grazing. For crops like potatoes, temporary labour is often used in the harvesting season and for some of these labourers this is their only source of income. Although the ash disposal facility will probably create some employment, it will adversely affect not only these farm workers but also the many people employed by the various chicken facilities in the area. | Van Rensburg Jordaan & Olivier Attorneys on behalf of Hans van Rensburg Boerdery cc | E-mail: 11 January 2012 | This concern will be addressed by the Social Impact Assessment proposed for the EIA phase. Willie Howell, EAP (2012) Impact Phase Note: The ash disposal facility will have very minor indirect impact on agricultural activities therefore job shedding should not occur. Please refer to the Social Impact Assessment Report included in the DEIR under Appendix F-Specialist Reports. Mathys Vosloo, EAP |
| 3 | Can you show me on the map where the families who have been displaced due to the power station have been moved? | Mr Zweli Mpofu, Bravo Cooperative, Hartbeestfontein. | Public meeting on 15 February 2012 at 14:00 to discuss and review the Draft Scoping Report. | The families have been moved to an area that now falls in Site C. |

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| 4 | What about the social impact on us, because we have already been moved once. | Mr Zweli Mpofu, Bravo Cooperative, Hartbeestfontein. | Public meeting on 15 February 2012 at 14:00 to discuss and review the Draft Scoping Report. | The social impact assessment to be done during the next phase will investigate this in great detail. The reason for this is that all properties in the area have been treated equally for the purpose of this study. Impact Phase Note: The social specialist study recommended that the impact of ADF on previously resettled households is very high. Therefore Site C is not ideal due to the presence of a resettled households. Please refer to the Social Impact Assessment Report included in the DEIR under Appendix F- Spcialist Reports. Mathys Vosloo, EAP |
| 5 | Land owners and affected parties do not have the financial resources to undertake monitoring to ensure that this facility is not polluting, can we ask for monthly monitoring to be done? | Mr Andries van Vuuren MANYATHELA AVENTURES Witpoort | Focus group meeting on 20 July 2012 at 10:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the | You may ask that Eskom be made responsible to undertake the monitoring and make this available for public consumption. Eskom is currently undertaking monitoring for the current Kusile Operations and reports this at an Environmental Monitoring Committee (EMC) meeting, held every 6 weeks, where public stakeholders are able to attend. It may be possible to combine the monitoring undertaken for this project with existing efforts. |
| 6 | What part does heritage play? There are distinctive circles on some farms from previous inhabitants. My farm also has a small cave with bushman drawings. | | project | A standard requirement of a Waste Management License (WML), which will be required for this type of facility, is extensive monitoring and reporting. Willie Howell, EAP (2012) Noted. A heritage impact assessment will be undertaken during the impact assessment phase. Willie Howell, EAP (2012) The Heritage Impact Assessment identified heritage resources on all of the alternative sites. Permits from the heritage authority must be obtained to remove or destroy these heritage resources. Mathys Vosloo, EAP |
| 6 | As was noted by the stakeholders and affected land owners | Dr James Meyer, | E-mail: 2 August | The recommendations submitted will be taken |

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| | present at the meeting referred to above the primary mechanism of protection for interested and affected parties remains a | Consultant for TOPIGS SA (Pty) Ltd | 2012 | into account when drafting the EMPr. |
| | combination of: | TOPIGS SA (Pty) Liu | | |
| | A commitment on behalf of Eskom/Kusile to monitor the | | | |
| | relevant constituents and parameters that may impact on the | | | |
| | environment and affected parties. | | | |
| | An agreement or undertaking on behalf of Eskom/Kusile to | | | |
| | adhere to standards set for upper limits of pollution for the | | | |
| | relevant sources applicable to the construction, operation | | | |
| | and maintenance of the proposed ash waste disposal site/s. | | | |
| | The implementation of environmental management plans | | | |
| | that offer sufficient protection to the current land uses. | | | |
| | Provision of all monitoring data within a reasonable time- | | | |
| | frame to the interested and affected parties. | | | |
| | Regular engagement with the interested and affected notice | | | |
| | parties. | | | |
| | It is proposed that this take the form of an Environmental | | | |
| | Monitoring Committee similar to that currently in operation by | | | |
| | Kusile Power Station. | | | |
| | | | | |
| | However, as these meetings already provide many specialist | | | |
| | reports relating to the construction (and future operation) of the | | | |
| | power station itself and do not necessarily relate specifically to | | | |
| | the Ash Disposal Facility/s it is proposed that a separate forum | | | |
| 7 | be established to focus on the Ash Disposal Facility/s. | Da Jamas Massa | | Management of the section of the sec |
| 7 | A key concern noted in the initial comments submitted remains that there appears to be an on-going adjustment to scope of | Dr James Meyer, Consultant for | E-mail: 2 August 2012 | Many possible options or alternative sites are investigated during the scoping phase of an |
| | waste disposal facility or facilities required: | TOPIGS SA (Pty) Ltd | 2012 | EIA. This is done in order to be as thorough as |
| | The initial projections failed in forming a reasonable | 101 100 0/1 (1 ty) Eta | | possible during the assessment phase of the |
| | estimate of the required ash dump facility size and scope | | | EIA when specialists do their work to find the |
| | and it was previously argued that it was unclear how the | | | site with the least impact from an |
| | Draft Scoping Process would prevent the same set of | | | environmental, social and economic |
| | scenario circumstances from occurring again (as verbally | | | perspective. |
| | explained for the 10 year ash dump). | | | Impact Phase Note: |
| | This has now occurred as predicted by the inclusion of yet | | | The inclusion of Site F has not increased the |
| | another potential site and possible use of a combination of | | | volume requirements of the ash disposal |
| | sites (as presented on 20 July 2012). | | | facility, but has simply added another feasible |
| | The fact that more reasons have presented themselves | | | alternative to already challenging sites. Furthermore, conditions surrounding the |
| | since the initial draft scoping report warranting the inclusion | | | Furthermore, conditions surrounding the |

- of another site (site F) suggests that landowners have a valid concern that additional sites may yet again be included at later stages with a similar set of reasons put forward to motivate for yet another set of waste disposal requirements.
- This implies that landowners are potentially expected to continually re-evaluate the challenges that may impose themselves on their environment.
- These landowners should have the certainty to plan their own development/expansions/ land use programmes, yet this is clearly very hard to do given the high degree of uncertainty that exists regarding the true requirement for Kusile Power Station.
- The request is thus that Eskom/Kusile not delay the process unnecessarily but commit with scientifically defensible motivation the true capacity and site requirements and that the selection and proposal be put forward for the necessary authorisations.
- It was noted previously that this should have been completed to a far greater degree of certainty when the initial authorization was granted for the location of the Kusile Power Station.
- Whilst this problem may not necessarily relate to the actions/decision making responsibilities of Eskom/Kusile Power Station, and may be significantly influenced by relevant authorities involved in the processes, it should not be at the cost of current existing landowners and activities in the area.

development of the 10 year ash disposal facility is not part of the scope of this EIA, therefore no further comment will be made regarding the circumstances associated with the 10 year ADF.

The capacity of the designed ash disposal facility on Site A has been undertaken by professional engineers and is regarded as scientifically defensible. There exist no reason to doubt the findings regarding the volume of ash to be produced and the size of the facility footprint unless proven otherwise. Please refer to Appendix G for the engineering design reports and drawings.

Lastly, Site A, which is completely Eskom owned, has emerged as the referred site alternative that will be recommended to the competent authority. Therefore land owners can continue unabated with their planning activities.

Mathys Vosloo, EAP

5.10. Communication

As affected parties we would like a regular review and feasibility study for in-pit ashing to be included in the EMP of the EIA application to ensure that this study is done, and reported to authorities and stakeholders.

Mrs Annamie Duvenhage, Bronkhorstspruit and Wilge River Conservancy Focus group meeting on 20 July 2012 at 10:00 to present information regarding the inclusion of Site F as a feasible alternative to be taken forward to the EIA phase of the In-pit ashing has been rejected by the department of Water Affairs due to the fact that a barrier system cannot be successfully installed along vertical surface associated with a pit or void. A review of the feasibility of in-pit ashing can only continue if new technology or innovation emerges that will make vertical barrier systems possible.

The Bronkhorstspruit and Wilge River Conservancy will be kept informed throughout

| | | | project | the EIA process as prescribed in the EIA Regulations. An EIA Newsletter was distributed in December 2013 to inform I&APs of the status of the project and the DEIR will be made available (advertised in various newspapers and notification letter sent to all registered I&APs) from Tuesday 29 July until Monday 08 September 2014. Mathys Vosloo, EAP |
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| ! | 5.11. Communication | | | |
| 1 | Trans African Concessions (TRAC) is the operator / concessionaire of the N4. The provision of a conveyor belt in the road reserve or 'building line' adjacent to the N4 would need to be acceptable to TRAC and SANRAL. We require additional information regarding the possibility of additional vehicles on the N4 during construction and the operational phase of this project. | Ms Carla Davies Traffic Engineer TRAC | E-mail: 28 October 2011 | A traffic specialist study has been commissioned to address this concern. Please see and comment on the proposed Terms of Reference for this study to ensure all elements of concern will be addressed. At completion of the specialist studies, the public will be given an opportunity to confirm acceptability of proposed mitigation strategies and plans. Willie Howell, EAP (2012) The traffic assessment can be viewed in Appendix F of this DEIR. Mathys Vosloo, EAP |
| 2 | Will the whole area of the ash disposal facility be developed before any ash is accepted? | Mr Robbie van Bulderen Transnet Pipelines | Public meeting on 15 February 2012 at 14:00 to discuss and review the Draft Scoping Report. | No, it will be developed step-by-step. Development of the ADF and barrier system will be undertaken in 5 year increments, with five years of barrier system being installed with each increment. Mathys Vosloo, EAP |
| 3 | Construction waste material must also be investigated in this EIA. | Dr James Meyer, Water Research Commission, Pretoria | Public meeting on 15 February 2012 at 14:00 to discuss | The construction phase will be dealt with extensively in the EMPr. Willie Howell, EAP (2012) |
| 4 | What will be done with the gypsum? | | and review the Draft Scoping Report. | During the first few years of operation the gypsum and the ash will both be stored on the 10 year ash disposal facility until construction of the 60 year ash disposal facility has commenced. Then only gypsum will be stored on the smaller facility which will have a dedicated barrier for gypsum and ash on the bigger facility. |

| | | | | Willie Howell, EAP (2012) |
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| 5 | Why can you not throw the ash in the open pit of the coal mine? | Mr Hans van Rensburg, Witklip | Public meeting on 15 February 2012 at 14:00 to discuss and review the Draft Scoping Report. | That will not be possible in the first 10 to 15 years of operation, because there is a big lag between digging out the coal and having an open pit to place the coal into. When Kusile Power Station starts operating, coal will be brought in by conveyor belt from |
| | | Mr Christiaan Gerber, Witklip | Public meeting on 15 February 2012 at 18:00 to discuss and review the Draft Scoping Report | the Phola Washing Plant while the proposed New Largo Colliery is being constructed. It is also unknown what will happen to the groundwater if ash and gypsum is added to the mine pit. Studies need to be done to find out what will happen to groundwater 15 to 20 years after this ash and gypsum have been added. Eskom and Anglo American will be investigating this during the next few years. The DWA does not like back fill, because there are still too many uncertainties regarding groundwater pollution. Willie Howell, EAP (2012) In-pit ashing has been rejected by the department of Water Affairs due to the fact that a barrier system cannot be successfully installed along vertical surface associated with a pit or void. Mathys Vosloo, EAP |
| 6 | When does the construction for the ash dump start, if the ash disposal facility affects our property directly will we be given ample time to relocate? | Mr Andries van Vuuren MANYATHELA AVENTURES Witpoort | Focus group meeting on 20 July 2012 at 10:00 to present information regarding the inclusion of Site F | Construction is planned to start 2015 and commissioning is planned to start 2017. It is important to realise that the I&AP's need fair time frames in order to make arrangements. A two year timeframe can be expected. Willie Howell, EAP (2012) |
| 7 | Are there construction plans for new roads for the ash facility? | | as a feasible alternative to be taken forward to the EIA phase of the project | Access and maintenance roads has been planned for the ash disposal facility and conveyor platform, Please review the engineering report and designs in Appendix G. <i>Mathys Vosloo, EAP</i> |

6. GENERAL COMMENTS

| 1 | How can we comment and to whom? | Mr Zweli Mpofu, Bravo Cooperative, Hartbeestfontein. | Public meeting on 15 February 2012 at 14:00 to discuss and review the Draft Scoping Report. | Send all comments to Zitholele Consulting. The contact details can be found on all documentation available here at the meeting. Willie Howell, EAP (2012) |
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| 7. I | EIA FOR KUSILE POWER STATION AND TEI | N YEAR ASH DIS | SPOSAL FACIL | ITY COMMENTS |
| 1 | I just want clarification. Which was the original site as you are calling this an extension? Why did the original planning not take the life of the project into account and not adequately provide for a suitable ash disposal site. Please provide any relevant comment or details of the technical investigations in the original application regarding the Ash Disposal site or other related infrastructure so that we can align ourselves with the work done to date. A copy of the existing Kusile Environmental Authorisation would also assist the interested and affected parties to align themselves with where we are in the process. | Rev. Andrew Manning, Anglican Communion Environmental Network | Reply sheet: 13 October 2011 | The original EIA did include planning for an ash disposal facility for the station as part of the EIA authorisation process. Through the Environmental Authorisation, the Department of Environmental Affairs enforced development and execution of a site layout that would avoid and minimise impacting on wetlands. To this end, a wetland delineation study was undertaken, which resulted in a reduction on available land that could be used for the ashing. Furthermore, the Water Use Licence also required that the project avoid and minimise impacts on water resources (wetlands and drainage lines). Through the need to avoid these sensitive systems, it became necessary for the project to consider other sites for the development of the ash disposal facility. The word extension is used in terms of extending the infrastructure at the Power Station, not necessarily an extension of the ashing facility. Copies of previous EIAs are available on the Eskom website www.eskom.co.za/eia and the link Kusile power station. Willie Howell, EAP (2012) |
| 2 | How can you plan a power station without including an ash disposal facility for the total life span of the power station? Your planning was not good enough. | Mr Hans van Rensburg, Witklip | Public meeting on 15 February 2012 at 14:00 to discuss and review the Draft Scoping Report. | The EIA for the power station left sufficient space for an ash disposal facility for the total life span of the power station. The Department of Environmental Affairs, however, in its conditions attached to the Environmental Authorisation, delineated all the water courses |

| 3 | Did the original EIA not under estimate the size of the ash disposal facility? | Dr James Meyer, Water Research Commission, Pretoria | Public meeting on 15 February 2012 at 14:00 to discuss and review the Draft Scoping Report. | on the land where the power station and ash disposal facility had to be developed. Another condition stated that flue gas desulphurisation (FGD) technology be used, which will add another waste – gypsum. This only left enough space for the power station and a 10-year ash disposal facility. Willie Howell, EAP (2012) No, the initial EIA investigated an area of over 1000 hectares for the ash disposal facility. The Department of Environmental Affairs (DEA), however, in its conditions attached to the Environmental Authorisation, delineated all the water courses on the land where the power station and ash disposal facility had to be developed. Another condition was that flue gas desulphurisation (FGD) technology must be used, which will add another waste – gypsum. This only left enough space for the power station and a 10-year ash disposal facility. Willie Howell, EAP (2012) |
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| 4 | Where can I get the EIA done for the power station? | Mr Stefan Vermaak, Topigs | Public meeting on 15 February 2012 at 14:00 to discuss and review the Draft Scoping Report. | This study was not done by the current team of consultants, Zitholele Consulting and can be found on the Eskom website: www.eskom.co.za/eia |