

**ENVIRONMENTAL IMPACT ASSESSMENT: PROPOSED PHOTOVOLTAIC ENERGY PLANT ON STRUISBULT FARM NEAR COPPERTON,
NORTHERN CAPE: COMMENTS AND RESPONSE REPORT 3 (DRAFT EIAR)**

This Comments and Response Report 3 reflects the comments submitted in writing on the Draft EIAR of the proposed project. Only four submissions were received and have been summarised and responded to below.

List of submissions:

No.	Name	Organisation	Date Received	Method
1	Thoko B	Department of Agriculture, Forestry & Fisheries	28/02/12	Email
2	Chamuwari J Ketano	Department of Environment and Nature Conservation	06/03/12	Fax
3	John Geeringh	Eskom Holdings Limited	07/03/12	Email
4	Harry Roberts	South African Civil Aviation Authority (SACAA)	15/03/12	Email

Comments and responses:

No.	Name, Organisation & Date received	Issue	Response
1.	Thoko B Department of Agriculture, Forestry & Fisheries	<p>Department does not have any objection to the proposed development of 100 MW with 300 hectares footprint. However the following needs to be adhered to;</p> <ol style="list-style-type: none"> Any further extension of this proposed project should be reviewed in terms of Subdivision of Agricultural Land Act, 70 (Act 70 of 1970). No subdivision for the purposes of demarcating the individual footprint area should be allowed. No construction should be placed on the existing agricultural activities. Natural vegetation should be restored after the construction of the plant to prevent degradation. Provision should be made for the controls of runoff water were applicable. Water needed for the maintenance of the site should not be sourced from existing water rights allocated to the site or nearby farm portions as it will negatively impact on agricultural production. The applicant should take responsibility of the maintenance and status of the natural resource base of the site. 	<ol style="list-style-type: none"> Comment noted. At this stage no expansion is planned. No subdivision would be required for the proposed project. The farm is currently used for sheep grazing and would continue to be used for grazing. However, due to safety risks, i.e. theft, and the possibility of livestock damaging the solar panels, the proposed site would need to be fenced off. No cultivated land would be impacted on by the proposed project. The Lifecycle Environmental Management Plan (LEMP) included in Annexure D of the Draft and Final Environmental Impact Assessment Report (EIAR), contains guidelines pertaining to restoring and revegetating the construction site, including a Rehabilitation Plan. Furthermore, the site would be cleared in sections for construction and rehabilitation is to start immediately on sections upon completion of work on the specific section. The LEMP requires that a storm water management program is compiled and adhered to mitigation potential stormwater issues during the lifecycle of the proposed project. Also included in the LEMP are erosion mitigation measures. Please refer to

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			<p>Annexure D of the EIAR for the LEMP.</p> <p>6. Comment noted. Limited water would be required during the construction and operational phases of the proposed solar energy facility. An application for water availability has been submitted to the Siyathemba Municipality (the regional Water Services Authority (WSA)). Furthermore, confirmation has been requested by the Siyathemba Municipality to Alkantpan on the capacity of their Pipelines and pumps. Mulilo is awaiting the final confirmation approval.</p> <p>7. Specific mitigation and management measures have been included in the LEMP for the Construction, Operational and Decommissioning Phases (see Annexure D of the EIAR) to limit impacts on the existing environment.</p>
2.	Chamuwari J Ketano Department of Environment and Nature Conservation	<ol style="list-style-type: none"> 1. The summary document of the DSR stipulates that approximately 200- 900 persons will be employed on site. Kindly indicate where on site the temporary dwellings will be erected for the non locals and the anticipated number of inhabitants and whether there is sufficient capacity within the municipality to provide the additional services, i.e water and sanitation for the site. 2. Section 1.2 reports on the applicable legislation and guidelines, however the following legislation is not included, the National Waste Management Act (No. 59 of 2008) and the Occupational Health and Safety Act (No. 85 of 2003) 3. The types of waste and quantities that will be generated during the construction phase. 4. The quantities of hydrocarbons, specifically diesel that will be stored on site for the trucks during the clearance phase and construction phase. Emergency and spillage plans need to be developed and submitted to the relevant authorities for approval. 5. The quantities of water that will be required for the cleaning of the panels, during operations. 6. On page 37, the report highlights the mounting system of the solar panels. It important that a decision be taken as to which mounting system will be used prior to commencement of the activity. The mountings systems may have different impacts environment, i.e what are the visual impacts ofthe ditferent mounting system? 	<ol style="list-style-type: none"> 1. During the construction phase between a maximum of 200 individuals (amounting to a total of 900 person months employment created over the construction period) would be employed depending on the procurement method used as well as the primary contractor. It is estimated that between 65 and 75% would be sourced locally and provided with the necessary training. This workforce would already have accommodation in the area and would be transported by bus to and from the site on a daily basis. The remaining 35 – 25% (50 – 70 high level staff would be housed within the locally available accommodation in the towns and surrounding farm areas (hotels, guest houses, etc.). A construction camp housing between 10 and 30 staff may be required for the duration of the construction period. The footprint of the construction camp would be approximately 1 – 1.5 ha in extent and would be located within the temporary laydown area. 2. Only environmental legislation that is relevant to the proposed project was considered. As the project would not generate any waste during the operational phase, National Environmental Management: Waste Act (Act 59 of 2008) was not included in the report. 3. Typical construction rubble and packaging material would be

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		<p>7. On page 54 the report suggests that the airstrip of 1.7 km be moved to an alternate location, approximately, 7 km east of its current location. Note that the construction runways or landing strips longer than 1.4 Km constitute a listed activity, activity 7 (ii) of R545, therefore an application need to be lodge with DENC before such an activity is undertaken.</p>	<p>generated during the construction phase. This amounts approximately 20 m³ in total. A licensed waste disposal service provider would be utilised to collect and transport all general construction solid waste from the construction sites and disposed of at a licenced disposal facility. According to the South African Waste Information Centre, the Siyathemba Local Municipality has a registered landfill site in Prieska for the disposal of general waste. The general construction solid waste produced would therefore be disposed at this facility. A negligible amount of solid waste would be produced during the operational phase and this would also be disposed of at the registered landfill site in Prieska.</p> <p>4. During the construction phase less than 5m³ of hazardous substances would be stored on site and would be managed via the LEMP included as Annexure D of the EIAR.</p> <p>5. Approximately 1 kℓ of water per day would be required for every 10 MW electricity produced (see Table 2.1 of the EIAR). Therefore 100 MW would require 10 kℓ per day. The frequency of panel cleaning would however depend on site conditions.</p> <p>6. All specialists, including visual, were instructed to consider the various mounting alternatives in their assessments. No differences in potential environmental impacts were however identified.</p> <p>7. The relocation of the Alkantpan airstrip has been proposed by Plan 8 for their wind energy facility and therefor would be their responsibility to apply for the necessary environmental authorisation.</p>
3.	John Geeringh Eskom Holdings Limited	<p>1. 12/12/20/2502 – Cover page have wrong DEA reference number.</p> <p>2. 12/12/20/2502 – Figure 4.2 is same as figure 4.2 in the report for 12/12/20/2501.</p> <p>3. Eskom is currently busy with an EIA for 2x132kV power lines from Cuprum to Kronos and see that two of the proposed PV plants are in close vicinity to Kronos substation.</p> <p>4. Eskom would require that the applicant take into consideration that Eskom may also in future require additional 400kV</p>	<p>1. Comment noted. Mulilo has been closely following the Eskom upgrade plans and is a registered Interested and Affected Party (I&AP) on the basic assessment process. Mulilo intends to use the planned 6 x 132 kV bays at Kronos Substation as the preferred connection point for the proposed solar plant and has ensured to not locate the solar sites within the servitude boundaries of either the exsisting or planned Eskom transmission lines. Furthermore, Mulilo has ensured that</p>

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		<p>infrastructure to be connected to Kronos substation and would therefore request that the applicant ensures that the Eskom assets stays accessible.</p> <ol style="list-style-type: none"> 5. Eskom Tx's rights and services must be acknowledged and respected at all times. 6. Eskom Tx shall at all times retain unobstructed access to and egress from its servitudes. 7. Eskom Tx's rights and duties in the servitude shall be accepted as having prior right at all times and shall not be obstructed or interfered with. 	<p>adequate access would be available on all sides of the Kronos substation for any potential upgrade plans. Mulilo requests to be kept informed as to the timeframe and status of the Kronos Cuprum link to allow construction planning of both projects to link with Eskom planning.</p>
4.	Harry Roberts South African Civil Aviation Authority (SACAA)	<ol style="list-style-type: none"> 1. Kindly provide a.kml (Google earth) file reflecting the footprint of the proposed development site. Both the development site and footprint of the PV Farm (referenced to the WGS E4 datum) should be reflected on the same kml file, for each of the three sites mentioned. 2. Also indicate the highest structure of the project. 3. Note that there may be other wind farms and PV farms in the area. Unique names are preferable. 4. Please always use the proposed PV farm name in the Subject box when corresponding via email with this office. 5. Please note that the lead time for approval may take up to 90 days. 6. The Sites PV 3 and PV 4 should not present a problem with regard to the present airfield, however the PV2 site will not be processed until such time as clarity has been obtained with regard to the intended relocation of the Alkantpan airfield. Should you have any information regarding the relocation or not, it would be appreciated if this could be shared with my office, as this would expedite the processing of your applications. 	<p>Mulilo's responses:</p> <ol style="list-style-type: none"> 1. The requested information was included in the solar plant SACAA applications that were submitted to the email address 'obstacles@caa.co.za' on 7 March 2012 for the following projects: <ul style="list-style-type: none"> • Prieska PV2 (Struisbult) • Prieska PV3 (Hoekplaas) • Prieska PV4 (Klipgats) 2. The solar panels (the highest structures on site) would either be 15.4 m (preferred) or 4 m (alternative) in height. The maximum height of the 132 KV power lines would be 25 m. 3. Mulilo has assigned unique names to each of the proposed solar energy facilities for which they are in the process of applying Environmental Authorisation (EA) for. Furthermore, a map is provided in the Scoping and the EIAR documentation to show the location of wind and solar energy projects for which EAs are currently being applied for by the various developers. 4. Noted. 5. Noted. 6. The alignment of the Alkantpan airstrip has recently been revised in the Final EIAR for the proposed Plan 8 wind energy facility. The proposed project should not impact on the airstrip, either in its current location or if it is moved, as there are numerous cases globally where solar plants have been

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			<p>constructed adjacent to airfields. Furthermore, Mulilo confirms that the solar panels would meet the necessary requirements in terms of potential glint and glare. It should also be noted that the relocation of the airstrip is dependent on the environmental authorisation of the Plan 8 wind energy facility, as well as its acceptance by the Department of Energy as an Independent Power Producer (IPP).</p> <p>Since the submission of the SACAA's comment, approval has been received for all three projects.</p>