Archaetnos



12 January 2022

To whom it may concern

LETTER FOR HIA EXEMPTION REQUEST: THE PROPOSED ESKOM MATIMBA POWER STATION ASH DISPOSAL FACILITY POLLUTION CONTROL DAMS, CLOSE TO LEPHALALE, LIMPOPO PROVINCE

The above-mentioned project refers. Archaetnos CC was appointed by WSP Group Africa (Pty) Ltd to write a motivation for an HIA exemption request. The client is ESKOM Holdings SOC Ltd. The Matimba Power Station is located close to Lephalale in the Limpopo Province (Figure 1-2).



Figure 1: Locality of Laphalale in the Limpopo Province.



Figure 2: Location of the site in relation to Lephalale.

Matimba Power Station applied for, and obtained, an Integrated Environmental Authorisation (IEA) in terms of the National Environmental Management: Waste Act No. 59 of 2008 (NEMWA) and the Environmental Impact Assessment (EIA) Regulations (2014) promulgated under the National Environmental Management Act No. 107 of 1998, (as amended) (NEMA) for the continuation of its Ash Disposal Facility (ADF). The IEA with Ref no: 14/12/16/3//3/56 was issued on 14 July 2016. A Water Use Licence (WUL) was obtained in September 2017 for the associated water uses as per Section 40 of the National Water Act (No. 36 of 1998).

Following a revision of the site water balance during detailed design, it was noted that an additional two Pollution Control Dams (PCDs) are required to contain surface runoff from the authorised ADF footprint. The project thus entails the provision of these PCD's. The total footprint area that was authorised for the continuous ashing is 700 ha, comprising 510 ha on greenfields and 190 ha on top of the existing ADF (Piggybacking).

The two proposed PCDs would be to the north (North PCD) and south (South PCD) of the existing ADF footprint (Figure 3-4). Other infrastructure associated with the New South and North PCDs include:

- Access roads leading to and around the dams;
- Pipelines from the South PCD to the existing Metsimaholo Dam
- A pumping system from the South PCD to Metsimaholo Dam; and
- Fencing installed around the dams

The specifications for the two PCDs are as follows:

Specifications for South Dam

- Volume = 80 000m³
- Max Depth (below ground) = 5m
- Footprint = 5,94ha (includes the dam, silt trap and access road area)
- Maximum Pumping Rate = 6 000m³/day
- Catchment Area = 162 ha
- Pipelines = 180 OD HDPE
 PE100 PN6.3 piping from New
 South Dam to Metsimaholo
 Dam 300m length required

Specifications for North Dam

- Volume: 60 000m³
- Max Depth (below ground) = 5m
- Footprint = 4.35ha (includes the dam, silt trap and access road area)
- Maximum Pumping Rate = 2 000m³/day
- Catchment Area = 229 ha
- Pipelines = 180 OD HDPE
 PE100 PN6.3 piping from New
 North Dam to existing Ash Dam
 1 2300m length required

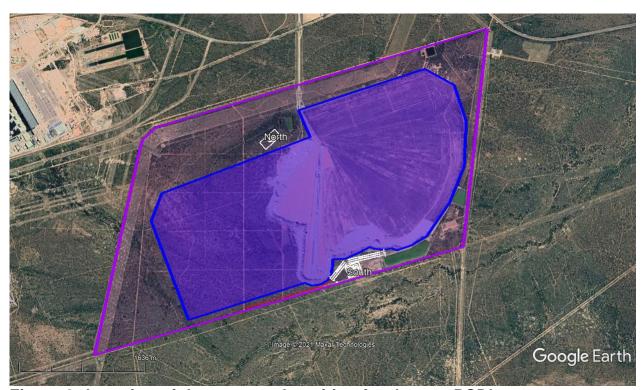


Figure 3: Location of the proposed position for the two PCD's.



Figure 4: Project design.

An HIA must be done under the following circumstances:

- a. The construction of a linear development (road, wall, power line, canal etc.) exceeding 300m in length.
- b. The construction of a bridge or similar structure exceeding 50m in length
- c. Any development or other activity that will change the character of a site and exceed 5 000m² or involve three or more existing erven or subdivisions thereof.
- d. Re-zoning of a site exceeding 10 000 m².
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority.

The proposed sites were studied via Google Earth images (Figure 5-6) and photographs provided by the client. The latter is preferred. It is believed that an HIA is not needed since such a study was done in 2014.¹

¹ JA van Schalkwyk, 2014. **Cultural Heritage Impact Assessment for the Proposed Matimba Ash Disposal Facility for the Matimba Power Station, Lephalale, Limpopo Province**. (Unpublished Report, Monument Park).



Figure 5: Detailed view of the North PCD site.



Figure 6: Detailed view of the South PCD site.

It is my opinion that the project may be exempted from doing a Heritage Impact Assessment (HIA), although the proposed locations are seemingly undisturbed and densely vegetated. The following is applicable:

- An HIA had been done in 2014.² The HIA included an area covering the three positions indicated above. This HIA forms part of the approved IEA of the ADF.
- Nothing of heritage importance was identified during this HIA. Only two sites, which was deemed of low significance was identified.
 - The first consisted of the ruin of a possible farm workers dwelling which was in a bad state of repair.³ This site lies about 450 m south-west of the North PCD.
 - The second is the remains of a small house.⁴ It lies approximately 9 km north of the North PCD.
- The study of Google Earth Images also did not indicate the presence of possible heritage features.
- Although limited, indications of disturbance are visible at the North PCD site.
- A large section of the South PCD site is disturbed.
- There are no buildings on any of these sites (Figure 7-9).
- It is believed to be low risk areas for the location of heritage sites.

² JA van Schalkwyk, 2014. **Cultural Heritage Impact Assessment for the Proposed Matimba Ash Disposal Facility for the Matimba Power Station, Lephalale, Limpopo Province**. (Unpublished Report, Monument Park).

³ JA van Schalkwyk, 2014. **Cultural Heritage Impact Assessment for the Proposed Matimba Ash Disposal Facility for the Matimba Power Station, Lephalale, Limpopo Province**. (Unpublished Report, Monument Park), p 18.

⁴ JA van Schalkwyk, 2014. **Cultural Heritage Impact Assessment for the Proposed Matimba Ash Disposal Facility for the Matimba Power Station, Lephalale, Limpopo Province**. (Unpublished Report, Monument Park), p 19.



Figure 7: General view of vegetation at North PCD.



Figure 8: Dam in the North PCD area.



Figure 9: General view of preferred site for South PCD.

In light of these factors, the chances of finding any heritage related features are believed to be slim, if any. This letter serves as an exemption request to the relevant heritage authority.

The developer should however note that due to the nature of archaeological material, such sites, objects or features, as well as graves and burials may be uncovered during construction activities on site. In such a case work should cease immediately and an archaeologist should be contacted as a matter of urgency to assess such occurrences.

Recommendation:

That the development be exempted from doing an HIA.

I trust that you will find this in order.

Yours faithfully

Prof AC van Vollenhoven: Director