



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

RISK ASSESSMENT IN TERMS OF REGULATION 8 OF THE WASTE EXCLUSION REGULATIONS

APPLICANT	AEL Mining Limited																																																	
WASTE STREAM OR PORTION OF A WASTE STREAM TO BE EXCLUDED FROM THE DEFINITION OF WASTE	Waste coal ash																																																	
BENEFICIAL USE/S	Brick making & Road construction																																																	
WASTE GENERATING FACILITY OR FACILITIES																																																		
PHYSICAL ADDRESS OF FACILITY OR FACILITIES	Modderfontein, Johannesburg																																																	
GPS CO-ORDINATES OF WASTE GENERATING FACILITY OR FACILITIES Attached hereto.	<table border="1"> <thead> <tr> <th>Point</th> <th>Ash Dam 1</th> <th>Ash Dam 2</th> <th>Ash Dam 3</th> <th>Ash Dam 4</th> <th>Ash Dam 5</th> <th>Ash Dam 6</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>26° 5'18.69"S 28°10'33.49"E</td> <td>26° 5'22.80"S 28°10'51.02"E</td> <td>26° 5'28.07"S 28°10'48.89"E</td> <td>26° 5'39.60"S 28°10'57.80"E</td> <td>26° 5'48.21"S 28°10'48.09"E</td> <td>26° 4'27.62"S 28°10'45.77"E</td> </tr> <tr> <td>2</td> <td>26° 5'20.01"S 28°10'32.41"E</td> <td>26° 5'24.81"S 28°10'48.71"E</td> <td>26° 5'33.64"S 28°10'48.30"E</td> <td>26° 5'44.36"S 28°10'52.62"E</td> <td>26° 5'59.81"S 28°10'40.44"E</td> <td>26° 4'37.06"S 28°10'41.32"E</td> </tr> <tr> <td>3</td> <td>26° 5'21.57"S 28°10'31.77"E</td> <td>26° 5'26.91"S 28°10'48.76"E</td> <td>26° 5'35.14"S 28°10'32.93"E</td> <td>26° 5'44.64"S 28°10'37.93"E</td> <td>26° 6'5.88"S 28°10'41.32"E</td> <td>26° 4'35.29"S 28°10'35.59"E</td> </tr> <tr> <td>4</td> <td>26° 5'22.69"S 28°10'32.22"E</td> <td>26° 5'29.99"S 28°10'35.79"E</td> <td>26° 5'39.02"S 28°10'35.20"E</td> <td>26° 5'54.69"S 28°11'1.94"E</td> <td>26° 6'2.57"S 28°10'32.29"E</td> <td>26° 4'43.20"S 28°11'3.08"E</td> </tr> <tr> <td>5</td> <td>26° 5'25.40"S 28°10'38.88"E</td> <td>26° 5'24.81"S 28°10'36.85"E</td> <td>26° 5'31.19"S 28°10'35.87"E</td> <td>26° 5'46.72"S 28°11'4.56"E</td> <td>26° 5'59.32"S 28°10'37.03"E</td> <td>26° 4'29.18"S 28°10'34.64"E</td> </tr> <tr> <td>6</td> <td>26° 5'20.20"S 28°10'39.13"E</td> <td>26° 5'23.12"S 28°10'34.41"E</td> <td>26° 5'27.96"S 28°10'32.55"E</td> <td>26° 5'40.01"S 28°11'1.51"E</td> <td>26° 5'48.29"S 28°10'49.71"E</td> <td></td> </tr> </tbody> </table>	Point	Ash Dam 1	Ash Dam 2	Ash Dam 3	Ash Dam 4	Ash Dam 5	Ash Dam 6	1	26° 5'18.69"S 28°10'33.49"E	26° 5'22.80"S 28°10'51.02"E	26° 5'28.07"S 28°10'48.89"E	26° 5'39.60"S 28°10'57.80"E	26° 5'48.21"S 28°10'48.09"E	26° 4'27.62"S 28°10'45.77"E	2	26° 5'20.01"S 28°10'32.41"E	26° 5'24.81"S 28°10'48.71"E	26° 5'33.64"S 28°10'48.30"E	26° 5'44.36"S 28°10'52.62"E	26° 5'59.81"S 28°10'40.44"E	26° 4'37.06"S 28°10'41.32"E	3	26° 5'21.57"S 28°10'31.77"E	26° 5'26.91"S 28°10'48.76"E	26° 5'35.14"S 28°10'32.93"E	26° 5'44.64"S 28°10'37.93"E	26° 6'5.88"S 28°10'41.32"E	26° 4'35.29"S 28°10'35.59"E	4	26° 5'22.69"S 28°10'32.22"E	26° 5'29.99"S 28°10'35.79"E	26° 5'39.02"S 28°10'35.20"E	26° 5'54.69"S 28°11'1.94"E	26° 6'2.57"S 28°10'32.29"E	26° 4'43.20"S 28°11'3.08"E	5	26° 5'25.40"S 28°10'38.88"E	26° 5'24.81"S 28°10'36.85"E	26° 5'31.19"S 28°10'35.87"E	26° 5'46.72"S 28°11'4.56"E	26° 5'59.32"S 28°10'37.03"E	26° 4'29.18"S 28°10'34.64"E	6	26° 5'20.20"S 28°10'39.13"E	26° 5'23.12"S 28°10'34.41"E	26° 5'27.96"S 28°10'32.55"E	26° 5'40.01"S 28°11'1.51"E	26° 5'48.29"S 28°10'49.71"E	
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CONTACT PERSON																																																		
NAME	Morne Stiglingh																																																	
ADDRESS	1 Platinum Drive, Longmeadow Business Estate																																																	

EMAIL ADDRESS	morne.stiglingh@aeciworld.com	
TELEPHONE	011 606 0232	
* DETAILED DESCRIPTION OF WASTE GENERATING PROCESS	See Section 3.1 of the Report Attached again hereto.	
PRODUCTION PROCESS FLOW CHART ATTACHED	YES	NO
WASTE CLASSIFICATION	HAZARDOUS	GENERAL
IF WASTE IS HAZARDOUS LIST THE HAZARDS OF THE WASTE	N/A the waste is non hazardous	
*A process flow chart must be attached to the process description		

See the Report Figures 16 & 17
Attached again hereto.

RISK ASSESSEMENT WITHOUT MITIGATION

Activity	Risk Description	Environmental Receptors	Assessment of Risk				Significance
			Impact	Probability	Magnitude	Duration	
See the Report Table 13 Again attached hereto but amended slightly to match this form.							

The following factors and criteria must be used to assess the impacts of the activities:

Criteria	
MAGNITUDE (Severity)	DURATION
10 - Very high	5 - Permanent (longer than 10 years)
8 - High	4 - Long-term (5 to 10 years)
6 - Moderate	3 - Medium-term (12 months to 5 years)
4 - Low	2 - Short-term (0 to 12 months)
2 - Minor	1 - Immediate
SCALE	PROBABILITY (Likelihood)
5 - International	5 - Definite
4 - National	4 - Highly probable
3 - Regional	3 - Medium probability
2 - Local	2 - Low probability
1 - Site only	1 - Improbable
0 - None	0 - None

Magnitude

Magnitude measures the size of the impact

Duration

Duration refers to the lifetime of the impact i.e. how long it will last

Scale

The scale refers to the extent of the impact.

Probability

The probability refers to the chance of impact to occur. The potential impact could be most likely to occur, unlikely, etc.

Assessment of Significance of impact

Significance rating of the potential impacts illustrates the importance of the impact itself. The size of area affected by pollution may be extremely high but the significance of this effect is dependent on the concentration or level of pollution in that area. In order to determine the significance of impact, the following method was used:

$$\text{Significance Points (SP)} = (\text{Magnitude} + \text{Duration} + \text{Scale}) \times \text{Probability}$$

The values of SP are then ranged as follows:

Rating		Description
SP >60	Indicates high environmental significance	An impact which could influence the decision about whether or not to proceed with the activities regardless of any possible mitigation.
SP 30 – 60	Indicates moderate environmental significance	An impact or benefit which is sufficiently important to require management and which could have an influence on the decision unless it is mitigated.
SP <30	Indicates low environmental significance	Impacts with little real effect and which will not have an influence on or require modification of the activities.
+	Positive Impact	An impact that is likely to result in positive consequences/effects

I, Morne Stiglingh hereby declare that I have read the completed the Risk Assessment form and hereby confirm that the information is to the best of my knowledge true and correct.

Furthermore, I declare that I am fully aware of my responsibilities in terms of the Waste Exclusion Regulations, and that failure to comply with these Regulations may constitute an offence in terms of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008).

Applicant (Full names) MORNE STIGLINGH

Designation EXECUTIVE GLOBAL SUPPORT SERVICES

Signature 

Date 19/6/2020 Place MODDERFONTEIN.

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Date Received			
Decision Taken	Authorised		Not Authorised (provide reasons)
Reference Number			