



forestry, fisheries & the environment

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

Private Bag X 447· PRETORIA 0001· Environment House 473 Steve Biko Road, Arcadia· PRETORIA

DFFE Reference: 14/12/16/3/3/3/97/AM3

Enquiries: Ms Bathandwa Ncube

Telephone: (012) 399 9368 E-mail: BNcube@environment.gov.za

Mr Andrey Korzh
Transalloys (Pty) Ltd
PostNet Suite 284
Private Bag X1
MELROSE ARCH
2076

Telephone Number : 011 214 0553
Email Address : A.Korzh@transalloys.com

PER EMAIL / MAIL

Dear Mr Korzh

AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION ISSUED ON 02 MARCH 2016 FOR THE 135MW TRANSALLOYS COAL FIRED POWER PLANT AND ASSOCIATED INFRASTRUCTURE NEAR EMALAHLENI, MPUMALANGA PROVINCE.

The Environmental Authorisation¹ (EA) issued for the abovementioned application by this Department on 02 March 2016; subsequent EA amendments issued on the 14 March 2016 and 26 November 2019; your application for amendment of the EA received by the Department on 19 February 2021; the acknowledgement dated 02 March 2021; comments on the draft amendment motivation report dated 23 March 2021 and the final motivation report received on 07 May 2021, refer.

Based on a review of the reason for requesting an amendment to the above EA, this Department, in terms of Chapter 5 of the Environmental Impact Assessment Regulations, 2014 as amended, has decided to amend the EA dated 02 March 2016 (as amended), as follows:

Amendment 1: Increase of output capacity of the power plant:

- a) Page 01 of the EA (cover page), the project title typed as:

"55MW Transalloys coal-fired power plant and associated infrastructure near Emalahleni, Mpumalanga Province"

Is amended to:

"135MW Transalloys coal-fired power plant and associated infrastructure near Emalahleni, Mpumalanga Province"

- b) The activity/project description for GN R.545, Item 1 on page 03 of the EA typed as:

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GN R. 545 Item 1 The construction of facilities or infrastructure, for the generation of electricity where the electricity output is 20 megawatts or more.	The captive power plant will have a generating capacity of 55 Megawatts.
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Is amended to:

GN R. 545 Item 1 The construction of facilities or infrastructure, for the generation of electricity where the electricity output is 20 megawatts or more.	The captive power plant will have a generating capacity of <u>135</u> Megawatts.
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Reason for amendment:

An initial output capacity of 150MW [Circulating Fluidized Bed (CFB) boiler technology] was assessed in the original EIA, however, at the request of the applicant the 55MW power plant was subsequently approved in order to align the approval with the project concept pursued at that time.

Further feasibility work and a detailed Value Engineering exercise since the EA was issued indicated that the 55MW output capacity authorised was not the optimum solution. This led to reconsideration, and subsequent reversal towards the original project concept and required power plant generation capacity of 135MW, to allow for sufficient energy generation and supply whilst making the most beneficial and optimal use of the facility.

Amendment 2: Amendment of the main infrastructure:

a) The main infrastructure for the power station listed on page 05 of the EA as:

"The main infrastructure for the Transalloys coal-fired power station includes:

- Power plant production unit/s (boilers/furnaces, turbines, generator and associated equipment, control room);
- Ash disposal facility and runoff leachate collection ponds;
- Dams for storage and separation of "clean" and "dirty" water;
- Raw water pipeline;
- Coal and limestone offloading and storage areas;
- Ash silos;
- Facility conveyor belts;
- Water and wastewater treatment facilities and raw water reservoir;
- Evaporation pond;
- A 33kV overhead power line from the switchyard to connect into the existing Transalloys Substation;
- General and hazardous waste storage area;
- Internal access roads; and
- Other operational support and administrative buildings."

Is amended to:

"The main infrastructure for the Transalloys 135MW coal-fired power station includes:

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- Power plant production unit/s (boilers/fumaces, turbines, generator and associated equipment, control room);
- Ash disposal facility and associated drainage channels, pollution control and run-off leachate collection tanks;
- Storage tanks for the separation of "clean" and "dirty" water;
- Raw water pipeline;
- Coal and limestone offloading and storage areas;
- Ash silos;
- One stack with a maximum height of 120m;
- Facility conveyor belts;
- Water and wastewater treatment facilities and raw water tanks;
- A 33kV power line from the switchyard to connect into the Transalloys Substation;
- General and hazardous waste storage area;
- Internal access roads; and
- Other operational support and administrative building."

b) The activity/project description for GN R.544, Item 12 on page 03 of the EA typed as:

<p><u>GN R. 544 Item 12</u></p> <p>The construction of facilities or infrastructure for the off-stream storage of water, including dams and reservoirs, with a combined capacity of 50 000 cubic metres or more, unless such storage falls within the ambit of activity 19 of Notice 545 of 2010.</p>	<p>An evaporation pond exceeding 50 000 cubic metres will be required. A water storage steel tank will also be required.</p>
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Is amended to:

<p><u>GN R. 544 Item 12</u></p> <p>The construction of facilities or infrastructure for the off-stream storage of water, including dams and reservoirs, with a combined capacity of 50 000 cubic metres or more, unless such storage falls within the ambit of activity 19 of Notice 545 of 2010.</p>	<p>Water storage and processing tanks will be required, including but not limited to the following major items:</p> <p>Service water and firefighting water storage tanks:</p> <ul style="list-style-type: none"> - x2 above-ground steel storage tanks of approximately 1000m³ capacity each; <p>Potable water storage tanks:</p> <ul style="list-style-type: none"> - An above-ground steel storage tank of approximately 25m³ capacity each; <p>Tanks for the Water Treatment Plant:</p> <ul style="list-style-type: none"> - x2 steel above-ground neutralizing tanks of approximately 63m³ each; - x2 steel above-ground demineralizing water tanks of approximately 160m³ each; - x1 steel above-ground re-used water tank of approximately 160m³; - x 2 steel above-ground osmosis water tanks of approximately 100m³; - x1 steel above-ground regenerative water tank of
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	<p>approximately 100m³; - x2 steel above-ground clarified water tanks of approximately 100m³.</p> <p>Condensate storage tanks: - x2 steel above-ground condensate storage tanks of approximately 250m³;</p> <p>Dirty Condensate storage tank: - x1 above-ground steel storage tank of approximately 100m³;</p> <p>Tanks waste effluents after chemical cleaning of equipment: - x1 semi-buried reinforced concrete tank of approximately 36m x 36m x 3m.</p> <p>Oily waste-water treatment tank: - x1 semi-buried reinforced concrete tank of approximately 6m x 10m x 3.5m.</p> <p>Surface waste-water treatment tank: - x1 semi-buried reinforced concrete tank of approximately 42m x 82m x 4m.</p> <p>Ash Dump run-off leachate collection tank: - x1 semi-buried reinforced concrete tank of approximately 30m x 30m x 4.5m.</p>
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Reason for amendment:

In order to maximise efficiency of the 135MW power plant, as being requested in this amendment, the main infrastructure and technology presented above requires modifications specifically in order to match the amended generation capacity with suitable infrastructure, and would thus need to be formally updated and cited within the EA.

Amendment 3: Amendment of the approved power station development site alternative:

a) Condition 3.1 on page 06 of the EA typed as:

"Authorisation is granted for the establishment of Transalloys coal-fired power plant and associated infrastructure within site co-ordinates as indicated above. Developmental site alternative 1 is hereby approved."

Is amended to:

"Authorisation is granted for the establishment of Transalloys coal-fired power plant and associated infrastructure within site co-ordinates as indicated above. Developmental site alternative 1 is hereby approved for the ash dump location and developmental site alternative 2 is hereby approved for the 135MW power plant and associated infrastructure."

b) The activity/project descriptions on page 04 of the EA typed as:

GN R. 545 Item 15 Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 hectares or more.	The power station including associated infrastructure will occupy a footprint of approximately 25 – 30ha.
GN R. 546 Item 14 Clearing an area of 5ha or more of 75% of indigenous vegetation in all areas outside urban areas.	The power station including associated infrastructure will occupy a footprint of approximately 25 – 30ha in extent of which 75% is indigenous vegetation.
GN R. 921 Category B Item 7 The disposal of any quantities of hazardous waste to land.	The power station will require the construction of a lined ash disposal facility over an area of 10ha. The ash is classified as Type 3 hazardous waste.

Are amended to:

GN R. 545 Item 15 Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 hectares or more.	The power station and ash disposal facility will occupy a footprint of approximately 65-70ha.
GN R. 546 Item 14 Clearing an area of 5ha or more of 75% of indigenous vegetation in all areas outside urban areas.	The power station including associated infrastructure will occupy a footprint of approximately 65 – 70ha in extent of which 75% is indigenous vegetation.
GN R. 921 Category B Item 7 The disposal of any quantities of hazardous waste to land.	The power station will require the construction of a lined ash disposal facility over an area of 40-45ha. The ash is classified as Type 3 hazardous waste.

c) The approved coordinates on pages 04 and 05 of the EA typed as:

Site alternative S1	Latitude	Longitude
Northern Corner	25°53'09.80"S	29° 07'09.08"E
Eastern Corner	25°52'51.16"S	29° 07'34.45"E
Western Corner	25°53'19.20"S	29° 07'44.27"E
Power line		
Start point	25°53'50.61"S	29° 7'9.62"E
Middle point	25°53'28.67"S	29° 7'32.05"E
End point	25°53'15.68"S	29° 7'35.04"E

Water pipeline		
Start point	25°53'9.86"S	29° 6'9.25"E
Middle point	25°53'1.76"S	29° 6'44.13"E
End point	25°53'14.66"S	29° 7'26.32"E
Access road		
Start point	25°53'26.87"S	29° 7'43.67"E
Middle point	25°53'20.24"S	29° 7'42.76"E
End point	25°53'15.08"S	29° 7'35.90"E

Are amended to:

Ash Dump (Site development alternative 1)	Latitude	Longitude
Northern Corner	25°52'54.28"S	29° 07'33.07"E
Eastern Corner	25°53'23.04"S	29° 07'43.21"E
Western Corner	25°53'11.74"S	29° 07'08.47"E
Power Plant (Site development alternative 2)		
Northern Corner	25°53'29.06"S	29° 07'38.82"E
North-Western Corner	25°53'31.24"S	29° 07'22.91"E
Eastern Corner	25°53'35.59"S	29° 07'38.21"E
Southern Corner	25°53'48.50"S	29° 07'24.00"E
Western Corner	25°53'36.15"S	29° 07'13.10"E
Power line		
Start point	25°53'44.70"S	29° 07'27.07"E
Middle point	25°53'48.09"S	29° 07'16.52"E
End point	25°53'51.27"S	29° 07'08.27"E
Access road		
Start point	25°53'22.63"S	29° 08'08.14"E
Middle point	25°53'26.84"S	29° 07'44.70"E
End point	25°53'30.46"S	29° 07'25.26"E

Reason for amendment:

In order to maximise the power output of the plant, adjustments are required. During a detailed land audit Transnet's pipeline was identified to be passing through the site that was initially allocated for the Ash disposal facility thereby restricting the development capacity of the site. This restriction resulted in the site being of insufficient size for the ash disposal site but large enough to accommodate the power plant. This necessitated the swapping of the power station zone and the ash disposal zone (exchanging the location of the one for the other) as previously evaluated with the 150MW Alternative 1 in the Final EIR, dated 26 May 2015. In addition, the 135MW facility proposed for amendment in this application necessitates the utilisation of both development site alternative 1 and development site alternative 2 due to the space constraints mentioned above, and thus utilising only the development site alternative 1 as approved in the EA dated 02 March 2016 will prove insufficient given the 135MW generation capacity. Both development alternative sites 1 and 2 will be required for the successful installation and operation of the 135MW facility and associated ash dump.

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Amendment 4: Amendment of property description:

- a) The location of the activities on page 01 (cover page) of the EA typed as:

Location of activity:	MPUMALANGA PROVINCE: On portions 20 and 24 of the Farm Schoongezicht 308 JS, within eMalahleni Local Municipality
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Is amended to:

Location of activity:	MPUMALANGA PROVINCE: On Portions 20 and 24 of the Farm Schoongezicht 308 JS and Portions 34 and 35 of the Farm Elandsfontein 309 JS, within Emalahleni Local Municipality
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- b) The property description on page 05 of the EA typed as:

‘for the establishment of Transalloys coal-fired power plant and associated infrastructure on portions 20 and 24 of the Farm Schoongezicht 308 JS within eMalahleni Local Municipality in the Mpumalanga Province, hereafter referred to as “the property”.’

Is amended to:

‘for the establishment of Transalloys coal-fired power plant and associated infrastructure on Portions 20 and 24 of the Farm Schoongezicht 308 JS and Portions 34 and 35 of the Farm Elandsfontein 309 for the 33kV powerline respectively, within Emalahleni Local Municipality in the Mpumalanga Province, hereafter referred to as “the property”.’

Reason for amendment:

The current property description within the original EA references associated infrastructure on portions 20 and 24 of the Farm Schoongezicht 308 JS. The property description within the original EA does not make reference to the properties for the approved 33kV overhead power line that will be constructed from the onsite switching station to the existing Eskom Transalloys Substation directly adjacent and outside of the Transalloys smelter complex, even though the 33kV overhead powerline has previously been assessed and approved as part of the EA issued 02 March 2016. The properties along which this approved 33kV power line traverses are along portion 34 and 35 of the Farm Elandsfontein 309 JS and it is requested that these properties be included in the EA for the sake of completeness.

These amendments to the EA dated 02 March 2016 are approved based on the following conditions:

- The Chance Finds Fossil Procedures as detailed in the Heritage Impact Assessment dated February 2019, compiled by Heritage Contracts and Archaeological Consulting CC. must be included in the Environmental Management Programme (EMPr).
- A comment regarding the retention or destruction of the buildings identified in the Heritage Impact Assessment report must be obtained from the Mpumalanga Heritage Resources Authority (MPHRA).
- In the event that fossils are uncovered during construction, construction must cease within the immediate vicinity, a buffer of 30m must be established, and a palaeontologist called in to inspect the finds. The palaeontologist must obtain a section 35(4) permit in terms of the National Heritage Resources Act (NHRA) and Chapter IV NHRA Regulations, before any fossils are collected.
- If there are any new heritages resources discovered during construction and operation phases of the proposed development, then a professional archaeologist or palaeontologist, depending on the nature of the finds, must be contracted as soon as possible to inspect the findings at the expense of the developer.

- e) If the newly discovered heritage resources prove to be of archaeological or palaeontological significance, a Phase 2 rescue operation may be required at the expense of the developer. Mitigation will only be carried out after the archaeologist or palaeontologist obtains a permit in terms of section 35 of the NHRA (Act 25 of 1999). You may contact SAHRA APM Unit for further details: (Nokukhanya Khumalo/Phillip Hine 021 202 8654).
- f) If any unmarked human burials are uncovered and the archaeologist called in to inspect the finds and/or the police find them to be heritage graves, then mitigation may be necessary and the SAHRA Burial Grounds and Graves (BGG) Unit must be contacted for processes to follow (Thingahangwi Tshivase/Mimi Seetelo 072 802 1251).

This amendment letter must be read in conjunction with the EA dated 02 March 2016, as amended.

In terms of the Promotion of Administrative Justice Act, 2000 (Act No 3 of 2000), you are entitled to the right to fair, lawful and reasonable administrative action; and to written reasons for administrative action that affects you negatively. Further your attention is drawn to the provisions of the Protection of Personal Information Act, 2013 (Act no. 4 of 2013) which stipulate that the Department should conduct itself in a responsible manner when collecting, processing, storing and sharing an individual or another entity's personal information by holding the Department accountable should the Department abuse or compromise your personal information in any way.

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014, as amended (the EIA Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 14 (fourteen) days of the date of the EA, of the Department's decision as well as the provisions regarding the submission of appeals that are contained in the Regulations.

Your attention is drawn to Chapter 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) National Appeal Regulations published under Government Notice R993 in Government Gazette No. 38303 dated 08 December 2014 (National Appeal Regulations, 2014), which prescribes the appeal procedure to be followed. Kindly include a copy of this document (National Appeal Regulations, 2014) with the letter of notification to interested and affected parties in this matter.

Should any person wish to lodge an appeal against this decision, he/she must submit the appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party, and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the registered interested and affected parties by the applicant; or the date that the notification of the decision was sent to the applicant by the Department, whichever is applicable.

Appeals must be submitted in writing in the prescribed form to:

The Director: Appeals and Legal Review of this Department at the below mentioned addresses.

By email: appeals@environment.gov.za;

By hand: Environment House
473 Steve Biko Road,
Arcadia,
Pretoria,
0083; or

By post: Private Bag X447,
Pretoria,
0001;

Please note that in terms of Section 43(7) of the National Environmental Management Act, Act No. 107 of 1998, as amended, the lodging of an appeal will suspend the environmental authorisation or any provision or condition

attached thereto. In the instance where an appeal is lodged, you may not commence with the activity until such time that the appeal is finalised.

To obtain the prescribed appeal form and for guidance on the submission of appeals, please visit the Department's website at https://www.environment.gov.za/documents/forms#legal_authorisations or request a copy of the documents at appeals@environment.gov.za.

Yours faithfully


Mr Sabelo Malaza
Chief Director: Integrated Environmental Authorisations
Department of Forestry, Fisheries and the Environment
Date: *24/08/2021*

CC:	Ms Jo-Anne Thomas	Savannah Environmental (Pty) Ltd	E-mail: joanne@savannahsa.com
	Mr L. Monareng	Mpumalanga DARDLEA	E-mail: prunkosi@mpg.gov.za
	Mr Erald Nkabinde	Emalahleni Local Municipality	E-mail: nkabindee@emalahleni.gov.za

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