



**destea**

department of  
economic, small business development,  
tourism and environmental affairs  
FREE STATE PROVINCE

## Environmental Authorisation

**Authorisation register number:** EMB/14/21/22

**Holder of Authorisation:** Enertrag South Africa (Pty) Ltd

**Project description:** The proposed construction of a hydrogen production and fuelling facility

**Location of activity:** On the remainder of the Farm Rooi Kraal 454 at Thanda Tau Truck Stop along N3 Road in Phumelela Local Municipality

**HEAD OF DEPARTMENT**  
Department of Economic,  
Small Business Development,  
Tourism and Environmental Affairs

22 NOV 2021

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## Decision

The Department of Economic, Small Business Development, Tourism and Environmental Affairs (DESTEA- 'the Department') is satisfied, on the basis of information available to it and subject to compliance with the conditions of this Environmental Authorisation (EA), that the applicant should be authorised to undertake the activity specified below.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

## Activity authorised

By virtue of the powers conferred on it by the National Environmental Management Act ('NEMA'), 1998 (Act No. 107 of 1998) and GNR 326 of the 2014 Environmental Impact Assessment Regulations as amended, the Department hereby authorises –

**ENERTRAG South Africa (Pty) Ltd** with the following contact details –

**Suite 104, 1<sup>st</sup> Floor, Albion Springs,  
183 Main Road,  
Rondebosch,  
Cape Town**

**Contact person: Mercia Grimbeek**

**Contact number: 078 299 3515**

**Email address: [Mercia.Grimbeek@enertrag.co.za](mailto:Mercia.Grimbeek@enertrag.co.za)**



To undertake the following activity (hereafter referred to as "the activity") indicated in Listing Notice 1 (GNR 327) activity 14 "the development and related operation of facilities or infrastructure for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres", as described in the Basic Assessment report dated 19 August 2021, the activity entails the proposed construction of a hydrogen production and fuelling facility



– Thanda Tau RF (Pty) Ltd, located at Thanda Tau Truck Stop along N3 road, Phumelela Local Municipality.

**Site coordinates:**

	<b>Latitude:</b>	<b>Longitude:</b>
Corner 1	27°33'11.79"S	28°50'1.23"E
Corner 2	27°33'13.44"S	28°50'2.66"E
Corner 3	27°33'14.22"S	28°50'1.40"E
Corner 4	27°33'12.47"S	28°50'0.06"E

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**Activity description**

ENERTRAG South Africa (Pty) proposes to establish a hydrogen (H<sub>2</sub>) production and fuelling facility (Thanda Tau RF PTY. Ltd.) along the N3 highway in the Free State Province. The proposed infrastructure includes; The Hydrogen Production and Fuelling facility with capacity to service up to 64 trucks a day; Hydrogen Storage – Up to 20 tons and stored at 15°C (includes 6 days of emergency storage); Electrolyser (Up to 10MW) – 12mx3m containers with a Hydrogen production capacity of 200Nm<sup>3</sup>/day; Compressor – 30bar to 350bar; Dispensers – Up to 8x 350bar fuel pump/station; Transformer Station – 5.1mx3.7m footprint; Liquid Oxygen Storage Units (-150°C and 12.5 bar); Water Storage Tank – Diameter of 5.75m and a capacity of 145.64m<sup>3</sup>; Water Treatment Plant with daily throughput of 290m<sup>3</sup>.

The granting of this EA is subject to the conditions set out below.

**Conditions**

**Scope of authorisation**

- 1.1 Authorisation of the activity is subject to the conditions contained in this document. These conditions form part of the EA and are binding on the holder of the Authorisation.
- 1.2 The holder of the Authorisation shall be responsible for ensuring compliance with the conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the Authorisation.

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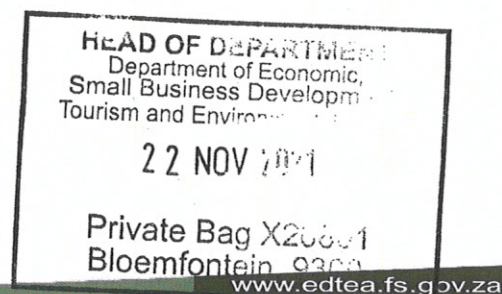
- 1.3 The authorised activity may only be carried out on the remaining extent of the Farm Rooi Kraal 454 at Thanda Tau Truck Stop along N3 Road in Phumelela Local Municipality, as indicated above at the exact site co-ordinates.
- 1.4 Any changes to, or deviations from, the project description set out in this Authorisation must be approved, in writing, by the Department before such changes or deviations may be commenced with.
- 1.5 In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations which may result in the holder of the Authorisation to apply for further Authorisation in terms of NEMA.
- 1.6 If commencement of the activity does not occur within a period of 3 (three) years from the date of issue, the Authorisation lapses and a new application for an EA must be made.
- 1.7 This Authorisation does not negate the holder of the Authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of this particular activity.

### **Appeal of Authorisation**

- 1.8 The holder of the Authorisation must notify every registered interested and affected party, of the decision by the Department in writing and within 14 (fourteen) calendar days of the date of this EA,
- 1.9 The notification referred must –
  - 1.9.1 specify the date on which the Authorisation was issued;
  - 1.9.2 inform the interested and affected party of the appeal procedure provided for in National Appeal Regulations published in Government Gazette No. 38559 of 12 March 2015.
  - 1.9.3 advise the interested and affected party that a copy of the Authorisation will be furnished on request; and
  - 1.9.4 Give the reasons for the decision.

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- 1.10 A person affected by the decision who wishes to appeal against the decision must lodge an appeal with the MEC of the Department of Economic, Small Business Development, Tourism and Environmental Affairs. An appeal should be directed to:

**Attention: Mr. Thabo Molotsi**

**MEC (DESTEA)**

**Private Bag X20801**

**Bloemfontein**

**9300**

**Tel: (051) 400 4810**

**E-mail: [modisepm@destea.gov.za](mailto:modisepm@destea.gov.za)**



**An appeal not submitted to the above mentioned address will not be regarded as valid.**

- 1.11 The applicant shall not commence with the proposed activity once an appeal has been lodged with the office of the MEC.

### **Management of the activity**

- 1.12 The Environmental Management Programme (EMPr) submitted as part of Application for EA is hereby approved.
- 1.13 The provisions of the EMPr included in the Basic Assessment Report (BAR) are an extension to the conditions of Authorisation, and non-compliance with the conditions of the EMPr would accordingly constitute non-compliance with the conditions of this Authorisation.
- 1.14 Should there be a change of ownership and/or project developer, the Department must be notified within 30 (thirty) days prior to the change itself. Conditions imposed in this EA must be made known to the new owner and/or developer and are binding on the new owner and/or developer.
- 1.15 The recommendations and mitigation measures recorded in the BAR dated 19 August 2021 must be adhered to and incorporated as part of the EMPr where applicable.



- 1.16 Any updates or amendments to the EMPr must be submitted to the Department of Economic, Small Business Development, Tourism and Environmental Affairs and must be decided upon within a period of 30 days of the submission.

## **Monitoring**

- 1.17 The applicant must appoint a suitably experienced Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation / rehabilitation measures and recommendations referred to in this Authorisation are implemented and to ensure compliance with the provisions of the EMPr.
- 1.18 The ECO shall be appointed before commencement of any construction activity.
- 1.19 The ECO shall keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
- 1.20 The ECO shall remain employed until all rehabilitation measures, as required for implementations due to construction damage are completed and the site is ready for operation.
- 1.21 Records relating to monitoring must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.
- 1.22 Construction and operation of the development may be temporarily or permanently stopped for reasons of non-compliance with the conditions of this particular EA as set out in this document or any other subsequent document emanating from the conditions of this EA.

## **Recording and reporting to the Department**

- 1.23 The applicant must appoint an independent auditor to conduct an environmental audit to ensure that the conditions, mitigation measures and recommendations stipulated in this EA are complied with. The environmental audit report must –
- 1.23.1 Indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the EA conditions as well as the corrective action plan and implementation programme.

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1.23.2 Be kept on site and be made available for inspection by any relevant and competent authority in respect of this development.

### **Commencement of the activity**

1.24 The authorised activity / shall not commence within twenty (20) days of the date of notification of Interested and Affected parties of the decision on the EA.

1.25 Should you be notified by the MEC of a suspension of the Authorisation pending appeal procedures, you shall not commence with the activity unless authorised by the MEC in writing.

### **Notification to authorities**

1.26 Fourteen (14) days prior written notice must be given to the Department that the activity will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which the construction of the activity will commence.

### **Operation**

1.27 Fourteen (14) days prior written notice must be given to the Department that the activity will commence operation.

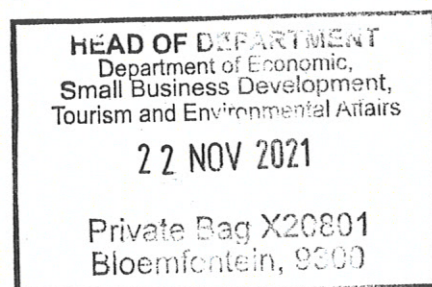
### **Site closure and decommissioning**

1.28 Should the activity ever cease or become redundant, the applicant shall undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.

1.29 Before decommissioning of the development becomes evident a rehabilitation plan must be compiled and should be approved by this Department.

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### **Specific conditions**

- 1.30 An integrated waste management approach that is based on waste minimisation must be implemented and must incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste shall be disposed of at a landfill licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act No. 59 of 2008) as amended.
- 1.31 The proposed activity must produce a maximum of 2m<sup>3</sup> solid construction waste during the construction/initiation phase.
- 1.32 The applicant must ensure that brine from water treatment process is removed from the plant by Enviroserv to their Vaalpark Tailings Depot on a three daily basis.
- 1.33 The applicant must ensure that the proposed development is powered by solar and wind generated electricity.
- 1.34 The applicant must ensure that once stormwater designs are available, they are reviewed by a suitably qualified freshwater ecologist and the Risk Assessment amended accordingly (if necessary).
- 1.35 The applicant must ensure that there is ground water monitoring conducted quarterly and the results should be evaluated and reviewed on a bi-annual basis by a registered hydrogeologist for interpretation and trend analysis for submission to the Regional Head: Department of Water and Sanitation.
- 1.36 The applicant must ensure to obtain necessary authorisation from the Department of Water and Sanitation for the extraction of the approximately 8 700 000 litres/month of ground water and river/dam.
- 1.37 If any evidence of archaeological sites or artefacts, paleontological fossils, graves or other heritage resources is found during construction, South African Heritage Resource Agency (SAHRA) and archaeologist and / palaeontologist, must be informed immediately depending on the nature of the findings.
- 1.38 The applicant must ensure to adhere to recommendations from all specialist studies conducted for the proposed development.

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## **General**

- 1.39 A copy of this particular EA must be kept at the property where the activity will be undertaken. The Authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the Authorisation who works or undertakes work at the property.
- 1.40 Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/or telephonic details, the applicant must notify the Department as soon as the new details become known to the applicant.
- 1.41 The holder of the Authorisation must notify the Department, in writing within 48 (forty eight) hours, if any condition of this Authorisation cannot be or is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance.
- 1.42 Non-compliance with a condition of this Authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.
- 1.43 National government, provincial government, local authorities or committees appointed in terms of the conditions of this Authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the applicant or his successor in title in any instance where operation be temporarily or permanently stopped for reasons of non-compliance by the applicant with the conditions of Authorisation as set out in this document or any other subsequent document emanating from these conditions of the Authorisation.

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- 1.44 The applicant is responsible for compliance with the provisions for Duty-of-Care and remediation of damage contained in Section 28 and emergency incidents contained in Section 30 of the National Environmental Management Act, (Act no 107) of 1998.
- 1.45 Emergency and reporting of incidents as stipulated in Section 30 of NEMA (Act 107 of 1998) must be followed accordingly.

**Approved:**



**Dr. M. Nokwequ**

**HOD: Department of Economic, Small-Business Development, Tourism and Environmental Affairs (DESTEA)**

  
**Date:**

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## **Annexure 1: Reasons for Decision**

### **1. Background**

The applicant, **ENERTRAG South Africa (Pty) Ltd** applied for Authorisation to commence with activity 14 from Listing Notice 1 (GNR 327) of the 2014 EIA Regulations as amended, described in the Basic Assessment Report (BAR) dated 19 August 2021 as the proposed construction of a hydrogen production and fuelling facility – Thanda Tau RF (Pty) Ltd, located at Thanda Tau Truck Stop along N3 road, Phumelela Local Municipality.

The applicant appointed SPOOR Environmental Services (Pty) Ltd to undertake Basic Assessment process, for the activity as described under Regulation Notice 326 of 2014 EIA Regulations as amended.

### **2. Information considered in making the decision**

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The information contained in the BAR dated 19 August 2021 completed by Green-Box Consulting and the accompanying Environmental Management Programme (EMPr).
- b) Mitigation measures as proposed in the BAR dated 19 August 2021 and the EMPr.
- c) The objectives and requirements of relevant legislation, policies and guidelines and Section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998).
- d) The findings of the site visit undertaken by Ms. D. Mokoena from the Department of Economic, Small Business Development, Tourism and Environment Affairs on the 27 October 2021.

### **3. Key factors considered in making the decision**

All information presented to the Department was taken into account in the Department's consideration of the application. Factors considered in making the decision are the following:

- a) Solid Waste Management
- b) Waste Water Disposal

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- c) Water and Electricity Supply
- d) Hydrogeological and Contamination Risk Assessment

#### **4. Findings**

After consideration of the information and factors listed above, the Department made the following findings –

- (a) The proposed activity will produce 2m<sup>3</sup> solid construction waste during the construction/initiation phase.
- (b) No waste water will be created during the hydrogen production process.
- (c) The brine from water treatment process is nontoxic and can be managed via a lined evaporation pond on-site. There is no space for this at the current proposed facility though. If the project is authorized the brine will be removed from the plant by Enviroserv to their Vaalpark Tailings Depot on a three daily basis.
- (d) The proposed development will use 8 700 000 litres/month groundwater and water from a river.
- (e) The hydrogen facilities will be powered by solar and wind generated electricity thereby posing no risk to the municipal resources.
- (f) In general, the groundwater samples analyzed did not indicate any signs of groundwater pollution, with the majority of sampling localities indicative of recently recharged groundwater.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the Environmental Authorisation, the proposed activity will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the proposed activity can be mitigated to acceptable levels. The application is accordingly granted.

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