



## Appendix B

DotE and NT EPA Determination Letters







Mr Paul Burton  
Managing Director  
TNG Limited  
PO Box 1126  
SUBIACO WA 6904

Dear Mr Burton

**Decision on referral and assessment approach – accredited assessment  
Mount Peake iron, vanadium and titanium mining project, Northern Territory  
(EPBC 2013/7027)**

Thank you for submitting a referral under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This is to advise you of my decision about the proposed action to undertake the Mt Peake iron, vanadium and titanium mining project and associated infrastructure, 280 kilometres north-northwest of Alice Springs, Northern Territory.

**As a delegate of the Minister for the Environment, I have decided that the proposed action is a controlled action and, as such, requires assessment and a decision on approval under the EPBC Act before it can proceed.**

It appears that the proposed action is likely to have a significant impact on the following matters protected by the EPBC Act:

- Listed threatened species and communities (sections 18 & 18A)

For example, based on the information available in the referral, the proposed action is likely to have a significant impact because:

- The proposed action will result in the clearance of 838.5 ha of native vegetation that may decrease the availability of habitat such that the listed vulnerable Dwarf Desert Spike-rush (*Eleocharis pappillosa*) is likely to decline;
- The clearance of potential habitat and risk of vehicle strike from increased truck movements may interfere with the recovery of the listed vulnerable Black-footed Rock-wallaby (MacDonnell Ranges race) (*Petrogale lateralis*), Greater Bilby (*Macrotis lagotis*) and Crest-tailed Mulgara (*Dasyercus cristicauda*) species.

Please note that this decision only relates to the potential for significant impact on the specific matters protected by the Australian Government under Chapter 2 of the EPBC Act.

I have also decided that the proposed action will need to be assessed through accredited assessment with the Northern Territory under the Northern Territory *Environmental Assessment Act 1982* at the level of an Environmental Impact Statement.

Details on the assessment process and the responsibilities of the proponent are set out in the enclosed fact sheet. Further information is available from the department's website at <http://www.environment.gov.au/epbc>.

I have also written to the following parties to advise them of this decision:

Territory authority	Northern Territory Environment Protection Agency
Other relevant authority	Commonwealth Department of Industry

Copies of both the referral decision notification and the decision on assessment approach notifications are enclosed.

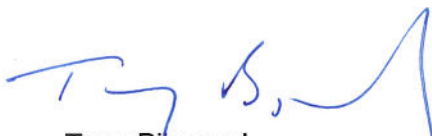
Please also note that once a proposal to take an action has been referred under the EPBC Act, it is an offence under Section 74AA to take the action while the decision making process is on-going (unless that action is specifically excluded from the referral or other exemptions apply). This provision of the EPBC Act carries a maximum penalty of \$425,000. The EPBC Act is available on line at:

<http://www.environment.gov.au/epbc/about/index.html>

The department has recently published an *Environmental Impact Assessment Client Service Charter* (the Charter) which outlines the department's commitments when undertaking environmental impact assessments under the EPBC Act. A copy of the Charter can be found at: <http://www.environment.gov.au/epbc/publications/index.html>.

If you have any questions about the assessment process or this decision, please contact the project manager, Rose Givens, by email to [Rose.Givens@environment.gov.au](mailto:Rose.Givens@environment.gov.au), or telephone 02 6274 1840 and quote the EPBC reference number shown at the beginning of this letter.

Yours sincerely



Tony Bigwood  
A/g Assistant Secretary  
North, West and Offshore Assessment Branch

18 November 2013



**Notification of  
REFERRAL DECISION AND DESIGNATED PROPONENT – controlled action**

**Mount Peake iron, vanadium and titanium mining project, Northern Territory (EPBC  
2013/7027)**

This decision is made under section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

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**proposed action** To undertake the Mount Peake iron, vanadium and titanium mining project and associated infrastructure, 280 kilometres north-northwest of Alice Springs, Northern Territory [See EPBC Act referral 2013/7027].

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**decision on proposed action** The proposed action is a controlled action.  
The project will require assessment and approval under the EPBC Act before it can proceed.

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**relevant controlling provisions** • Listed threatened species and communities (sections 18 & 18A)

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**designated proponent** TNG Limited  
ACN: 000 817 023

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**assessment approach** To be advised.

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**Decision-maker**

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**name and position** Tony Bigwood  
A/g Assistant Secretary  
North, West and Offshore Assessment Branch

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**signature**

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**date of decision** 13 November 2013

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Notification of  
**DECISION ON ASSESSMENT APPROACH**

**Mount Peake iron, vanadium and titanium mining project, Northern Territory  
(EPBC 2013/7027)**

This decision is made under Section 87 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

**Proposed action**

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<b>proposed action</b>	To undertake the Mount Peake iron, vanadium and titanium mining project and associated infrastructure, 280 kilometres north-northwest of Alice Springs, Northern Territory [See EPBC Act referral 2013/7027]
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**Decision on assessment approach**

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<b>assessment approach</b>	The project will be assessed by accredited assessment at the level of Environmental Impact Statement under the Northern Territory <i>Environmental Assessment Act 1982</i> .
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**Person authorised to make decision**

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<b>name and position</b>	Tony Bigwood A/g Assistant Secretary North, West and Offshore Assessment Branch
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**signature**

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<b>date of decision</b>	18 November 2013
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**Australian Government**  
**Department of the Environment**

Mr Paul Burton  
Managing Director  
TNG Limited  
PO Box 1126  
SUBIACO WA 6904

EPBC Ref: 2013/7027

Dear Mr Burton

**Decision on variation request  
Mount Peake Iron, Vanadium and Titanium Mining Project, Northern Territory  
(EPBC 2013/7027)**

I refer to Mr Ian McCardle's letter of 11 March 2015 requesting a variation of the proposed Mount Peake Iron, Vanadium and Titanium Mining Project (EPBC 2013/7027), on your behalf.

After examination of all relevant and additional information, I have considered the request under section 156B of the EPBC Act.

**As a delegate of the Minister for the Environment, I have decided to accept the variation to the proposal.**

A copy of the notice recording this decision is enclosed. This document will be published on the Department's website.

I note that all provisions under the EPBC Act have ceased to apply to the original proposal and now apply to the varied proposal, and that for the purpose of the application of those provisions, anything done in relation to the original proposal is taken to have been done in relation to the varied proposal.

I have also written to the Northern Territory Environment Protection Authority to advise them of my decision.

If you have any questions about the referral process or this decision, please contact the project manager, Lauren Mackaway, by email to [lauren.mackaway@environment.gov.au](mailto:lauren.mackaway@environment.gov.au), or telephone (02) 6275 9790 and quote the EPBC reference number shown at the beginning of this letter.

Yours sincerely

A handwritten signature in blue ink that reads 'Simon Banks'.

Dr Simon Banks  
Assistant Secretary  
West Assessments Branch  
8 April 2015

CC: Mr Ian McCardle  
Principle Environmental Scientist  
GHD Pty Limited



**NOTIFICATION OF VARIATION OF PROPOSAL TO TAKE ACTION**

**Mt Peake Iron, Vanadium and Titanium Mining Project, Northern Territory  
(EPBC 2013/7027)**

This decision to accept a variation to the proposal to take an action is made under section 156B of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

**Variation to proposal to take an action**

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**Person proposing to take the action** TNG Limited  
ACN: 000 817 023

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**Original proposed action** To undertake the Mount Peake iron, vanadium and titanium mining project and associated infrastructure, 280 kilometres north-northwest of Alice Springs, Northern Territory [See EPBC Act referral 2013/7027].

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**Varied proposed action** The variation is to remove from the original proposed action:

- the hydrometallurgical processing plant,
- the gas/slurry pipeline infrastructure corridor linking the mine site with a rail siding at Adnera.

The variation also alters the original proposed action by:

- trucking of magnetite concentrate to the rail head rather than as a slurry via a pipeline,
- delivery of gas to the mine site via a pipeline located within the transport corridor.

[see EPBC Act referral 2013/7027 and request to vary the proposal dated 11 March 2015].

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**Date of effect** This variation has effect on the date the instrument is signed.

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**Person authorised to make this decision**

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**Name and position** Dr Simon Banks  
Assistant Secretary  
West Assessment Branch

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**Signature**

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**date of decision** 8 April 2015

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**Our ref** EN2013/0051

Mr Paul Burton  
Managing Director  
TNG Limited  
PO Box 1126  
Subiaco WA 6904

Dear Mr Burton,

**RE: NOTICE OF INTENT – TNG LIMITED - MT PEAKE PROJECT**

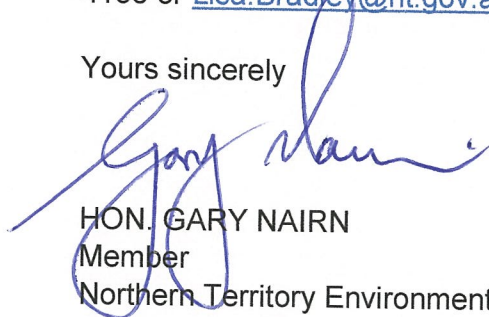
Thank you for submitting a Notice of Intent (NOI) for consideration under the NT *Environmental Assessment Act* (EA Act).

I am writing to inform you that the Northern Territory Environment Protection Authority (NT EPA) has decided that the above proposal put forward by TNG Ltd requires assessment under the EA Act at the level of an Environment Impact Statement (EIS). Enclosed is a Statement of Reasons supporting the decision.

Draft Terms of Reference for the project are being prepared by the NT EPA. The draft Terms of Reference will be advertised for public comment for 14 days. The Terms of Reference will be finalised and issued to you following full consideration of any comments raised during the exhibition period. The Terms of Reference will advise you of the information and matters that are required to be addressed in the EIS.

Any queries in relation to this matter should be directed to Ms Lisa Bradley, Manager Environmental Assessments, NT EPA on (08) 8924 4136 or [Lisa.Bradley@nt.gov.au](mailto:Lisa.Bradley@nt.gov.au).

Yours sincerely



HON. GARY NAIRN  
Member  
Northern Territory Environment Protection Authority

13 November 2013

Attached: *Statement of Reasons*

## Statement of Reasons

### MT PEAKE PROJECT – TNG LIMITED

NOVEMBER 2013

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#### PROJECT

ON 4 July 2013, TNG Limited (the Proponent) (of Enigma Mining Ltd) submitted a Notice of Intent (NOI) proposing to develop and operate the Mt Peake Project, 280 km north-northwest of Alice Springs and 60km west of the Stuart Highway. The NOI proposed:

- Mining of a poly-metallic ore body;
- Beneficiation and hydrometallurgical processing of the ore at the mine-site or offsite, to produce hematite powder ( $\text{Fe}_2\text{O}_3$ ), vanadium pentoxide flake ( $\text{V}_2\text{O}_5$ ) and titanium dioxide ( $\text{TiO}_2$ );
- Transport of the products via a slurry pipeline or trucks to a new rail siding near Adnera, beside the Alice Springs to Darwin Railway, followed by rail transport to East Arm Wharf for export.

The resource is estimated to be at least 160 Million tonnes, which would provide a mine-life of approximately 20 years. Workforce would peak at around 350 workers.

New infrastructure requirements include:

#### Mount Peake Mine Area

- 150m-deep pit;
- dry stacked tailings cell, or conventional Tailings storage facility;
- waste rock dump;
- gas-fired power station;
- run of mine (ROM) pad;
- mine access road;
- gas and water pipelines;
- beneficiation plant;
- hydrometallurgical plant including acid plant and oxygen generation facility (onsite or offsite, yet to be determined);
- concentrate stockpile;
- leach and salt residue storage cells;
- product stockpiles for titanium dioxide and hematite (or magnetite);
- water treatment ponds or tanks;
- water and waste water treatment plants;
- explosives and detonator magazines;
- construction camp and accommodation village;
- administrative, control, laboratory, workshop and storage buildings;
- gatehouse and weighbridge;
- bulk fuels storage area and water storage tanks;
- workshops and offices; and
- air strip.

#### Rail Siding (near Adnera):

- product rail load-out facility at Adnera including hard stand storage shed for containerised vanadium and product stockpiles for titanium dioxide and hematite (or magnetite); and
- If transport via slurry pipeline is selected additional new facilities required include:

- filtration area with:
  - thickeners;
  - pressure filters;
  - control room; and
  - buffer tanks.
- transfer pond or tank;
- slurry pipeline from the Project Mining Area to Adnera Rail Siding; and
- return water line.

#### **Corridors**

- Infrastructure pipeline corridor (gas, +/- slurry, +/- return water, <90km / 100.8 ha); and
- Road transport corridor (90km, 310 ha);

#### **East Arm Wharf**

- Stockpiles for Fe<sub>2</sub>O<sub>3</sub> and TiO<sub>2</sub>;
- Laydown area for containerised V<sub>2</sub>O<sub>5</sub>; and
- Reclaim hopper.

### **DECISION**

The Northern Territory Environment Protection Authority (NT EPA) considers that there is a risk of significant impacts to the environment from this proposal. A number of the risks have not been adequately characterised and require further studies and a more comprehensive assessment. Therefore, the proposal requires assessment under the *Environmental Assessment Act* at the level of an Environmental Impact Statement (EIS).

### **JUSTIFICATION**

A review of the NOI identified:

- Environmental risk and details of proposed risk reduction measures are yet to be defined with respect to:
  - Waste rock dump (WRD) and dry stacked tailings cell, or conventional Tailings Storage Facility (TSF);
  - Potential for Acidic and/or Metalliferous Drainage from the WRD, TSF and other mine infrastructure;
  - Handling, storage and transport of mineral products: hematite powder (Fe<sub>2</sub>O<sub>3</sub>), vanadium pentoxide flake (V<sub>2</sub>O<sub>5</sub>) and titanium dioxide (TiO<sub>2</sub>);
  - Product transport alternatives to the railhead, i.e. slurry pipeline vs. road train transport.
  - Potential for product concentrate spills, such as from ruptured pipelines, traffic and rail transport accidents, and wind and water erosion of product stockpiles;
  - Alternative hydrometallurgical plant locations;
  - Handling, storage and transport of reagents and/or hazardous materials, including: hydrochloric acid, organic solvent, sulphuric acid, sulphur, sodium hydroxide, sodium chloride, calcium carbonate, oxygen, sodium hypochlorite; flocculent; and fuels;
  - Storm surge (East Arm Wharf infrastructure); and
  - Closure and Rehabilitation.
- Potential for impacts may exist to:
  - Sites of biological conservation significance, including Mud Hut Swamp and Anmatyerr North, downstream of the Project Area;
  - Sites of Aboriginal heritage significance;
  - Sites of cultural heritage (Indigenous and non-Indigenous);
  - Flora and fauna species of conservation significance for the NT and nationally;

- Local communities;
- Workers, such as from inhalation of product dust; and
- Livestock at neighbouring pastoral properties.
- The Proponent has not yet demonstrated:
  - sufficient water will be available for the Project;
  - ground and surface water resources will be protected from contamination;
  - that Sensitive receptors to mine impacts have been identified. Impacts might include:
    - groundwater drawdown (cone of depression) associated with pit dewatering, potentially affecting groundwater dependent ecosystems, livestock; nearby communities or other users of shared potable aquifers;
    - dust (including product dust) at all Project locations;
    - power station emissions;
    - erosion and sedimentation; and
    - groundwater and surface water contamination.
  - negative social and economic impacts will be avoided, and benefits optimised;
  - breeding sites for biting insects will not be created; and
  - clearing of native vegetation will be minimised where possible.

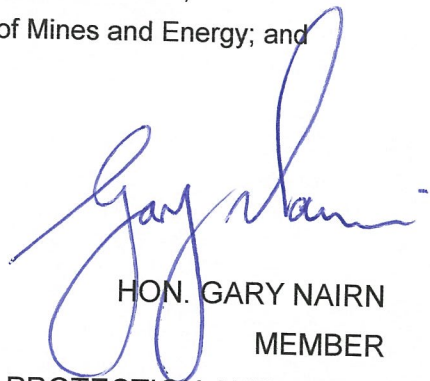
The above information gaps and risks have not been adequately characterised or addressed in the NOI and require further studies and a more comprehensive assessment, to ensure environmental impacts from the proposal will be minimised.

## CONSULTATION

On 5 July 2013, in accordance with the Environmental Assessment Administrative Procedures, the NOI was circulated to Northern Territory Government advisory agencies that have administrative responsibilities relating to this action.

Submissions were received from:

- Aboriginal Areas Protection Authority;
- Environmental Health Branch - Department of Health ;
- Department of Land Resource Management;
- Heritage Branch - Department of Lands, Planning and the Environment;
- Medical Entomology - Centre for Disease Control - Department of Health;
- Mining Environmental Compliance Division - Department of Mines and Energy; and
- Department of Primary Industry and Fisheries.



HON. GARY NAIRN  
MEMBER

NORTHERN TERRITORY ENVIRONMENT PROTECTION AUTHORITY

13 NOVEMBER 2013

**Our ref:** EN2013/0051-002

Paul Burton  
Managing Director,  
TNG Limited  
PO Box 1126  
SUBIACO WA 6904

Dear Mr Burton,

**RE: Advice of changes to the TNG Limited Mount Peake Project**

The Northern Territory Environment Protection Authority (NT EPA) acknowledges correspondence submitted by Ian McCardle, Principal Environmental Scientist, GHD Pty Ltd on 9 March 2015, notifying of changes to the Mount Peake Project. The Project amendments were described as:

*The hydrometallurgical processing plant, that was to be located within the Mount Peake Mining Area, is now not being considered. Current planning is for this facility to be located offshore. This will result in the projects disturbance footprint reducing by approximately 80ha, a reduction in atmospheric emissions, reduced vehicle movements due to fewer consumable being required, and a reduced construction and operations workforce.*

*In addition, the infrastructure corridor linking the mine site with a new rail siding at Adnera will no longer be required. It is proposed to truck magnetite concentrate to the rail head rather than to slurry it via a pipeline. Gas to the mine site will now be delivered via a pipeline located within the transport corridor. The removal of the infrastructure corridor will reduce the projects disturbance footprint by approximately 100 ha.*

In accordance with clause 14A of the *Environmental Assessment Administrative Procedures*, the NT EPA has decided that the above changes do not alter the environmental significance of the Project. The Project will continue to be assessed at the level of an Environmental Impact Statement, and the Terms of Reference issued 7 March 2014 will not be amended.

Any queries in relation to this matter should be directed to Ms Lisa Bradley, Manager Environmental Assessments, NT EPA on telephone (08) 8924 4136 or email [lisa.bradley@nt.gov.au](mailto:lisa.bradley@nt.gov.au).

Yours sincerely



GARY NAIRN  
Member  
Northern Territory Environment Protection Authority

March 2015