

Submission on the Supplement to the draft EIS

TNG Limited – Darwin Processing Facility

This submission is made under clause 9 of the Environmental Assessment Administrative Procedures 1984 and section 296 of the *Environment Protection Act 2019*

Government authority: Environmental Operations, Department of Environment, Parks and Water Security–Environment Division

Summary: Environmental Operations recommends that the NT EPA request additional information and further assurance that the proposal can feasibly achieve zero discharge of waste water. Emissions to air also still need to be properly characterised. The proponent should also be required to consider alternative renewable energy sources, and engage a suitably qualified third party auditor (Industrial Auditor) to assess the pollution controls proposed for the facility.

Section of Supplement	Theme or issue	Comment
Main Report TNG Supplement p262 TNG Response to ID#42	Air quality EIS 3.3.2	<p>The block/flow diagrams in Figures 2-11 & 2-12 are basic and do not provide information on the discharges/emissions that can be attributed to the various processes shown in the figures. Although Figure 2-37 shows the locations of discharges and emissions, it will assist the assessment process if these discharge points are depicted in the block/flow diagrams.</p> <p>It is important to provide more details of all processes and fluids so it can be determined if all pollutants have been identified.</p> <p>Proponent must conduct impact assessment of carbon monoxide emissions from combustion process</p> <p>Proponent must verify if there will be any carbonyl sulfide or heavy metals emissions from use coke and or from roasting activities.</p> <p>If organic compounds are used in the extractive process, emissions of dioxins and VOCs may occur and impacts must be assessed.</p> <p>Proponent must ensure that emissions from the ponds are modelled as area source emissions.</p> <p>Include emissions from the WRT stacks in the air emissions model.</p> <p>Proponent must show that BAT is being used to reduce emissions.</p> <p>When all air emissions have been identified and modelled, the assessment and BAT for emission reductions must be reviewed by a suitably qualified and experienced third party.</p>
Main Report TNG Supplement p263	Odours EIS 3.4.4	<p>Proponent must model the impact of odour emissions taking into account emissions such as Cl₂ and NH₃ from point sources and area sources such as ponds.</p>

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Section of Supplement	Theme or issue	Comment
TNG Response to ID#43 2.6.4 Odours		
Main Report TNG Supplement p265 TNG Response to ID#45	Topic: Social, Cultural and Economic Surroundings - Noise and Vibration E.I.S. 3.5.3	Proponent must include the Weddell Urban Area as a sensitive receptor on the noise contour plots for operational phase of the facility and have an independent assessment conducted on the noise impact assessment reports.
EIS Supplement	Construction Materials	0.42 GL of potable Darwin water to be used for dust suppression, soil conditioning and washdown requirements is excessive.
EIS Supplement	Process	The TIVAN process (Section 2.3.1.1 and Figure 2-11) and the titanium pigment plant (section 2.3.1.2 and figure 2-12) need to be supplemented by information that properly identifies the emission and waste offtake points so that the characteristics of each emission point and waste offtake point can be properly described in terms of composition, volumetric flow rate and flow characteristics. The proponent must account for all relevant chemical components that could be released to the atmosphere, including acid mists, particulates, products of combustion, etc.
EIS Supplement	2.3.2 Stockpiles	In addition to minimising dust emissions, the stockpile areas must also incident rainfall and subsequent entrainment of stockpiled material in stormwater runoff during the thunderstorm and monsoonal conditions, when rainfall can be very intense and horizontal.
EIS Supplement	2.3.3 Process Ponds	Leak detection systems and leachate collection systems should be included for any pond that is likely to contain any contaminants. Emergency overflow and controls for the quality of any emergency overflow must be established.
EIS Supplement	2.3.7 Stormwater	Environmental Assessments must establish the minimum water quality criteria for discharge of uncontaminated stormwater offsite and as groundwater recharge in bioretention basins and for onsite irrigation.

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EIS Supplement	2.6.2 Atmospheric emissions	<p>Stack emission design criteria should also be established for carbon monoxide, volatile organic carbon, dioxins and sulphides. Chemical mass balance to ensure all potential contaminants are considered. Confirmation that the air emission assessment has been done in accordance with:</p> <ul style="list-style-type: none"> the emission standards specified for Group 6 plant and equipment under NSW Protection of the Environment Operations (Clean Air) Regulation 2010 Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales, as amended (https://www.epa.nsw.gov.au/your-environment/air/industrial-emissions/modelling-assessing-air-emissions)
EIS Supplement	2.6.2 Atmospheric emissions	<p>Given the significance of the air emissions, the proponent should be asked to contribute to an additional ambient air quality monitoring station for the Darwin Regional airshed.</p>
EIS Supplement	3.3 Air Quality	<p>Background air quality should exclude the contribution from Dry season bushfires, and the stationary source emissions should not be designed to meet the NEPM ambient air quality guidelines. Existing and possible future cumulative impacts should be considered. Modelling should be carried out in accordance with Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales.</p> <p>Monitoring programs for all stationary source emissions will need to be implemented with sampling ports, and continuous emission monitoring equipment install into all stacks, where appropriate. Ground level ambient monitoring will also need to be implemented to confirm model predictions.</p>
EMP	Closure objectives and site preparation	<p>The proponent should include the requirements for assessing contaminated land into the closure and rehabilitation plan, and refer to the Northern Territory Contaminated Land Guideline, available at https://ntepa.nt.gov.au/_data/assets/pdf_file/0020/434540/guideline_contaminated_land.pdf.</p> <p>During site preparation, illegally dumped waste will need to be removed and disposed legally. It is possible that there may be contaminants like asbestos and hydrocarbons present. The proponent is advised to obtain land contamination clearance in accordance with the Northern Territory Contaminated Land Guideline. It is noted that this is included in the EMP, EP – 13 Contaminated Sites, page 85.</p>
EMP	Chapter 7 Stakeholder Engagement and Chapter 9.9 Complaints Management	<p>The proponent will need to ensure the community is aware that TNG has a process and contact details for the community to lodge complaints or enquiries about environmental matters. The proponent should endeavour to resolve complaints about alleged pollution incidents and environmental nuisance before they come to the attention of the NT EPA Pollution Response Line.</p> <p>Information about the NT EPA Pollution Hotline is available at https://ntepa.nt.gov.au/make-a-report.</p> <p>In the event that there is an incident that causes or has potential to cause material or serious environmental harm, an incident report must be submitted to the NT EPA as soon as the proponent becomes aware of the incident and in any case, within 24 hours of becoming aware of the incident. Failure to do so is an offence against the Waste Management and Pollution Control Act 1998. Further information is available at https://ntepa.nt.gov.au/your-business/compliance-and-regulation/notification-of-an-incident.</p>

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EMP, EP-11, page 83	Waste management	Landfill – is it proposed to construct a landfill for domestic and industrial waste, if so where will this be located?
EMP, EP -12	Sewage Management	What are the DER Prescribed Premises Licence conditions?
EMP, EP -17	Noise Management	<p>Note that there are currently no prescribed guidelines for noise levels or acceptable working hours for noisy activities in the NT. The general environmental duty under the Waste Management and Pollution Control Act 1998 applies. The following guidelines provide advice:</p> <ul style="list-style-type: none"> • Northern Territory Noise Management Framework Guideline (https://ntepa.nt.gov.au/your-environment/noise) • Recommended Land Use Separation Distances Guideline (https://ntepa.nt.gov.au/_data/assets/pdf_file/0006/453192/guideline_recommended_land_separation_distances_oct.pdf)