



Application for Works Approval Amendment

Part V Division 3 of the *Environmental Protection Act 1986*

Works Approval Number	W5172/2012/1
Works Approval Holder	Onslow Iron Pty Ltd
ACN	649 012 395
File Number	2012/002153-1
Premises	West Pilbara Iron Ore Project Putrescible Landfill Legal description - Mining Tenement L08/68 within the coordinates 7548057N, 417188E 7547991N, 417299E 7547459N, 417108E 7547571N, 416816E CANE WA 6710
Date of Report	23 May 2023
Decision	Revised works approval granted

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**A/Manager, Waste Industries
REGULATORY SERVICES**

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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1. Decision summary

Works approval W5172/2012/1 is held by Onslow Iron Pty Ltd (works approval holder) for the West Pilbara Iron Ore Project Putrescible Landfill (the premises), located within Mining Tenement L08/68, Cane, Western Australia.

This amendment report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the construction and operation of the premises. As a result of this assessment, revised works approval W5172/2012/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this amendment report, the department has considered and given due regard to its regulatory framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

2.2 Amendment summary

On 15 February 2023, the works approval holder submitted an application to the department to amend works approval W5172/2012/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments were sought:

- Remove the Phase 1 and Phase 2 landfill trenching approach. Trenches will be constructed as required without a staged approach. Total landfill footprint will remain unchanged.
- Increase the number of trenches from 5 in Phase 1 and 47 (cumulative) in Phase 2 to 74 trenches in total.
- Increase total capacity from 32 tonnes per year during Phase 1 and 780 tonnes per year during phase 2 to 3,675 tonnes per year (555 tonnes per year of general (putrescible) waste and 3,120 tonnes per year of inert waste type 1 (construction waste)).
- Inclusion of time limited operations.
- Amendments to landfill drainage designs.

2.3 Consolidation of works approval

In consolidating the works approval, the CEO has:

- updated the format and appearance of the works approval;
- corrected clerical mistakes and unintentional errors; and
- revised the wording of the conditions to remove reference to constructing the landfill in accordance with documents separate to the works approval. Conditions have instead been listed within the works approval and have incorporated the current standard conditions set.

The full consolidation of works approval conditions as they relate to this revised works approval are detailed in Section 5.1.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk assessments* (DWER 2020).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises construction and operation which have been considered in this Amendment Report are detailed in Table below.

Table also details the proposed control measures the works approval holder has proposed to assist in controlling these emissions, where necessary.

Table 1: Works approval holder controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Excavation works and vehicle movements associated with landfill construction	Air/windborne pathway	<ul style="list-style-type: none"> Dust suppression water will be applied as required; Excavated overburden material will be placed around the edge of the landfill trenches; After the initial five trenches have been constructed, no more than two trenches per waste type to be open at any one time.
Noise			<ul style="list-style-type: none"> Noise attenuation methods will be considered for plant and relevant equipment; Mobile equipment will be operated and serviced in line with the manufacturer's specifications; and Maximum sound power levels are specified for equipment.
Time limited operations			
Dust	Construction of new landfill cells Disposal of waste to landfill and associated activities	Air/windborne pathway	<ul style="list-style-type: none"> Dust suppression water will be applied as required; Excavated overburden material will be placed around the edge of the landfill trenches; and

Emission	Sources	Potential pathways	Proposed controls
			<ul style="list-style-type: none"> • After the initial five trenches have been constructed, no more than two trenches per waste type to be open at any one time.
Noise			<ul style="list-style-type: none"> • Noise attenuation methods will be considered for plant and relevant equipment; • Mobile equipment will be operated and serviced in line with the manufacturer's specifications; and • Maximum sound power levels are specified for equipment.
Odour			<ul style="list-style-type: none"> • Tipping area will be no longer than 30 metres; • Putrescible trenches covered fortnightly with sufficient quantities of clean fill or other appropriate cover material; • Training to staff and contractors for permitted waste disposal and recycling; • Landfill will be fenced to prevent fauna from accessing food wastes; • Regular landfill inspections; and • Report on feral animal captures and eradication programmes associated with landfill facilities as per EPBC Fauna Management Plans.
Windblown wastes			<ul style="list-style-type: none"> • Tipping area will be no longer than 30 metres; • Putrescible trenches covered fortnightly with sufficient quantities of clean fill or other appropriate cover material; • Training to staff and contractors for permitted waste disposal and recycling; • Landfill will be fenced; and • Regular landfill inspections.
Fire / smoke			<ul style="list-style-type: none"> • Tipping area will be no longer than 30 metres; • Putrescible trenches covered fortnightly with sufficient quantities of clean fill or other appropriate cover material;

Emission	Sources	Potential pathways	Proposed controls
			<ul style="list-style-type: none"> • Training to staff and contractors for permitted waste disposal and recycling; and • Regular landfill inspections.
Contaminated stormwater / Leachate		<p>Overland runoff into surface water</p> <p>Infiltration into soil and groundwater</p>	<ul style="list-style-type: none"> • Tipping area will be no longer than 30 metres; • Putrescible trenches covered fortnightly with sufficient quantities of clean fill or other appropriate cover material; • Excavated overburden material will be placed around the edge of the landfill trenches; • After the initial five trenches have been constructed, no more than two trenches per waste type to be open at any one time; • Thick clay layer at base of landfill trenches; • Divert clean stormwater around the landfill facility via a perimeter drain and fill batter, scour protection will be used where required to minimise erosion; • Training to staff and contractors for permitted waste disposal and recycling; • Spillages of hydrocarbons occurring as a result of incident or equipment failures will be addressed and reported through the Mineral Resources incident reporting procedure; • Spill kits will be made available at the fuel / chemical storage locations and employees trained in their use; • Have appropriate signage for the landfill, including signage within the facility, to designate specific areas (i.e. tipping area, water collection sump); • Regular landfill inspections; and • Groundwater monitoring at two locations associated with the landfill, one location up hydraulic gradient and one location down hydraulic gradient, as per original Works Approval application.

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the delegated officer has excluded employees, visitors and contractors of the works approval holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

Table 2: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Native Title – Kuruma Marthudunera Part B	Premises within Native Title area
Aboriginal Artifacts / scatter	Multiple sites within 3 km of premises (mostly to the north and north-west)
Homestead	10 km south-west of premises
Red Hill Homestead	25 km north-west of premises
Environmental receptors	Distance from prescribed activity
Watercourses	Non-perennial minor – 450 m north of premises Non-perennial major – 1 km south of premises
Underlying groundwater	Between 13 – 35 m bgl
Threatened Ecological Communities - (<i>Triodia pisolitica</i> (previously <i>Triodia</i> sp. Robe River) assemblages of mesas of the West Pilbara	Within 3 km of the premises
Threatened Fauna – <i>Dasyurus hallucatus</i> (Northern Quoll)	Multiple sightings within 5 km of the premises

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the works approval holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the delegated officer considers the works approval holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

Additional regulatory controls may be imposed where the works approval holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table .

The revised works approval W5172/2012/1 that accompanies this Amendment Report authorises construction and time-limited operations. The conditions in the revised works approval have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the premises. A risk assessment for the operational phase has been included in this amendment report, however licence conditions will not be finalised until the department assesses the licence application.

Table 3. Risk assessment of potential emissions and discharges from the Premises during construction, commissioning and operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Works approval holder's controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works approval holder's controls				
Construction								
Excavation works and vehicle movements associated with landfill construction	Dust	Air/windborne pathway causing impacts to health and amenity	Homesteads 10 km south-west and 25 km north-west of premises	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Emission to be regulated under the general provisions of the EP Act	N/A
	Noise		Surrounding vegetation and threatened flora / fauna species	Refer to Section 3.1		Y	Emission to be regulated under the <i>Environmental Protection (Noise) Regulations 1997</i>	N/A
Operation (including time-limited-operations operations)								
Disposal of waste, decomposition of wastes, tipping, application of landfill cover, vehicle movement	Dust	Air/windborne pathway causing impacts to health and amenity	Homesteads 10 km south-west and 25 km north-west of premises	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Condition 6	N/A
	Noise		Surrounding vegetation and threatened flora / fauna species	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Emission to be regulated under the <i>Environmental Protection (Noise) Regulations 1997</i>	N/A
	Odour			Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Condition 6	N/A

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Risk Event					Risk rating ¹ C = consequence L = likelihood	Works approval holder's controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works approval holder's controls				
	Windblown wastes		Surrounding vegetation and threatened flora / fauna species	Refer to Section 3.1	C = Slight L = Possible Low Risk	Y	Condition 6	N/A
	Fire / smoke		Homesteads 10 km south-west and 25 km north-west of premises Surrounding vegetation and threatened flora / fauna species	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	Condition 1, 6 and 7	N/A
	Leachate / Contaminated stormwater	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality Infiltration into soil and groundwater	Nearby surface water courses Underlying groundwater 13 – 35 m bgl Surrounding vegetation and threatened flora / fauna species	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1, 6 and 7	N/A

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk assessments* (DWER 2020).

Note 2: Proposed works approval holder's controls are depicted by standard text. **Additional regulatory controls** depicts additional regulatory controls imposed by department.

4. Consultation

Table provides a summary of the consultation undertaken by the department.

Table 4: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website (12 April 2023)	None received	N/A
Works approval holder was provided with draft amendment on 17 May 2023	The works approval holder provided an email response on 22 May 2023 stating that they do not have any comments and wish to waive the consultation period.	Noted. Consultation period waived.

5. Conclusion

Based on the assessment in this amendment report, the delegated officer has determined that a revised works approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

5.1 Summary of amendments

Table provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the revised works approval as part of the amendment process.

Table 5: Summary of works approval amendments

Condition no.	Proposed amendments
1	<ul style="list-style-type: none"> Removed Phase 1 and Phase 2 landfill trenching approach so trenches can be constructed as needed; Increase capacity from 32 tonnes per year in Phase 1 and 780 tonnes per year in Phase 2 to 555 tonnes per year of putrescible waste and 3,120 tonnes per year of construction waste; Increase number of trenches from 5 during Phase 1 and 47 (cumulative) during Phase 2 to a total of 74 (total landfill area remains unchanged though); and Amend drainage design to divert clean stormwater around the landfill facility via a perimeter drain and fill batter.
2	Environmental Compliance Report to be submitted following the construction of the first five trenches.
4 to 13	Inclusion of time limited operations

Table 6: Consolidation of licence conditions in this amendment

Existing condition	Condition summary	Revised licence condition	Conversion notes
1	Construction requirements	1	Redundant condition referring to works detailed in a separate document. Condition has been expanded to include all relevant conditions from the previous documents into the revised works approval. Redundant conditions have been omitted.
2	Compliance reporting	2 & 3	Revised to current licensing format and wording.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.

Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMMARY							
Application type							
Works approval	<input type="checkbox"/>						
Licence	<input type="checkbox"/>	Relevant works approval number:		None	<input type="checkbox"/>		
		Has the works approval been complied with?			Yes <input type="checkbox"/>	No <input type="checkbox"/>	
		Has time limited operations under the works approval demonstrated acceptable operations?			Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?			Yes <input type="checkbox"/>	No <input type="checkbox"/>	
		Date Report received:					
Renewal	<input type="checkbox"/>	Current licence number:					
Amendment to works approval	<input checked="" type="checkbox"/>	Current works approval number:	W5172/2012/1				
Amendment to licence	<input type="checkbox"/>	Current licence number:					
		Relevant works approval number:		N/A	<input type="checkbox"/>		
Registration	<input type="checkbox"/>	Current works approval number:		None	<input type="checkbox"/>		
Date application received		13 February 2023					
Applicant and Premises details							
Applicant name/s (full legal name/s)		Onslow Iron Pty Ltd					
Premises name		West Pilbara Iron Ore Project (WPIOP) Putrescible Landfill					
Premises location		Mining Tenement L08/68 within the coordinates 7548057N, 417188E, 7547991N, 417299E, 7547459N, 417108E 7547571N, 416816E					
Local Government Authority		Shire of Ashburton					
Application documents							
HPCM file reference number:		2012/002153-1~3					
Key application documents (additional to application form):		Supporting documents report including: <ul style="list-style-type: none"> • Proof of occupier status • ASIC Full Company Extract • Amended Landfill Plan 					
Scope of application/assessment							

<p>Summary of proposed activities or changes to existing operations.</p>	<p>Amendment to works approval to:</p> <ul style="list-style-type: none"> Remove Phase 1 and Phase 2 landfilling approach and construct trenches as required; Include construction waste as an authorised waste accepted; Increase number of landfill cells/trenches from 47 to 74 within the approved landfill footprint (increasing total design capacity to 3,675 tpa); and Commence TLO (submitting compliance report following the construction of the first putrescible and inert trenches/cells). <p>Applicant also mentioned that they will transfer Works Approval holder from API Management Pty Ltd (APIM) to Onslow Iron Pty Ltd (Onslow Iron; owned by Mineral Resource Pty Ltd) at a later stage. LO and DO agree to include transfer as part of this amendment (charging the applicant both the transfer and amendment fees).</p>
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Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 89: Putrescible landfill site	Assessed – 780 tpa	3,675 tpa

Legislative context and other approvals

<p>Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Referral decision No: N/A Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/></p>
<p>Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Ministerial statement No: MS1027 EPA Report No: 1563</p>
<p>Has the proposal been referred and/or assessed under the EPBC Act?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Reference No: 2009/4706</p>
<p>Has the applicant demonstrated occupancy (proof of occupier status)?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Certificate of title <input type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input type="checkbox"/> Expiry: Other evidence <input checked="" type="checkbox"/> Level of authorisation from APIM to MinRes authorising MinRes to act on behalf of the APIJV joint venture as manager and agent.</p>
<p>Has the applicant obtained all relevant planning approvals?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/></p>	<p>Approval: N/A Expiry date: N/A If N/A explain why? Applicant has</p>

		Mining Lease
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	CPS No: N/A Clearing assessed under Part IV
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Application reference No: Applicant intends to apply for a permit to interfere with bed and banks. Licence/permit No: GWL 174888 (2) and CAW206959(1)
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Name: Pilbara Groundwater Area / Pilbara Surface Water Areas and Irrigation Districts Type: Proclaimed Groundwater Area/Surface Water Area Has Regulatory Services (Water) been consulted? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Regional office: North West
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx</i>)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A

<p>Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i>?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Classification: N/A Date of classification: N/A</p>
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