# Decision Report

## Application for Works Approval

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

| | |
|---|---|
| **Works Approval Number** | W6723/2022/1 |
| **Applicant** | Onslow Infraco Pty Ltd |
| **ACN** | 612 668 201 |
| **File number** | DER2022/000357 |
| **Premises** | North West Coastal Highway Temporary Camp<br>Miscellaneous Licenses L08/205, L08/215 and L08/216<br>Pastoral Lease 3114/905<br>PEEDAMULLA WA 6710 |
| **Date of report** | 22 February 2023 |
| **Decision** | Works approval granted |

Hayden Nebel
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**SENIOR INDUSTRY REGULATION OFFICER**
**REGULATORY SERVICES**
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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# 1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and time limited operation of the Premises. As a result of this assessment, Works Approval W6723/2022/1 has been granted.

# 2. Scope of assessment

## 2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) 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 Licence and amendment history

Onslow Infraco Pty Ltd has not previously held a works approval or a licence for the proposed premises.

## 2.3 Application summary and overview of premises

On 28 July 2022, the applicant submitted an application for a new works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The applicant proposed to undertake construction works, commissioning and Time Limited Operations (TLO) relating specifically to a temporary Wastewater Treatment Plant (WWTP), a Reverse Osmosis (RO) plant and an irrigation spray field to support the North West Coastal Highway (NWCH) Temporary Camp at the Premises.

The Premises relates to the category 85 and assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in Works Approval W6723/2022/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in Works Approval W6723/2022/1.

The NWCH Temporary Camp and associated WWTP is located within the Haul Road Development Envelope of the Ashburton Infrastructure Project (AIP), located approximately 64km (east-south-east) of the town of Onslow, Western Australia.

The proposed works are intended to support preliminary investigative works for the larger proposed AIP. Approval for the AIP was being sought under the EP Act via a referral to the Environmental Protection Authority (EPA) under Part IV of the EP Act (Assessment Number 2320) at the time of this environmental risk assessment. Refer to section 2.4 for further information regarding the Part IV approval.

## 2.4 Part IV of the EP Act

On 23 June 2022, the Environmental Protection Authority (EPA) approved the AIP submitted by Onslow Iron Pty Ltd for minor or preliminary works under Part IV, section 41A(3) of the EP Act for a temporary camp and associated infrastructure.

The AIP includes a fully sealed private haul road, commencing at the boundary of the approved Buckland Project haul road (Ministerial Statement (MS) 960 and MS1147), and continuing approximately 125 kilometers (km) west to link to Onslow Road. Landside and Nearshore Facilities are proposed to be developed to export ore at the Pilbara Ports Authority's (PPA) Port of Ashburton (Port).

A Section 41A(3) request to undertake minor or preliminary works under the EP Act was submitted to the EPA, seeking consent for construction of the temporary NWCH camp, temporary office and workshops, access tracks, a wastewater treatment plant (WWTP) and irrigation spray field. Consent from EPA was granted on 23 June 2022 to progress investigative geotechnical, hydrogeological and ancillary activities (early works), including the development of the NWCH Temporary Camp associated within the AIP.

Authorisation to allow clearing of up to 3.72 ha for the temporary Wastewater Treatment Plant (WWTP) and spray field, subject to the implementation of Terrestrial Construction Environmental Management Plan (TEMP) (A0000-ENPLN-0003, Rev 1, 25/10/2021).

The AIP has also been referred to the Commonwealth Department of Agriculture, Water and the Environment ((DAWE) now Department of Climate Change, Energy, the Environmental and Water (DCCEEW)) for consideration of potential impacts to Matters of National Environmental Significance (MNES) under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and was deemed a Controlled Action (EPBC 2021/9064). A Section 156A 'Request to Vary a Proposal to Take Action' under the EPBC Act was submitted to DCCEEW on 16 June 2022 and was accepted on 10 August 2022 to excise the NWCH Camp area from the Development Envelope.

## 2.5 WWTP construction and commissioning and TLO

The proposed WWTP is a Sequence Batch Reactor (SBR) modular containerised system designed to treat up to 50 $m^3$ per day and the wastewater disposed of via an irrigation system.

The applicant requested the works approval scope include construction, commissioning and TLO of the WWTP and associated infrastructure.

## 2.6 Inputs

The NWCH Temporary Camp will accommodate 200 people and the main inputs into the WWTP will be domestic sewage from the following sources:

- Accommodation facilities;
- Kitchen and mess areas,
- Workshop ablutions; and
- Administration office.

Sodium hypochlorite will be added to wastewater during the treatment process to provide disinfection. The expected quality of influent is shown in Table 1: Anticipated influent quality below.

**Table 1: Anticipated influent quality**

| Parameter | Concentrations |
|---|---|
| pH | 6.5 – 8.5 |
| Total Nitrogen (TN) | 60 mg/L |
| Total Phosphorus (TP) | 14 mg/L |
| Total Suspended Solids (TSS) | 350 mg/L |
| Biochemical Oxygen Demand (BOD) | 350 mg/L |
| RO reject water Total Dissolve Solids | 4,250 mg/L |

| Parameter | Concentrations |
|---|---|
| (TDS) (indicative) | |

Chemical inputs for the treatment process include the following, which provides several functions within the treatment process:

- Liquid chlorine dosing;
- Sodium hypochlorite dosing; and
- Poly aluminum chloride dosing.

An anti-scaling chemical will also be used within the RO plant.

## 2.7 Irrigation of blended effluent

A RO plant is proposed for installation to provide potable water to the NWCH Temporary Camp. Raw water will be pumped from a nearby bore to the RO plant. The RO plant will separate the filtered feed water into two streams, the RO permeate stream and the concentrate reject stream (RO reject water). The RO reject water will be stored in the Reject Tank that will be connected to the WWTP Irrigation Tank for co-disposal to the irrigation spray field with treated effluent.

# 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 *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, commissioning and time limited operations which have been considered in this decision report are detailed in Table 2 below. Table 2 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

**Table 2: Proposed applicant controls**

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| **Construction** | | | |
| Dust | Disturbance to soils during installation and placement of the WWTP and the RO plant;<br>Vehicle and equipment movements; and<br>Erosion from cleared | Air/windborne pathway causing impacts to health, welfare and amenity of humans and flora and fauna. | The SBR will be designed and assembled off site, requiring minimal installation works onsite.<br>All engineering design and manufacturing checks will be undertaken prior to the WWTP being mobilised to site.<br>Static checks on unpowered equipment to check plant has been installed to manufactures specifications. |

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| | areas. | | Dust suppression via:<br>• water sprays;<br>• water trucks;<br>• control of vehicle movements; and<br>• restricted speeds.<br>Dust to be visually monitored during installation; and<br>An incident reporting system will be implemented and maintained to assist in managing environmental incidents such as excessive dust emissions. |
| Noise | Equipment and vehicle movements; and<br>Installation and construction of the WWTP | Air/windborne pathway causing impacts to health and amenity | The SBR will be designed and assembled off site, requiring minimal installation works onsite.<br>All engineering design and manufacturing checks will be undertaken prior to the WWTP being mobilised to site.<br>All vehicles and the WWTP plant to be regularly maintained to ensure it is operating efficiently and within manufacturer's specifications.<br>Construction works will be carried out in accordance with Australian Standard AS2436-1981 *"Guide to Noise Control on Construction, Maintenance and Demolition Sites"* and the *Environmental Protection (Noise) Regulations 1997.*<br>An incident reporting system will be implemented and maintained to assist in managing environmental incidents such as excessive noise emissions. |
| Sediment laden stormwater | Installation and construction of a WWTP and a RO plant;<br>Vehicle and equipment movements; and<br>Erosion from cleared areas. | Overland runoff causing ecosystem disturbance and surface water impacts | Water will be supplied from a nearby AIP Haul Road bore field to control dust emission during construction activities.<br>Dust suppression will be used as required in running surfaces to reduce generation of dust.<br>Appropriate management of surface water flows within and around the NWCH Temporary Camp will be implemented as required. |
| Hyper saline water | Construction of a Reverse Osmosis (RO) plant. | Overland runoff, direct discharge and migration via soil to groundwater. | No RO water is proposed to be utilised in construction stage of the project.<br>All storage components will be impermeable, and tanks installed on a concrete pad. |

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| | | | |
| Hydrocarbons and WWTP Chemicals (namely chlorine, sodium hypochlorite and aluminium) | Spills, leaks and direct discharge of chemicals during loading, unloading, transportation, handling and placement; and vehicle and equipment refuelling. | Overland runoff, direct discharge and migration via soil to groundwater. | No hydrocarbons or chemicals are proposed to be utilised in construction stage of the project.<br>Operate in accordance with the *Dangerous Goods Safety Act 2004* and *Fuel storage and handling will be in accordance with Australian Standards* (AS 1940);<br>Refueling restricted to dedicated refueling areas;<br>Spill kits will be located at all hydrocarbon and chemical storages on site to ensure immediate clean-up of any spills;<br>Soil contaminated by hydrocarbons will either be treated in-situ or removed by a controlled waste contractor for disposal to an appropriate licensed facility;<br>Potentially contaminated waters retained within the work front via culverts, levees and surface diversions.<br>Regular inspections of fuel and chemical storage areas.<br>Spillages occurring as a result of incident or equipment failures will be addressed and reported through the MinRes Incident Reporting Procedure. |
| Wastewater | Spills, leaks and direct discharge during installation and placement of the WWTP. | Overland runoff, direct discharge and migration via soil to groundwater. | No wastewater is proposed to be utilised in construction stage of the project;<br>All storage components will be impermeable, and sewage tanks installed on a concrete pad;<br>WWTP balance tank will be built to have contingency storage capacity for up to 1 day of normal flow if discharge is suspended while any problems are fixed;<br>WWTP balance tank will have contingency storage capacity for up to 1 day of normal flow if discharge is suspended while any problems are fixed;<br>Earthen bunds to be constructed around the spray field; |
| **Commissioning (and Time-limited Operations)** | | | |
| Odour | Incorrect wastewater chemical treatment balance; and Storage of wastewater solids. | Air/windborne pathway causing impacts to health and | Operators of the WWTP will be trained in testing and maintenance procedures to ensure the plant is operated in accordance with the manufacturer's specifications.<br>Wastewater contained within storage tanks. |

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| | | amenity | Wastewater is treated prior to irrigation.<br>The WWTP will be commissioned in accordance with manufacturers specifications;<br>Regular checks for any odours outside of the WWTP, if odours are noted necessary repairs will be made to the WWTP;<br>Volume of sludge produced from the treatment process will be monitored on a regular basis and removed as required by a licensed controlled waste contractor. The controlled waste will be disposed to appropriate licensed landfill facility;<br>Chemicals/reagents will be stored in impermeable bunds or be stored in self bunded tanks/containers;<br>The irrigation spray field will be commissioned in accordance with manufacturers specifications;<br>The irrigation spray field will be fenced, sign posted and include a spray drift buffer;<br>Treated and blended effluent generated during the commissioning process will only be discharged via approved discharge points; and<br>An incident reporting system will be implemented and maintained to assist in managing environmental incidents such as excessive odour emissions. |
| Noise | Operation and time limited operation of the WWTP equipment and irrigation spray field (including equipment alarms and pumps); and<br>Movement of vehicles and equipment (including reversing alarms). | Air/windborne pathway causing impacts to health and amenity | Operators of the WWTP will be trained in testing and maintenance procedures to ensure the plant is operated in accordance with the manufacturer's specifications;<br>The WWTP unit will be enclosed in order to attenuate noise;<br>All activities will be in accordance with the *Environmental Protection (Noise) Regulations 1997 (WA);*<br>Additionally, construction works will be carried out in accordance with *Australian Standard AS2436-1981 "Guide to Noise and Vibration Control on Construction, Maintenance and Demolition Sites"; and*<br>An incident reporting system will be maintained to assist in managing environmental incidents such as excessive noise emissions/complaints. |
| Solid waste | Direct discharge and | Infiltration via | Volume of sludge produced from the treatment |

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| (sludge) | spills and leaks from storage and disposal. | soil to groundwater and overland runoff potentially causing impact to ecosystems. | process will be monitored on a regular basis and removed as required by a licensed controlled waste contractor;<br>The controlled waste will be disposed to appropriate licensed landfill facility;<br>Store sludge waste from the WWTP in dedicated waste receptacles;<br>An incident reporting system will be implemented and maintained to assist in managing environmental incidents such as the WWTP solid waste emissions; and<br>Manage wastes in accordance with the AIP Terrestrial Environmental Management Plan (TEMP). |
| WWTP Chemicals (namely chlorine, sodium hypochlorite, aluminium and hydrocarbons) | Spills, leaks and direct discharge of chemicals during loading, unloading, transportation, handling and placement; and vehicle and equipment refuelling. | Overland runoff and direct discharge and migration via soil to groundwater. | Operators of the WWTP will be trained in testing and maintenance procedures to ensure the plant is operated in accordance with the manufacturer's specifications; and<br>Chemicals/reagents will be stored within impermeable bunds or be stored in self bunded tanks/containers. |
| Wastewater | Spills, leaks and/or discharges of untreated sewage, treated effluent not meeting discharge criteria, sludge and chemicals;<br>Discharge of wastewater to land prior to treatment;<br>Commissioning and TLO of the irrigation spray field;<br>Incorrect discharge rate to land;<br>Discharge during high rainfall events. | Overland runoff, direct discharge and migration via soil to groundwater. | Appropriate management of surface water flows within and around the NWCH Camp will be implemented as required will reduce potential for contaminants to enter surface water;<br>Spill kits will be made available at the chemical storage locations and employees trained in their use;<br>Operators of the WWTP will be trained in testing and maintenance procedures to ensure the plant is operated in accordance with the manufacturer's specifications;<br>Components of the WWTP will be fitted with alarms to warn of high-water levels in the tank or if a pump failure occurs;<br>The units can be isolated and shut down if required;<br>A spray drift buffer implemented around the spray field boundary;<br>Static checks on unpowered equipment to check plant has been installed to manufactures specifications;<br>Operators of the WWTP will be trained in testing and maintenance procedures to ensure the plant is operated in accordance with the |

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| | | | manufacturer's specifications;<br>Irrigation spray field fenced and sign posted to prevent unauthorised access;<br>Volume of treated wastewater produced during time limited operations discharge to the irrigation spray field will be recorded;<br>Weekly visual inspection of vegetation to ensure vegetation health is maintained;<br>Weekly inspections of wastewater pipeline integrity;<br>Weekly inspection of irrigation spray field to ensure no visible runoff outside the spray field;<br>WWTP balance tank will be built to have contingency storage capacity for up to 1 day of normal flow if discharge is suspended while any problems are fixed;<br>WWTP balance tank will have contingency storage capacity for up to 1 day of normal flow if discharge is suspended while any problems are fixed;<br>Earthen bunds to be maintained around the WWTP irrigation spray field;<br>Irrigation will not occur during significant rainfall events to prevent potential unauthorised discharges to surface water flows;<br>Effluent is disposed of to a dedicated irrigation field by an automated system that is managed by a trained operator; and<br>Regular monitoring of vegetation for changes such as declining condition. |
| Hyper saline water | Spills, leaks and/or discharges of RO water stored in tanks. | Overland runoff, direct discharge and migration via soil to groundwater. | Irrigation will not occur during significant rainfall events to prevent potential unauthorised discharges to surface water flows;<br>Regular monitoring of vegetation for changes such as declining condition;<br>Earthen bunds to be maintained around the WWTP irrigation spray field. |

### 3.1.2 Receptors

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

Table 3: Sensitive human and environmental receptors and distance from prescribed activity 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 3: Sensitive human and environmental receptors and distance from prescribed activity**

| **Human receptors** | **Distance from prescribed activity** |
|---|---|
| Peedamulla Station – Jundaru Corporation | 5 km (northwest of the WWTP boundary) |
| Ex-Peedamulla Lease Exclusion Area (Archaeological & Ethnographic) | 154 m (east of the proposed WWTP Boundary) |
| **Environmental receptors** | **Distance from prescribed activity** |
| Groundwater | Approximately 20-50m BGL |
| Pilbara Surface Water Area | 0 km (located within the proclaimed surface water area) |
| Minor surface water drainage lines | 0 km (minor river and surface water lines (non-perennial located throughout the premises)) |
| Threatened species and communities | 0 km (x 58 Threatened species and communities were identified).<br>Managed under the EPBC Act: EPBC2021/9064. |

## 3.2 Risk ratings

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

Where the applicant 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 applicant'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 applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 4.

Works approval W6723/2022/1 that accompanies this decision report authorises construction, commissioning and time-limited operations. The conditions in the issued Works Approval, as outlined in Table 4 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 i.e. wastewater treatment activities. A risk assessment for the operational phase has been included in this decision report, however licence conditions will not be finalised until the department assesses the licence application.

**Table 4: Risk assessment of potential emissions and discharges from the premises during construction, commissioning and operation**

| Risk events | | | | | Risk rating [1] C = consequence L = likelihood | Applicant controls sufficient? | Conditions [2] of works approval | Justification for additional regulatory controls |
|---|---|---|---|---|---|---|---|---|
| **Sources / activities** | **Potential emission** | **Potential pathways and impact** | **Receptors** | **Applicant controls** | | | | |
| **Construction** | | | | | | | | |
| Land clearing and earthworks<br>Positioning of plant associated equipment including vehicle movements (reversing beepers)<br>Installation of sprayfield | Dust | Air/windborne pathway causing impacts to native vegetation communities (smothering of foliage and flowers) and disturbance to fauna | Remnant native vegetation | Refer to Section 3.1 | C = Slight<br>L = Unlikely<br>**Low Risk** | Y | N/A | N/A |
| | Noise and vibration | Air/windborne pathway and vibration through soil with impacts on (disturbance to) native fauna | Native fauna | Refer to Section 3.1 | C = Slight<br>L = Unlikely<br>**Low Risk** | Y | N/A | N/A |
| | Spills/unintended releases of hydrocarbons or chemicals | Seepage to soil and groundwater with potential impacts on native vegetation | Native fauna (Including soil fauna) and remnant vegetation | Refer to Section 3.1 | C = Minor<br>L = Rare<br>**Low Risk** | Y | Condition 1 | N/A |
| Disturbance to soil during construction and installation of infrastructure and equipment; and<br>Erosion from cleared areas. | Sediment laden stormwater | Overland runoff potentially causing ecosystem disturbance or impacting surface water quality | Surface water / minor surface water drainage lines (located throughout and surrounding the proposed premises); and<br>Threatened species and communities (located | Refer to Section 3.1 | C = Moderate<br>L = Unlikely<br>**Medium Risk** | Y | Condition 1 | N/A |

| Risk events | | | | | Risk rating [1]<br>C = consequence<br>L = likelihood | Applicant controls sufficient? | Conditions [2] of works approval | Justification for additional regulatory controls |
|---|---|---|---|---|---|---|---|---|
| **Sources / activities** | **Potential emission** | **Potential pathways and impact** | **Receptors** | **Applicant controls** | | | | |
| | | | throughout and surrounding the proposed Premises). | | | | | |
| **Commissioning (including Time Limited Operation (TLO))** | | | | | | | | |
| Irrigation of partially treated or untreated wastewater to the irrigation sprayfield;<br>Spills and leaks of untreated waste water at the WWTP;<br>WWTP tank overflows;<br>Irrigation of partially treated wastewater;<br>Ruptured and/or damaged pipework;<br>RO water to sprayfield; and<br>Spills and leaks of untreated RO water | Wastewater | Overland runoff potentially causing ecosystem disturbance and/or impacting surface water quality and/or groundwater quality | Groundwater;<br>Groundwater dependent vegetation;<br>Pilbara Surface Water Area;<br>Minor surface water drainage lines; and<br>Threatened species and communities | Refer to Section 3.1 | C = Moderate<br>L = Possible<br>**Medium Risk** | Y | Conditions 1, 2, 3, 4 and 5 | Conditions 2 and 3 require the submission of an Environmental Compliance Report to verify the works have been constructed in accordance with the relevant requirements.<br>Conditions 4 and 5 require the submission of an Environmental Commissioning Report to verify infrastructure against manufacturer's specifications. |
| Spills and leaks of chemicals;<br>Ruptured and/or damaged containers; and<br>Irrigation of incorrect balance of wastewater chemicals. | Chemicals | Overland runoff potentially causing ecosystem disturbance and/or impacting surface water quality and/or groundwater quality | Groundwater;<br>Groundwater dependent vegetation;<br>Pilbara Surface Water Area;<br>Minor surface water drainage lines; and<br>Threatened species and communities | Refer to Section 3.1 | C = Moderate<br>L = Unlikely<br>**Medium Risk** | Y | Conditions1, 5 and 13 | N/A |

| Risk events | | | | | Risk rating [1]<br>C = consequence<br>L = likelihood | Applicant controls sufficient? | Conditions [2] of works approval | Justification for additional regulatory controls |
|---|---|---|---|---|---|---|---|---|
| **Sources / activities** | **Potential emission** | **Potential pathways and impact** | **Receptors** | **Applicant controls** | | | | |
| Spills, leaks and overflows of effluent via decant for removal from the premises | Effluent | Direct impact to soil; nutrient soil imbalance causing ecosystem disturbance and/or surface water quality. | Soil health | Refer to Section 3.1 | C = Moderate<br>L = Unlikely<br>**Medium Risk** | Y | Conditions 1, 5 and 13 | N/A |
| Commissioning works<br>WWTP operations and sludge removal | Odour | Air/windborne pathway with impacts on amenity | Accommodation village residents | Refer to Section 3.1 | C = Slight<br>L = Unlikely<br>**Low Risk** | Y | Conditions 1, 5, 13 and 20 | N/A |
| Infrastructure and equipment failure<br>Maintenance works (accidental spills) | Spills/Untreated releases of partially treated wastewater or solid waste | Seepage to soil and groundwater resulting in elevated soil nutrients | Native fauna (Including soil fauna) and remnant vegetation | Refer to Section 3.1 | C = Slight<br>L = Unlikely<br>**Low Risk** | Y | Conditions 1, 5 and 13 | N/A |
| Stormwater interaction with plant and irrigation sprayfield | Contaminated or potentially contaminated stormwater | Seepage to soil and groundwater resulting in elevated soil nutrients | Remnant native vegetation | Refer to Section 3.1 | C = Slight<br>L = Unlikely<br>**Low Risk** | Y | Conditions 1, 5 and 13 | N/A |
| Chemical handling and storage | Spills/unintended releases of hydrocarbons or chemicals | Seepage to soil and groundwater resulting in damage to vegetation (root systems) | Remnant native vegetation | Refer to Section 3.1 | C = Slight<br>L = Unlikely<br>**Low Risk** | Y | Conditions 1, 5 and 13 | N/A |
| Irrigation sprayfield | Treated effluent | Direct application to vegetation and seepage to soil and groundwater resulting in nutrient accumulation and | Remnant native vegetation | Refer to Section 3.1 | C = Minor<br>L = Possible<br>**Medium Risk** | Y | Conditions 5-8 and 13-17 | Application of undiluted, highly saline RO brine has the potential to result in salt scaling and death of native vegetation. The applicant has proposed to dilute the brine with treated effluent. A monitoring condition has |

| Risk events | | | | | Risk rating [1] C = consequence L = likelihood | Applicant controls sufficient? | Conditions [2] of works approval | Justification for additional regulatory controls |
|---|---|---|---|---|---|---|---|---|
| Sources / activities | Potential emission | Potential pathways and impact | Receptors | Applicant controls | | | | |
| | | toxicity | | | | | | been included to ensure TDS levels are monitored prior to irrigation |

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

Note 2: Proposed applicant controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

# 4. Consultation

Table 5 provides a summary of the consultation undertaken by the department.

**Table 5: Consultation**

| Consultation method | Comments received | Department response |
|---|---|---|
| Application advertised on the department's website on 19 September 2022 | None received | N/A |
| Local Government Authority (Shire of Ashburton) advised of proposal on 30 September 2022 | None received | N/A |
| Department of Health (DoH) advised of proposal 30 September 2022 | DoH comments are summarised in Appendix 1. | The Departments responses are in Appendix 1. |
| Department of Planning Lands and Heritage (DPLH) advised of proposal on 30 September 2022 | None received | N/A |
| Department of Climate Change, Energy the Environment and Water advised of proposal on 30 September 2022. | None received | N/A |
| Peedamulla Station (managed by Ashmulla Pastoral Station) advised of proposal on 30 September 2022 | None received | N/A |
| Applicant was provided with draft documents on 21 December 2022 | The applicant comments are summarised in Appendix 2. | The Departments responses are provided in Appendix 2. |

# 5. Conclusion

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

# 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.
4. Department of Water (DOW), July 2008. Water Quality Protection Note 22 (WQPN22): Irrigation with nutrient rich wastewater. Perth, Western Australia. Accessed at: www.dwer.wa.gov.au
5. Department of Health (DOH), 2011. Guidelines for the Non-potable Uses of Recycled Water in Western Australia. Perth, Western Australia. Accessed at: www.health.wa.gov.au

# Appendix 1: Summary of DoH's comments on application

| Consultation method | Comments received | Department's response |
|---|---|---|
| The DOH was of advised of the application on 30/09/2022 | ***Water Supply and Wastewater Disposal***<br>1. A formal application to be submitted to the DoH for assessment. As there has not been much information detailing how wastewater will be managed nor the proposed times involved as a temporary approval, the proposal will be assessed as a case-by-case application.<br>2. Subject to purpose, the proposal may require an application for a recycled water quality management plan.<br>3. A specific site and soil evaluation report undertaken by a qualified consultant that is conducted during the wettest seasonal time of the year (February/March), as per AS/NZS 1547:2012 requirements.<br>4. To address all the Government Sewage Policy requirements.<br>5. The wastewater treatment plant is to comply with and meet the current DoH legislation water volumes, water quality and disposal criteria.<br>6. A plan detailing the proposed building envelopes, land application area/s, all parking bays and exclusion zones for the proposal.<br>7. To insure where the production of wastewater is generated, that it is the same lot used for disposal.<br>8. Consideration of nuisances such as odours, spray drift, noise and vibration in relation to the location of the wastewater treatment plant to camp accommodation and/or sensitive land users.<br>9. All sewage spills are required to be reported to the DoH, please refer to: Wastewater-Overflow-Notification-and-Response-Procedures (healthywa.wa.gov.au) | The department notes the DOH's comments and advice in relation to water supply, wastewater disposal and approvals to be considered by the applicant.<br>A decision under Part V of the EP Act on an assessment of an application may be made prior to the final determination of a planning application. However, the department recognises the importance of land use planning in the context of the delivery of appropriate public health and environmental outcomes and will have regard to the processes and views of other authorities in its decision-making process.<br>Decisions are also made in accordance with the department's *Guideline: Risk Assessment* (DWER 2020). The applicant's employees, visitors, and contractors have been excluded from this environmental risk assessment. Protection of those parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.<br>An instrument granted by the department may provide a defence for the occupier for offences under Part V, Division 3 of the EP Act, provided the conditions contained within the Works Approval have been complied with. An instrument does not provide a defence for offences under other Western Australian legislation.<br>A person who begins works on or operates a prescribed premises without the necessary approvals from other required regulatory agencies does so at its own risk. |

# Appendix 2: Summary of applicant's comments on risk assessment and draft conditions

| Condition | Summary of applicant's comment | Department's response |
|---|---|---|
| n/a | Administration error on address. Registered Business Postcode is 6017, not 6014. | The Delegated Officer notes this information and has updated the postcode. |
| 1, Table 1 (1b) | Amend condition 1(a) of Table 1, to: all above ground infrastructure to be located on compacted ground. | The Delegated Officer notes there was an error in the supporting document and has updated condition to reflect the WWTP being installed on compacted ground, noting that containment risk is unchanged due to the containerised system. |
| 1, Table 1 (1d) | Amend Total Nitrogen to <30mg/L and Total Dissolved Solids to 2,800 mg/L. | The Delegated Officer notes this information and has updated the output standards for TN and TDS. |
| 1, Table 1 (1f) | Remove the second sentence as it is confusing/unclear. | The condition has been reworded to:<br>*Flow meters are required to be installed on the inlet and outlet side of the plant to record both inflows and outflows from the WWTP.* |
| 1, Table 1 (1h) | Remove the condition as it is unclear. The plant can be adjusted for lower inflows, and process sequence times are adjustable based on influent/effluent concentrations. | The Delegated Officer notes this information and has removed the condition. |
| 1, Table 1 (2a) | Change wording to 'Minimum 1.22 ha" at the start of the condition. | The condition has been reworded to:<br>*Minimum 1.22 ha spray field with above ground sprinklers.* |
| 1, Table 1 (2b) | Add 'to the spray field boundary" at the end on of the condition. | The condition has been reworded to:<br>*Maintain a 5 m spray drift buffer from the edge of the sprinkler radius to the spray field boundary* |
| 1, Table 1 (2c) | Remove the condition on the basis that they do not propose to modify the natural surface of the spray field in any way. The location of the spray field has been positioned outside of natural drainage lines and irrigation will be managed to ensure no runoff or pooling. Additionally, topographical maps of the area do not indicate any significant gradients. | The Delegated Officer notes this information and has removed the condition, based on other controls specified to ensure runoff does not occur. |
| 1, Table 1 (3d) | Remove 3(d) from Table 1. Condition 3(e) is adequate for the management of chemical storage. | The Delegated Officer notes this information and has removed the condition.<br><br>Condition 3(e) is considered adequate for the management of chemical storage. |
| 3 (a) | Amend the condition to 'certification that the items of infrastructure or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1' | Certification of wastewater infrastructure construction is required to be undertaken by a qualified engineer with credentials relevant to that infrastructure to ensure works were undertaken as specified. The condition has been amended to allow for certification from an engineer with either of the |

| Condition | Summary of applicant's comment | Department's response |
|---|---|---|
| | | following qualifications; civil, structural, environmental or wastewater engineering. |
| 5, Table 2 | Amend the commissioning duration '*for a period not exceeding 60 calendar days for each item of infrastructure'*. | The Delegated Officer has increased the commissioning timeframe to 90 calendar days as proposed in the application, which is considered sufficient for commissioning of all infrastructure prior to time-limited operations. |
| 13, Table 5 (4a) | Remove the condition on the basis that condition 4(b) in Table 5 is adequate for the management of chemical storage. All chemicals will be stored in accordance with relevant Australian Standards. | The Delegated Officer notes this information and has removed the condition. |
| 15, Table 7 | Amend the limit for Nitrogen to 20mg/L and removal of TDS 2,000 mg/L which is duplicated. | The Delegated Officer notes this information and has updated to match supporting documentation. |
| Section 2.4 Decision Report | The delegate of the Minister accepted the variation to the proposal (for components 1 and 2 of the proposal) in accordance with section 156B of the EPBC Act on 10 August 2022. | The delegated officer notes this information and has updated the section to include this information. |
| Section 3.1.1, Table 2 Decision Report | Include 'blended effluent' to:<br><br>Treated effluent generated during the commissioning process will not only be discharged via approved discharge points into the environment until it meets the relevant water quality discharge criteria. | The condition has been reworded to:<br><br>*Treated and blended effluent generated during the commissioning process will only be discharged via approved discharge points.* |
| | Deletion of 'Solid Waste Management Plan' and replace with 'TEMP'. | The condition has been reworded to:<br><br>*Manage wastes in accordance with the AIP TEMP.* |
| | Deletion of 'WWTP' and replace with 'spray field boundary' | The condition has been reworded to:<br><br>*A spray drift buffer implemented around the spray field boundary.* |

# Appendix 3: Application validation summary

| SECTION 1: APPLICATION SUMMARY (as updated from validation checklist) | | | | | |
|---|---|---|---|---|---|
| **Application type** | | | | | |
| Works approval | ☒ | W6723/2022/1 | | | |
| ~~Licence~~ | ☐ | ~~Relevant works approval number:~~ | | ~~None~~ | ☐ |
| | | ~~Has the works approval been complied with?~~ | ~~Yes ☐ No ☐~~ | | |
| | | ~~Has time limited operations under the works approval demonstrated acceptable operations?~~ | ~~Yes ☐ No ☐ N/A ☐~~ | | |
| | | ~~Environmental Compliance Report / Critical Containment Infrastructure Report submitted?~~ | ~~Yes ☐ No ☐~~ | | |
| | | ~~Date report received:~~ | | | |
| ~~Renewal~~ | ☐ | ~~Current licence number:~~ | | | |
| ~~Amendment to works approval~~ | ☐ | ~~Current works approval number:~~ | | | |
| ~~Amendment to licence~~ | ☐ | ~~Current licence number:~~ | | | |
| | | ~~Relevant works approval number:~~ | | ~~N/A~~ | ☐ |
| ~~Registration~~ | ☐ | ~~Current works approval number:~~ | | ~~None~~ | ☐ |
| Date application received | | 29 July 2022 | | | |
| **Applicant and premises details** | | | | | |
| Applicant name/s (full legal name/s) | | Onslow Infraco Pty Ltd | | | |
| Premises name | | North West Coastal Highway Temporary Camp | | | |
| Premises location | | Miscellaneous Licenses L08/205, L08/215 & L08/216<br>Pastoral Lease 3114/905<br>Peedamulla WA 6710 | | | |
| Local Government Authority | | Shire of Ashburton | | | |
| **Application documents** | | | | | |
| HPCM file reference number: | | DER2018/001042-7 | | | |
| Key application documents (additional to application form): | | • NWCH Camp_WAA_Form_reduced size<br>• NWCH_Camp_WAA_Supporting Document<br>• NWCH Camp WAA_Cover Letter<br>• Attachment 1A - Proof of Occupier Status<br>• Attachment 1B – ASIC Company Extract<br>• Attachment 2 - Prescribed Map<br>• Attachment 5A – EP Act-s41A Decision<br>• Attachment 5B - Request to AIP<br>• Attachment 8A – Terrestrial Environmental Management | | | |

| SECTION 1: APPLICATION SUMMARY (as updated from validation checklist) | |
|---|---|
| | Plan<br>• Attachment 8B – Flora and Vegetation<br>• Attachment 8C – Fauna and SRE<br>• Attachment 8D – Tech Memo_Groundwater Investigations<br>• Attachment 8E – Surface Water Assessment<br>• Attachment 8 F – Stakeholder Engagement |
| **Scope of application/assessment** | |
| Summary of proposed activities or changes to existing operations. | Construction of a temporary Sequencing Batch Reactor (SBR) Wastewater Treatment Plant (WWTP) and irrigation spray field to support preliminary investigative works for the larger Ashburton Infrastructure Project (AIP). |

Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

| Prescribed premises category and description | Proposed production or design capacity | Proposed changes to the production or design capacity (amendments only) |
|---|---|---|
| Category 85:<br>Sewage facility: premises —<br>(a) on which sewage is treated (excluding septic tanks); or<br>(b) from which treated sewage is discharged onto land or into waters | 50 $m^3$ per day | No proposed changes |

| Legislative context and other approvals | | |
|---|---|---|
| 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? | Yes ☒ No ☐ | Referral decision No: 2320<br>Managed under Part V ☒<br>Assessed under Part IV ☒ |
| Does the applicant hold any existing Part IV Ministerial Statements relevant to the application? | Yes ☒ No ☐ | Ministerial statement No:<br>EPA Report No: |
| Has the proposal been referred and/or assessed under the EPBC Act? | Yes ☒ No ☐ | Reference No:<br>Submission numbers:<br>• IBSASUB-20211116-7ED1E83C<br>• IBSASUB-20211116-FA3CF966<br>IBSA numbers:<br>• IBSA-2021-460; and<br>• IBSA-2021-0461. |

| SECTION 1: APPLICATION SUMMARY (as updated from validation checklist) | | |
|---|---|---|
| Has the applicant demonstrated occupancy (proof of occupier status)? | Yes ☒ No ☐ | Certificate of title ☐<br>General lease ☐ Expiry:<br>Miscellaneous lease ☒ (x3)<br>Expiry: 09/03/2042<br>Other evidence ☐ Expiry: |
| Has the applicant obtained all relevant planning approvals? | Yes ☐ No ☒ N/A ☐ | Approval:<br>Expiry date:<br>If N/A explain why? |
| Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal? | Yes ☒ No ☐ | CPS No: 818/12<br>Clearing is conducted under EPA Act Clearing Approval. |
| Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal? | Yes ☐ No ☒ | Application reference No: N/A<br>Licence/permit No: N/A |
| Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal? | Yes ☒ No ☐ | Application reference No: DWERVT10104~3<br>Licence/permit No:048709<br>CAW207565 |
| Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)? | Yes ☒ No ☐ | Name: Pilbara Surface Water Area & Pilbara Groundwater area<br>Type: Proclaimed Groundwater Area & Surface Water Area<br>Has Regulatory Services (Water) been consulted?<br>Yes ☐ No ☒ N/A ☐<br>Regional office: North West |
| Is the Premises situated in a Public Drinking Water Source Area (PDWSA)? | Yes ☐ No ☒ | Name: N/A<br>Priority: N/A<br>Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)?<br>Yes ☐ No ☐ N/A ☒ |
| Is the Premises subject to any other Acts or subsidiary regulations (e.g. *Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx*) | Yes ☒ No ☐ | • *Environment Protection and Biodiversity Conservation Act 1999*<br>• *Rights in Water and Irrigation Act 1914* |

| SECTION 1: APPLICATION SUMMARY (as updated from validation checklist) | | |
|---|---|---|
| | | • *Environmental Protection (Controlled Waste) Regulations 2004*<br>• *Environmental Protection (Noise) Regulations 1997* |
| Is the Premises within an Environmental Protection Policy (EPP) Area? | Yes ☐ No ☒ | N/A |
| Is the Premises subject to any EPP requirements? | Yes ☐ No ☒ | N/A |
| Is the Premises a known or suspected contaminated site under the *Contaminated Sites Act 2003*? | Yes ☐ No ☒ | Classification: N/A<br>Date of classification: N/A |