# Decision Report

## Application for Works Approval

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

| | |
|---|---|
| **Works Approval Number** | W6617/2021/1 |
| **Applicant** | APC Equipment Hire Pty Ltd |
| **ACN** | 166 123 682 |
| **File number** | DER2021/000559 |
| **Premises** | APA Northern Goldfields Interconnect Pty Ltd Pindar Construction Camp<br>Legal description -<br>Within a portion of Lot 3805 on Plan 138739<br>As defined by the coordinates in Schedule 2 of the Works Approval |
| **Date of report** | 08 April 2022 |
| **Proposed Decision** | Works approval granted |

Marko Pasalich
Digitally signed by Marko Pasalich
Date: 2022.04.08 15:39:49 +08'00'

Marko Pasalich
A/MANAGER WASTE INDUSTRIES
REGULATORY SERVICES

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

# Table of Contents

# 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 operation of the premises. As a result of this assessment, works approval W6617/2021/1 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 Application summary and overview of premises

On 17 September 2021, the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake construction works relating to the construction and operation of a temporary worker accommodation camp including a packaged waste water treatment plant (WWTP) at the premises. The premises is located within the City of Greater Geraldton.

The premises relates to the category and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6617. 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 W6617.

The applicant is constructing the Northern Goldfields Interconnect Pipeline (NPI pipeline), a 300 mm diameter buried gas pipeline. The pipeline will commence at Ambania, continue 580 km and terminate 40 km south of Leinster. The project will connect existing gas assets in the two regions with the aim of providing reliable and increased supply to the industries in the area.

To support the construction of the project, several temporary construction worker camps will be established along the footprint of the NPI pipeline. The camps will be located in Pindar, Mount Magnet and Sandstone. This application relates to the Pindar Construction Camp.

The Pindar camp will be located approximately 5.1 km east of the town of Pindar. The camp will accommodate 327 people and generate an estimated volume of sewage of 250 L per person per day. The camp will include a membrane bioreactor (MBR) activated WWTP with a maximum design capacity of 101.4 $m^3$/day.

Treated waste water will be discharged onto a 3 ha spray irrigation field located on the premises.

In addition to the WWTP, the applicant intends to construct a reverse osmosis plant (RO plant) at the camp for potable water. The RO concentrate generated from the plant processes is below the Category 85B threshold (0.5 GL/y) for licencing under Schedule 1 of the *Environmental Protection Regulations 1987* (the Regs). However, the applicant intends to blend the RO concentrate with the WWTP effluent prior to discharge to the irrigation field. The RO concentrate volume is estimated to be 54.5 kL/day. The RO concentrate is considered a part of the WWTP effluent as it is blended prior to discharge and as such, has been included within the risk assessment.

The Pindar camp is only expected to be operational for approximately 194 days before being demolished. The applicant has requested both Commissioning and Time Limited Operations as

part of the application. Due to the short operational period of the plant, an extended Time Limited Operations period of 220 days has been granted.

## 2.3 Part IV of the EP Act

The applicant has a relevant Part IV Ministerial Statement that relates to the Northern Goldfields Interconnect Pipeline project. Ministerial Statement MS 1184 was published on 2 February 2022 and authorises the implementation of the proposal under specified conditions. As the Works Approval area is already cleared of vegetation and does not impact any Aboriginal heritage sites, there are no conditions within the Ministerial Statement which affect the assessment of the Pindar accommodation camp WWTP and irrigation field under Part V of the EP Act.

## 2.4 EPBC Act

The Northern Goldfields Interconnect Pipeline project was referred to the Department of Agriculture, Water and the Environment under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) (EPBC Number 2021/8900). Draft conditions were provided to the applicant and accepted on 4 April 2022 which a determination now pending. As the Works Approval area is already cleared of vegetation and is located on historical farmland, referral of the project under the EPBC Act will not impact the determination of the Works Approval under Part V of the EP Act.

# 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 decision report are detailed in Table 1 below. Table 1 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

**Table 1: Proposed applicant controls**

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| **Construction** | | | |
| Dust | Vehicle movement and earthworks associated with construction | Air / windborne pathway | • Water will be applied to roads that are prone to dust risk;<br>• Vehicle speed limits will be implemented on site;<br>• Biodegradable stabilising agents may be used to minimise dust lift-off;<br>• Opportunistic inspections for dust will be |

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| | | | undertaken to ensure dust control measures are effective;<br>• If visible dust emissions are noted, an assessment of the source will be made and additional water or an alternative treatment will be applied to the key source areas;<br>• The potential for high risk weather conditions for dust emissions (i.e. windy conditions) will be monitored and extra water applied in preparation; and<br>• An incident reporting system will be maintained to assist in managing environmental incidents such as dust emissions. |
| Noise | Vehicle movement and earthworks associated with construction | Air / windborne pathway | Compliance with the *Environmental Protection (Noise) Regulations 1997* (Noise Regulations) |
| Hydrocarbons/ chemicals | Leaks or spillages from vehicles and plant | Seepage to soil and groundwater | • Spill kits will be available on site;<br>• Refueling of immobile or semi-mobile equipment will be conducted using a service vehicle fitted with a spill kit;<br>• Light vehicle refueling facilities will be conducted in a dedicated area;<br>• Any spills will be controlled, contained and cleaned up in accordance with a Spill Management Procedure;<br>• Visual inspections of the soil surface will be carried out regularly;<br>• Spill kits will be inspected on a regular basis and replenished as required; and<br>• As incident reporting system will be maintained to assist in managing environmental incidents. |
| Construction waste / litter | Construction activities | Air / windborne pathways | • Construction waste will be collected in skip bins at a dedicated waste storage area; and<br>• Waste will be disposed of at a licensed facility. |
| **Operation** | | | |
| Sewage / sludge / treatment chemicals | Failure of sewage water treatment system / key containment | Overland runoff<br>/ migration into surface water | • Use of licensed contractors to install and operate the system;<br>• Use of purple pipes for recycled water; |

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| | infrastructure during normal operations of the WWTP | ways causing ecosystem disturbance or impacting surface water quality and amenity<br><br>Seepage to soil and groundwater causing contamination and impacting water quality | • Monitoring system integrity;<br>• Regular maintenance;<br>• Critical spares to be kept on site;<br>• Local maintenance staff;<br>• Alarms on key infrastructure;<br>• Ensure equipment used is reliable with track record;<br>• WWTP to be bunded within a 1 mm HDPE liner; and<br>• Chemical storage to be accommodated in a self-bunded storage container. |
| Treated waste water / RO concentrate | Failure of sewage water treatment system / key containment infrastructure during normal operations of the WWTP<br><br>Discharge of treated waste water to an area other than the dedicated irrigation field. | Flooding or pooling / overspray or spray drift / overland runoff / migration into surface water ways causing ecosystem disturbance or impacting surface water quality and amenity<br><br>Spills / leaks resulting in seepage to soil and groundwater causing contamination and impacting water quality | • Management document to guide the use of recycled water;<br>• Education / training programs;<br>• Use of purple pipes for recycled water;<br>• Use of licensed contractors to install the system;<br>• Monitoring system integrity;<br>• Regular maintenance;<br>• Critical spares to be kept on site;<br>• Local maintenance staff;<br>• Alarms on key infrastructure;<br>• Ensure equipment used is reliable with track record;<br>• Treated waste water only used on areas that do not signs of pooling;<br>• Three day storage capacity in case of wet weather;<br>• Authorised people only to access the irrigation area;<br>• Signs of recycled water in use shall be erected around the irrigation field; and<br>• WWTP to be bunded within a 1 mm HDPE liner. |
| Odour | Normal and abnormal operations of the WWTP | Air/windborne pathway causing impacts to | • None provided |

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| | | health and amenity | |
| Noise | WWTP air blower (60 dB at 10 m) | Air/windborne pathway causing impacts to health and amenity | • None provided |
| Pest/vermin | Mosquito breeding in recycled water storage tank | Breeding of mosquitos causing impacts to human health and amenity | • All tanks are sealed. |

### 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 2 and **Error! Reference source not found.** 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 |
|---|---|
| Residential premises | Approximately 320 m south of the premises boundary |
| Pindar townsite – Old Pindar Hotel, Pindar Heritage Homestead and Pindar train station | Approximately 5 km west of the premises boundary |
| Agricultural premises | Immediately surrounding premises |
| **Environmental receptors** | **Distance from prescribed activity** |
| Conservation significant flora | The nearest mapped priority flora record is *Verticordia chrysostachys* var. *pallida* (Priority 3), located 0.74 km from the premises boundary.<br>The nearest mapped threatened flora record is *Eremophila viscida* (Endangered) located approximately 15 km from the premises boundary. |
| Conservation significant fauna | The nearest conservation significant fauna record is *Leipoa ocellata* (malleefowl), listed as Vulnerable and mapped approximately 0.23 km |

| | |
|---|---|
| | west from the premises boundary. |
| Ecological community (TECs/PECs) | The nearest known conservation significant ecological community is Eucalypt woodlands of the Western Australian Wheatbelt (Priority 3 WA and Critically Endangered under Commonwealth), mapped approximately 5.5km east from the proposed premises boundary. |
| Hydrology | The eastern extent of the premises boundary intersects a minor waterline. |
| Underlying groundwater | Approximately between 15 and 30 m bgl |

## 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 3.

Works approval W6617 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 3 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 decision 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 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** | | | | | | | | |
| Construction of WWTP<br><br>Vehicle and plant movements and associated activities | Noise<br><br>Dust | Air/windborne pathway causing impacts to health and amenity | Residences 320 m south of the premises<br><br>Agricultural land immediately surrounding the premises | Refer to Section 3.1.1 | **Low Risk**<br>C = slight<br>L = unlikely | Y | N/A | The Delegated Officer has considered the risk of dust and noise as not foreseeable due to the separation distance between the source and receptors.<br><br>Dust can be adequately regulated by section 49 of the EP Act.<br><br>Noise emissions can be adequately managed by the Noise Regulations. |
| | Hydrocarbons and chemicals (spills and leaks) | Overland runoff / migration into surface water ways potentially causing ecosystem disturbance or impacting surface water quality<br><br>Localised contamination of soils causing impacts to amenity | Ephemeral creek with the south eastern corner of the premises<br><br>Agricultural land immediately surrounding the premises<br><br>Underlying groundwater approximately between 15 and 30 m bgl | Refer to Section 3.1.1 | **Low Risk**<br>C = slight<br>L = unlikely | Y | N/A | The Delegated Officer considers the risk of hydrocarbons and chemical impacts as minimal and superficial. The Delegated Officer is of the opinion that the risks can be adequately managed through the applicants controls and by section 49 of the EP Act. |
| | Construction | Windborne | Agricultural | Refer to | **Low Risk** | Y | N/A | The Delegated Officer considers |

| 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** | | | | |
| | waste/litter | pathways causing impacts to ecosystem health and amenity | land immediately surrounding the premises<br>Residences 320 m south of the premises | Section 3.1.1 | C = slight<br>L = unlikely | | | the risk of litter/construction waste impacts as minimal and superficial. The Delegated Officer is of the opinion that the risks can be adequately managed through the applicants controls and by section 49 of the EP Act. |
| **Commissioning and Operation**<br>**(including time-limited-operations operations)** | | | | | | | | |
| Operation of WWTP | Odour<br><br>Noise | Air/windborne pathway causing impacts to health and amenity | Residences 320 m south of the premises | Refer to Section 3.1.1 | **Low Risk**<br>C = slight<br>L = unlikely | Y | N/A | The Delegated Officer considers that the risk of odour and noise are not foreseeable due to distance from receptors and as this is a packaged WWTP system.<br>Noise and odour can be adequately regulated by section 49 of the EP Act. |
| | Pests / vermin | Breeding of mosquitos causing impacts to human health and amenity | Residences 320 m south of the premises | Refer to Section 3.1.1 | **Low Risk**<br>C = slight<br>L = unlikely | Y | N/A | The Delegated Officer considers that as this is a packaged WWTP system, the risk of pests / vermin is not foreseeable. |
| | Sewage<br><br>Treated Waste Water | Spills / leaks resulting in migration into surface water ways causing ecosystem disturbance or impacting surface water | Agricultural land directly adjacent to the Premises<br><br>Ephemeral creek with the south eastern corner of the | Refer to Section 3.1.1 | **Medium Risk**<br>C = moderate<br>L = unlikely | Y | Conditions 1, 5, 7, 14, 16 & 17 | The Delegated Officer considers that the controls proposed by the applicant are adequate for managing the WWTP in a way that prevents system failures and decreases the risk of environmental harm in the event of abnormal operations (e.g. loss of containment event). |

| 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 | | | | |
| | Treatment Chemicals<br><br>Solid waste/sludge | quality and amenity<br><br>Spills / leaks resulting in seepage to soil and groundwater causing contamination and impacting water quality | premises<br><br>Flora and fauna in or around the vicinity of the Premises<br><br>Underlying groundwater approximately between 15 and 30 m bgl | | | | | |
| Discharge of treated waste water onto the irrigation field | Treated waste water (diluted with RO Concentrate) | Flooding / pooling / overland runoff / migration into surface water ways potentially causing ecosystem disturbance or impacting surface water quality<br><br>Overspray / spray drift from irrigation activities discharging treated waste water into areas other than the designated irrigation area | Agricultural land directly adjacent to the Premises<br><br>Ephemeral creek with the south eastern corner of the premises<br><br>Flora and fauna in or around the vicinity of the Premises<br><br>Underlying groundwater approximately between 15 and 30 m bgl | Refer to Section 3.1.1 | **Medium Risk**<br>C = moderate<br>L = possible | Y | Conditions 1, 5, 6, 14 & 15 | Refer to Section 3.3 |

| 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 | | | | |
| | | causing impacts to human health<br><br>Seepage through soil and to groundwater causing contamination and impacting water quality | | | | | | |

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.

## 3.3 Detailed risk assessment for discharge of treated wastewater and RO concentrate

### 3.3.1 Description of emissions risk event

The applicant intends to discharge treated wastewater blended with RO concentrate (the waste by-product from the RO plant) to a dedicated irrigation field. The volume of treated wastewater discharged to the irrigation field will be up to 101 $m^3$/day and the volume of RO concentrate will be up to 55 $m^3$/day. Irrigation will be onto a dedicated 3 ha irrigation field via an above ground spray system. The premises shall only be operational for approximately 194 days before being decommissioned and deconstructed. Irrigation of treated wastewater and RO concentrate has the potential to cause impacts to soil (salinification, sodification, nutrification).

### 3.3.2 Identification and general characterisation of emission

The Applicant proposes to discharge up to 156 $m^3$/day of blended effluent to the 3 ha irrigation field at a hydraulic loading rate of 310 L/person/day. The expected water quality parameters of the blended effluent prior to irrigation are contained in Table 4 below:

**Table 4: Proposed effluent quality to be discharged to the irrigation spray-field**

| Parameter | Expected concentration |
|---|---|
| Biochemical oxygen demand | <20 mg/L |
| Total suspended solids (TSS) | <30 mg/L |
| Total nitrogen (TN) | <30 mg/L |
| Total phosphorous (TP) | <10 mg/L |
| Total dissolved solids (TDS) | <2500 mg/L |
| Electrical conductivity (EC) | <4000 µS/cm |
| *E. coli* | <10 CFU/100mL |
| Residual free chlorine | <2 mg/L |
| Sodium ions (Na+) | 490 mg/L |
| Calcium ions (Ca2+) | 39 mg/L |
| Magnesium ions (Mg2+) | 75 mg/L |

### 3.3.3 Description of potential adverse impact from the emission

**Nutrient loading:**

Excess quantities of N and P can leach into groundwater and surface water resulting in the rapid growth of microorganisms (i.e. algal blooms) and the over stimulation of plant growth. Therefore, excess quantities of nutrients has the potential to impact surface water bodies, groundwater and native vegetation.

The field data collected by the applicant indicates that the soil within the irrigation field area is a slightly acidic silty loam. Irrigation shall be onto a historical agricultural field. The site is

predominantly bare of vegetation with a few scattered small shrubs.

Based on the nutrient uptake values for a risk category D as described in Table 1 – Eutrophication risk (Water Quality Protection Note 22), and assuming that the site operates for no longer than the granted 220 day time limited operations phase, a 3 ha size irrigation field should be appropriate to manage nutrient loading on the receiving environment. It is noted that the lack of vegetation may affect the receiving environment's ability to uptake nutrients and irrigation onto bare land is not usually recommended. It is expected that some vegetation should establish during the irrigation period.

**Salinity:**

Salinity is the concentration of soluble salts in water or soils. High levels of salinity can inhibit a plants ability to uptake water and can cause plant stress, ultimately leading to reduced plant growth or death. During the RO plant process, soluble salts are forced out of brackish or saline water to create fresh drinking water. The remaining salts are a waste product and are proposed to be mixed into the treated wastewater before then discharging the combined effluent onto the irrigation field.

With each irrigation event, more salt is added to the irrigation field. Plants take up much of the applied water but leave the salt behind, therefore, the effects of salinity can be cumulative. As the RO concentrate can contain a high concentration of salt, the level of salts in the effluent must be managed prior to discharge to avoid impacts to soil and vegetation at the discharge point (irrigation field).

While there is currently little to no vegetation growing at the irrigation field site, impacts from salinity must still be managed to ensure the soil can still be used for agricultural purposes after the decommissioning and demolition of the camp.

The electrical conductivity of the blended effluent is highly saline (<4000 µS/cm at 25°C) and as such is only suitable for plants with a high tolerance to salinity. Some of the crops likely to be grown in this area are tolerant to this level of salinity. Due to the short nature of the operation, it is unlikely that there will long lasting salinity impacts in the area which could impact future agricultural uses of the land.

**Sodicity:**

Sodicity is the presence of a high proportion of sodium ions relative to other cations and can be indicated by the sodium adsorption ratio (SAR). SAR relates to the amount of sodium relative to calcium and magnesium in water. As sodium salts are leached into the soil, some of the sodium ions remain bound to clay particles, displacing other cations.

Sodicity directly relates to salinity. The risk of adverse impacts increases if the water being irrigated has a relatively high SAR but low salinity.

Soil sodicity leads to a degradation of soil structure causing erosion and decreased water infiltration and flow. Decreased permeability of the receiving soil reduces root penetration and air availability for plants as soils become waterlogged at the root zone. Waterlogged soils may become saline as salts are unable to leach through the profile and accumulate in the topsoil and root zone. A reduction in root penetration, air availability and increased soil salinity can lead to reduced plant growth or death.

High dispersibility increases the erodibility of soil, as clay platelets become detached from larger clay aggregates. This may cause a reduction in water quality at surrounding watercourses due to the increased nutrient and sediment transported through surface runoff. There is no significant watercourses / surface water within 10km of the irrigation field and the closest water body to the site is an ephemeral creek located 250 m east / south east of the irrigation field.

As the SAR of the soil prior to irrigation is low (2.8), and salinity is relatively high (<4000 µS/cm at 25°C), it is unlikely that there will be a sodicity hazard. Furthermore, the crops likely to be grown within this area tend to have a greater tolerance to high SAR.

### 3.3.4 Overall rating for the discharge of treated wastewater and RO concentrate

Considering the temporary nature of the proposed premises (no more than 220 days) and with consideration to the proposed controls to manage nutrient loading, salinity and sodicity onto the receiving environment, the Delegated Officer has determined the overall risk of adverse impacts to the soil condition through the irrigation of blended effluent to be **Medium**.

# 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 20 August 2021 | None received | N/A |
| Local Government Authority advised of proposal on 6 December 2021 | None received | N/A |
| Department of Mines, Industry Regulation and Safety (DMIRS) advised of proposal 6 December 2021 | None received | N/A |
| Department of Health advised of the proposal 6 December 2021 | The Department of Health replied on the 21 December 2021 with the following comments:<br>• Each onsite WWTP system and disposal area requires a formal application to be submitted to the Local Government Authority for assessment and forwarding onto the DoH;<br>• The water quality criteria of the effluent should meet the DoH's requirements as per *Health (Treatment of Sewage and Disposal of Effluent and Liquid Wastes) Regulations 1972*;<br>• The wastewater treatment plant should be engineer certified detailing the requirements as specified on the DoH's website;<br>• A specific site and soil evaluation (SSE) report is required to be undertaken by a qualified consultant that is conducted during the wettest seasonal time of the year only | Noted. It is up to the Works Approval holder to ensure that all other necessary approvals and requirements are in place before commencing operations at the site.<br>Condition 3(a) of the Works Approval details that a civil engineer must certified that the system has been constructed in accordance with the requirements detailed in Condition 1. |

| | | |
|---|---|---|
| | (July/August) as per AS/NZS 1547:2012 requirements;<br>• The disposal area should be sized in accordance to the above standard requirements and permeability findings;<br>• Consideration that the wastewater treatment system and disposal areas comply with the Government Sewage Policy requirements;<br>• Scaled drawings to detail the required volume of wastewater treatment plant and disposal area for the proposed volumes and purpose and showing all exclusion zones and setback measurements. | |
| Applicant was provided with draft documents on 29 March 2022 | The applicant replied on 8 April 2022 with the following comments:<br>• EPA MS 1184 was issued on 2 February 2022;<br>• DAWE issued final draft comments which APA accepted on 4 April 2022. The decision is now imminent;<br>• Updated TDS value (<2500 mg/L); and<br>• Updated EC value (<4000 µS/cm). | Noted. The Works Approval and Decision Report have been updated to include these comments. |

# 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. ANZECC & ARMCANZ, October 2000. Australian and New Zealand Guidelines for Fresh and Marine Water Quality, Volume 3, Primary Industries – Rationale and Background Information. Perth, Western Australia.
2. Department of Water (DOW), July 2008. Water Quality Protection Note 22 (WQPN22): Irrigation with nutrient rich wastewater. Perth, Western Australia.
3. Department of Health (DOH), 2011. Guidelines for the Non-potable Uses of Recycled Water in Western Australia. Perth, Western Australia.
4. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
5. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
6. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.

# Appendix 1: Application validation summary

<table>
<tr><th colspan="6">SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)</th></tr>
<tr><td colspan="6">Application type</td></tr>
<tr><td>Works approval</td><td>☒</td><td colspan="4"></td></tr>
<tr><td rowspan="5">Licence</td><td rowspan="5">☐</td><td>Relevant works approval number:</td><td></td><td>None</td><td>☐</td></tr>
<tr><td colspan="3">Has the works approval been complied with?</td><td colspan="2">Yes ☐ No ☐</td></tr>
<tr><td colspan="3">Has time limited operations under the works approval demonstrated acceptable operations?</td><td colspan="2">Yes ☐ No ☐ N/A ☐</td></tr>
<tr><td colspan="3">Environmental Compliance Report submitted?</td><td colspan="2">Yes ☐ No ☐</td></tr>
<tr><td>Date report received:</td><td colspan="3"></td></tr>
<tr><td>Renewal</td><td>☐</td><td>Current licence number:</td><td colspan="3"></td></tr>
<tr><td>Amendment to works approval</td><td>☐</td><td>Current works approval number:</td><td colspan="3"></td></tr>
<tr><td rowspan="2">Amendment to licence</td><td rowspan="2">☐</td><td>Current licence number:</td><td colspan="3"></td></tr>
<tr><td>Relevant works approval number:</td><td></td><td>N/A</td><td>☐</td></tr>
<tr><td>Registration</td><td>☐</td><td>Current works approval number:</td><td></td><td>None</td><td>☐</td></tr>
<tr><td colspan="2">Date application received</td><td colspan="4">17 September 2021</td></tr>
<tr><td colspan="6">Applicant and premises details</td></tr>
<tr><td colspan="2">Applicant name/s (full legal name/s)</td><td colspan="4">APC Equipment Hire Pty Ltd</td></tr>
<tr><td colspan="2">Premises name</td><td colspan="4">APA Northern Goldfields Interconnect Pty Ltd project - Pindar Construction Camp.</td></tr>
<tr><td colspan="2">Premises location</td><td colspan="4">Lot 3805 on Plan 138739<br>Geraldton Mount Magnet Road, Pindar, WA 6631<br>Coordinates:
<table>
<tr><th>Latitude</th><th>Longitude</th></tr>
<tr><td>-28.47032983</td><td>115.85056193</td></tr>
<tr><td>-28.47030942</td><td>115.85081648</td></tr>
<tr><td>-28.47076169</td><td>115.85082691</td></tr>
<tr><td>-28.47012326</td><td>115.85904294</td></tr>
<tr><td>-28.46967108</td><td>115.85904372</td></tr>
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<tr><td>-28.47564724</td><td>115.85950453</td></tr>
<tr><td>-28.47574009</td><td>115.85059325</td></tr>
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| SECTION 1: APPLICATION SUMMARY (as updated from validation checklist) | |
|---|---|
| Local Government Authority | City of Greater Geraldton |
| **Application documents** | |
| HPCM file reference number: | DER2018/001042-6 |
| Key application documents (additional to application form): | Supporting documents provided with the application:<br>- Pindar construction camp works approval supporting information (September 2021), including:<br>  o Proof of applicant status.<br>  o ASIC Company Extract<br>  o Prescribed premises map<br>  o Environmental commissioning map<br>Proposed activities. |
| **Scope of application/assessment** | |
| Summary of proposed activities or changes to existing operations. | Construction of a temporary worker camp in Pindar. The camp will include a sewage treatment facility with a maximum design capacity of 101.4 $m^3$/day. Treated waste water will be mixed with a maximum of 55.4 $m^3$/day of brine from the RO plant. |

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) |
|---|---|---|
| **54 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.<br>100 $m^3$ or more per day | Proposed (from application form):<br>Estimated / actual throughput for each category applied for:<br>**81.8 $m^3$/day**<br>Maximum production or design capacity for each category applied for (based on infrastructure operating 24 hours a day, 7 days a week):<br>**155.9 $m^3$/day.** | |

| 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:<br>Managed under Part V ☐<br>Assessed under Part IV ☒<br>**Notes:**<br>Case number: CMS 17949<br>Assessment number 2284<br>**Decision: Assess – referral information.** |

| SECTION 1: APPLICATION SUMMARY (as updated from validation checklist) | | |
|---|---|---|
| | | The construction camp is associated with the wider project of the Northern Goldfields Interconnect Pipeline under assessment by the EPA.<br>https://www.epa.wa.gov.au/proposals/northern-goldfields-interconnect-pipeline.<br>Additional submissions as part of the Part IV review process were being addressed and the project is being considered at the September EPA Board. |
| Does the applicant hold any existing Part IV Ministerial Statements relevant to the application? | Yes ☐ No ☒ | Ministerial statement No: Still under assessment by the EPA.<br>EPA Report No: Still under assessment by the EPA.<br>***Note on 6/10/2021**: Final conditions and the report were being reviewed. Then will go to ED and Chairman for sign-off. Then to Minister. Subject to appeals period.*<br>***Note on 15/10/2021**: MM has been in touch with the EPA Part IV Assessing Officer and the EPA assessment for the project should be complete within a few weeks.* |
| Has the proposal been referred and/or assessed under the EPBC Act? | Yes ☒ No ☐ | Reference No: **EPBC 2021/8900**<br>***Note:** DAWE advised APA on 4 June that they have reviewed the information provided and the Department's next steps would be drafting particular manner requirements specifying the measures required to support a decision of 'Not a controlled action – particular manner'. At the time of this CEP, APA is awaiting a final decision to close out the EPBC referral.* |
| Has the applicant demonstrated occupancy (proof of occupier status)? | Yes ☒ No ☐ | Certificate of title ☐<br>General lease ☒ Expiry: **30 December 2022**<br>Mining lease / tenement ☐ Expiry:<br>Other evidence ☐ Expiry:<br>**Sub-lease** (camp and equipment laydown area) |

| SECTION 1: APPLICATION SUMMARY (as updated from validation checklist) | | |
|---|---|---|
| Has the applicant obtained all relevant planning approvals? | Yes ☐ No ☒ N/A ☐ | Approval:<br>Expiry date:<br>If N/A explain why?<br>***Note on application form:*** *Timing for the s.38 referral is based on the project being considered in September EPA Board meeting decision. Final decision expected in October 2021.* |
| Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal? | Yes ☐ No ☒ | CPS No: N/A<br>No clearing is proposed. |
| 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<br>No clearing is proposed. |
| Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal? | Yes ☐ No ☒ | Application reference No:<br>Licence/permit No:<br>Licence / permit not required. |
| Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)? | Yes ☒ No ☐ | Name: **Greenough River and Tributaries Catchment Area Surface Water Area proclaimed under the RIWI Act.**<br>**Gascoyne Groundwater Area proclaimed under the RIWI Act.**<br>Has Regulatory Services (Water) been consulted?<br>Yes ☐ No ☒ N/A ☐<br>Regional office: **Swan Avon.** |
| 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 ☒<br>**Note:** The nearest PDWSA is Yalgoo Water Reserve (P1), located ~79 km north east from the application area. |

| SECTION 1: APPLICATION SUMMARY (as updated from validation checklist) | | |
|---|---|---|
| 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 ☐ | - The construction and operation of pipelines are regulated under the *Petroleum Pipelines Act 1969* and subsidiary regulations; thereby requiring an Environment Plan submitted to and approved by DMIRS.<br>- *Mining Act 1978* – the pipeline project will be assessed by DMIRS.<br>- *Health Act 1911* – The applicant is currently applying for approval from the Department of Health for installation of the WWTP and on-site disposal of water.<br>- EPBC Act (DAWE) - EPBC 2021/8900. DAWE advised APA on 4 June that they have reviewed the information provided and the Department's next steps would be drafting particular manner requirements specifying the measures required to support a decision of 'Not a controlled action – particular manner'. At the time of this CEP, APA is awaiting a final decision to close out the EPBC referral. |
| 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 ☒ | Spatial data indicates that there are no contaminated sites mapped over the application area.<br>Classification: N/A<br>Date of classification: N/A |