Application for Licence

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

Choose an item.	L9249/2020/1
Applicant	Claw Environmental Pty Ltd
ACN	621 244 139
File Number	DER2020/000124
Premises	Claw Environmental 5 Forge Street WELSHPOOL WA 6106 Legal description – Part Lot 202 on Deposited Plan 9507 And Part Lot 86 on Deposited Plan 7655
Date of Report	31 August 2020
Proposed Decision	Licence granted

Tracey Hassell
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Date: 2020.08.31 10:45:49 +08'00'

Tracey Hassell
A/MANAGER WASTE INDUSTRIES
Officer delegated under section 20 of the Environmental Protection Act 1986

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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 operation of the Premises. As a result of this assessment, Licence L9249/2020/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Decision Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at https://www.der.wa.gov.au.

2.2 Application summary and overview of Premises

On 9 March 2020, the applicant submitted an application for a licence to the department under section 57 of the *Environmental Protection Act 1986* (EP Act).

The application is to seek a licence relating to rigid plastic and polystyrene recycling at the Premises. The Premises is approximately 8 km southeast of Perth CBD in the Canning Vale Light Industrial Area located within the City of Canning. The site has been in operation since 2003, with the Applicant acquiring the business in 2010. The site processes polyethylene (PE), polypropylene (PP) and extruded polystyrene (EPS).

The Premises relates to Category 61A activities and assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) are defined in Licence L9249/2020/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guidance Statement: Risk Assessments* (DER 2017) are outlined in Licence L9249/2020/1.

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 *Guidance Statement: Risk Assessments* (DER 2017).

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 operation which have been considered in this Decision Report are detailed in Table 1 below. Table 1 also details the proposed 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
Dust	Loading, unloading and vehicle movements.	Air/windborne pathway	Dust generation during operations is expected to be minimal due to the nature of the product received. Loading/unloading operations are performed on hardstand. Regular housekeeping will minimise the amount of loose material accumulating on the hard stand area which can be disturbed during loading and unloading.
Noise	Loading, unloading, processing and storage of products	Air/windborne pathway	All fixed plant operations are located within the factory building with the exception of the Genox 4080 shredder that is located adjacent the main building under the lean to. Partition wall and foam insulation panels are located throughout the processing shed as required. These are designed to contain noise within the shed. Anti-vibration mounts are used extensively through the facility.
Odour	Processing	Air/windborne pathway	The factory building has both fixed and portable fans that can be used if required to avoid a build-up of fugitive odour emissions if required. The ridge cap of the building is vented to allow for natural convectional flow and circulation of air.
Wash water	Processing	Spills, stormwater runoff	Screens and sand filters are used on the washwater to remove residual fines and organic material. All excess wash water is analysed and removed offsite by an accredited controlled waste carrier. Sludge from waste tank 2 is removed as required by an accredited controlled waste carrier. Internal spillage of waste water is directed to the sump and captured in the wash water circuit.
Stormwater	Rainfall runoff	Overland flow	All stormwater sumps at the premise have screens fitted to prevent plastics entering the stormwater system. The screens are regularly maintained and cleaned. The site exit drain has an underflow/overflow interceptor fitted. Any stormwater collected by the waste water system is maintained in the waste water system.

Emission	Sources	Potential pathways	Proposed controls
Litter	Loading, unloading, processing and storage of products.	Air/windborne pathway Stormwater runoff	If non-conforming wastes are bought to site or found during collection, the material is not unloaded or collected, and removed offsite by the customer. The site is regularly maintained by sweeping and rubbish collection to ensure there is minimal opportunity for spilt or dropped plastics to become migratory. Load controls are in place to avoid waste becoming airborne e.g. storage of smaller plastics in IBC's. Shade cloth is installed on the perimeter fencing. EPS material has the highest risk of airborne littering. To control this, the Applicant does not accept any loose EPS material unless it is received in closed bags.
Fire/smoke	Fire	Air/windborne pathway Firewater runoff	The alarm system has thermal sensors fitted to monitor any rapid rise in temperature. The alarm system is monitored remotely by an external security company. If an alarm event occurs emergency services are immediately contacted. Staff are trained in the use of fire extinguishers and are aware of their locations and application. Equipment is isolated when not in use. The processing area and storage areas are cleaned at the end of shift to reduce the risk of fire migrating from one area to another should a fire break out. Routine maintenance of plant and equipment to ensure it is in good condition. Annual Thermal Scans are conducted on all switch boards to monitor electrical supply integrity. Hot Work Permit system, to ensure any hot work outside of designated areas is controlled and monitored. Forklifts are fitted with spark arrestors to their exhaust systems.

3.1.2 Receptors

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), the Delegated Officer has excluded employees, visitors and contractors of the Applicant 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 Figure 1 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 *(Guidance Statement: Environmental Siting* (DER 2016)).

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

Human receptors	**Distance from prescribed activity**
Commercial/Industrial land use	Commercial/industrial receptors are located adjacent to the Premise in all directions.
Closest residential receptor	The nearest residential properties are located 585 m north northeast of the Premises and 1,000 m east southeast as measured from the prescribed premises boundary.
Environmental receptors	**Distance from prescribed activity**
Groundwater	Static groundwater is estimated as being 3.3 m below ground level (mbgl) according to the Perth Groundwater Atlas. The beneficial use of the groundwater is listed as fresh with salinity levels of between 250-500 mg/L. Groundwater flow direction beneath the site is regionally towards the south towards the Canning Rover. The Premises lies within the RIWI Act 1914 proclaimed Perth Groundwater Area. There are seven licensed groundwater abstraction bores within one kilometre of the Premises. Two of these bores are located hydrologically upgradient (north) from the site with the remaining 5 bores located cross-hydraulic gradient from the Premises.
Surface Waters	A conservation wetland (Tomato Lake) is located 1,150m north of the Premises. A multiple use category dampland is located 1,150 m south of the Premises. The Anvil Way compensation Basin is located 375 m east southeast of the Premises. The compensation basin was rehabilitated in 2010 to improve its ability to filter and treat polluted stormwater from the Mills Street Catchment. The Mills Street Main Drain runs through Welshpool and drains a 12km² residential-industrial catchment before discharging to the Canning River.
Threatened Ecological Communities	An endangered banksia dominated woodland of the Swan Coastal Plain ecological community is located 400 m south of the Premises.

Figure 1: Distance to sensitive receptors

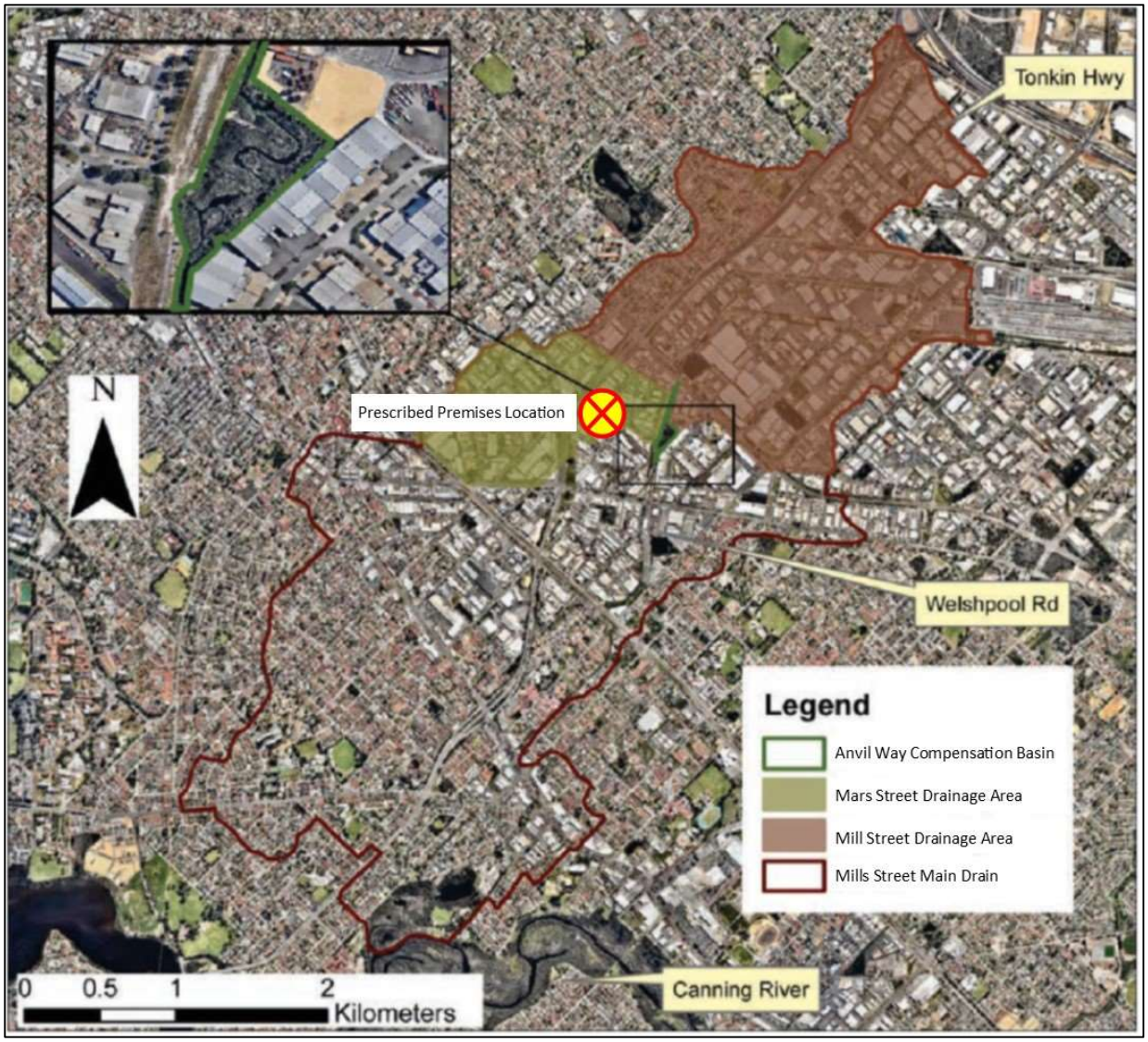

Figure 2: Drainage pathways and receptors

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) 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 licence 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.

Licence L9249/2020/1 that accompanies this Decision Report authorises emissions associated with the operation of the Premises i.e. Plastic recycling activities.

The conditions in the issued Licence, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 3: Risk assessment of potential emissions and discharges from the Premises during operation

Risk Event					Risk rating[1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Receival and storage of recyclable materials	Dust	Air/windborne pathway causing impacts to health and amenity	Commercial and industrial properties located adjacent the Premises Residential properties located 585 m and 1,000 m southeast of the Premises.	Refer to Section 3.1.1	C = Minor L = Rare **Low Risk**	Y	N/A	The receival and storage of recyclable materials is not likely to generate large amounts of dust. On this basis, the Delegated Officer considers that the Applicant's proposed dust mitigation controls are likely to be sufficient.
	Noise	Air/windborne pathway causing impacts to health and amenity	Commercial and industrial properties located adjacent the Premises Residential properties located 585 m and 1,000 m southeast of the Premises.	Refer to Section 3.1.1	C = Minor L = Possible **Medium Risk**	**N**	**Conditions 5, 10, 11, 12 & 13**	The results of the noise survey undertaken in 2013 identified that the allowable noise levels were exceeded at a number of locations along the boundary of the Premises. The Delegated Officer considers that due to the timeframe from the previous noise assessment, the results may not be representative of current activities and associated emissions. The proposed hours of operation fall within night time conditions as per the Environmental Protection (Noise) Regulations 1997 (Noise Regulations). As such, the Delegated Officer considers that additional noise validation assessment is required and that further regulatory controls may be required to mitigate noise emissions.

Risk Event					Risk rating[1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
	Plastic and polystyrene fines	Overland runoff potentially causing ecosystem disturbance or impacts to surface water quality	Multiple use category dampland located 1,150 m south of the Premises. The Anvil Way compensation Basin located 375 m east southeast of the Premises. The Mills Street Main Drain.	Refer to Section 3.1.1	C = Minor L = Unlikely **Medium Risk**	Y	Conditions 3 & 4 **Condition 5**	The Delegated Officer considers that the Applicant's proposed mitigation controls for plastic and polystyrene fines are likely to be sufficient with additional regulatory controls in place to mitigate potential emissions.
	Litter and windblown wastes	Air/windborne pathway causing impacts to health and amenity	Commercial and industrial properties located adjacent the Premises Residential properties located 585 m and 1,000 m southeast of the Premises.	Refer to Section 3.1.1	C = Slight L = Unlikely **Low Risk**	Y	Condition 4	The Premises activities are, by nature, not likely to generate large amounts of windblown waste. On this basis, the Delegated Officer considers that the Applicant's proposed windblown waste mitigation controls are likely to be sufficient.
Processing of recyclable materials	Dust	Air/windborne pathway causing impacts to health and amenity	Commercial and industrial properties located adjacent the Premises Residential properties located 585 m and 1,000 m southeast of the Premises.	Refer to Section 3.1	C = Minor L = Rare **Low Risk**	Y	N/A	The processing of recyclable materials is not likely to generate large amounts of dust. On this basis, the Delegated Officer considers that the Applicant's proposed dust mitigation controls are likely to be sufficient.

Risk Event					Risk rating[1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
	Noise	Air/windborne pathway causing impacts to health and amenity	Commercial and industrial properties located adjacent the Premises Residential properties located 585 m and 1,000 m southeast of the Premises.	Refer to Section 3.1	C = Minor L = Possible **Medium Risk**	**N**	**Conditions 5, 10, 11, 12 & 13**	The results of the noise survey undertaken in 2013 identified that the allowable noise levels were exceeded at a number of locations along the boundary of the Premises. The proposed hours of operation fall within night time conditions as per the Noise Regulations. As such, the Delegated Officer considers that additional regulatory controls are required to validate noise emissions and to reinforce Applicant controls.
	Odour	Air/windborne pathway causing impacts to health and amenity	Commercial and industrial properties located adjacent the Premises Residential properties located 585 m and 1,000 m southeast of the Premises.	Refer to Section 3.1.1	C = Slight L = Possible **Low Risk**	Y	N/A	While there are sensitive receptors located in proximity to the Premises, the premises activities are, by nature, not likely to generate large amounts of odour. On this basis the Delegated Officer considers that odour controls are not required.
	Wastewater	Loss of wastewater to ground impacting soil or groundwater quality	Soil and groundwater beneath the site. Groundwater and surface waters at offsite locations including the multiple use category dampland and the Anvil Way compensation Basin.	Refer to Section 3.1	C = Moderate L = Possible **Medium Risk**	Y	Conditions 3 and 4 **Condition 6**	The Delegated Officer considers that the Applicant's proposed mitigation controls for wastewater are likely to be sufficient with additional regulatory controls in place to mitigate potential emissions.

Risk Event					Risk rating[1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Fugitive emissions from fire event	Fire/smoke	Commercial and industrial properties located adjacent the Premises Residential properties located 585 m and 1,000 m southeast of the Premises. Loss of fire water to ground impacting soil or groundwater quality	Soil and groundwater beneath the site. Groundwater and surface waters at offsite locations including the multiple use category dampland and the Anvil Way compensation Basin.	Refer to Section 3.1	C = Moderate L = Possible **Medium Risk**	**N**	Condition 5 **Condition 14**	While there are residential receptors located down-prevailing wind of the premises, the Applicant controls are likely to be sufficient at mitigating the risk of a fire starting at the Premises. Further controls are required to mitigate the risk associated with losses of fire water to the environment.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guidance Statement: Risk Assessments* (DER 2017).

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

4. Consultation

Table 4 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 (15/05/2018)	None received	N/A
Application advertised in the West Australian newspaper (18/05/2018)	None received	N/A
Department of Fire and Emergency Services (DFES) (23/06/2020)	The Department of Fire and Emergency Services replied on 24/06/2020. DFES correspondence is listed below: • All drainage plans, relevant MSDS and Maps should be available to fire responders at the entrance to facility. • DFES understands that there is a single fire hose reel on the Premises. DFES state that the fire hose reel should be able to reach all relevant areas of the processing area. If this is not possible the Applicant should consider installing additional hose reels.	Noted. The Licence is conditioned to ensure the DFES recommendations are met where appropriate.

Consultation method	Comments received	Department response

Local Government Authority advised of proposal (19/05/2020)	The City of Canning replied on 5/06/2020. Relevant correspondence is listed below:
	• The land use was approved by the City as a Plastic Recycling Facility on 12 September 2012;
	• Some relevant conditions of Development Approval are:
	  ○ All cutting or crushing of plastics to be carried out inside the existing building onsite and mechanical ventilation installed to capture and disperse odours; and
	  ○ No waste water being permitted to be discharged into the stormwater system.
	• Since the business commenced operations, the City has only received one noise complaint regarding the business activity in June 2011; and
	• In addition to the noise complaint received, the City investigated a complaint of polystyrene beads accumulating within the Anvil Street Compensation Basin. The premises was suspected of causing the problem and has since installed screens on the drains to prevent polystyrene and plastic fines from entering the stormwater system.
		Noted. The Licence is conditioned to prevent conflict with Development Approval conditions where appropriate.
		Controls have been added to the licence to mitigate the risk of polystyrene from entering the stormwater system.
		The Delegated Officer understands that mechanical ventilation has not been installed at the Premises. The Delegated Officer also understands that no odour complaints have been received and considers that the activities are, by nature, not likely to generate significant odour emissions.
		On this basis, the Delegated Officer does not consider additional controls for mechanical odour extraction necessary.

Applicant was provided with draft documents on 20/08/2020	Applicant comments and responses are provided in Appendix 1	

5. Conclusion

Based on the assessment in this Decision Report, the Delegated Officer has determined that a licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

References

1. Department of Environment Regulation 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
2. Department of Environment Regulation 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
3. Department of Environment Regulation 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.

Appendix 1: Summary of applicant's comments on risk assessment and draft conditions

Condition	Summary of applicant's comment	Department's response
10	Applicant requested an extension to the noise validation assessment to undertake remedial actions for noise emissions prior to undertaking the assessment.	Licence updated to reflect the request.
14	Applicant requested additional time to address fire management conditions.	Fire management conditions have been updated to reflect DFES feedback thus removing the requirement for stormwater isolation valve.

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY					
Application type					
Licence	☒	Relevant works approval number:		None	☒
		Has the works approval been complied with?		Yes ☐ No ☐ N/A ☒	
		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 ☐ N/A ☒	
		Date Report received: NA			
Date application received		9 March 2020			
Applicant and Premises details					
Applicant name/s (full legal name/s)		Claw Environmental Pty Ltd			
Premises name		Claw Environmental			
Premises location		Lot 202 on Plan 009507, Volume 1402 Folio 99 Part Lot 86, Volume 1636 Folio 704			
Local Government Authority		City of Canning			
Application documents					
HPCM file reference number:		DER2020/000124			
Key application documents (additional to application form):		Environmental Summary of Activities			
Scope of application/assessment					
Summary of proposed activities or changes to existing operations.		Operation of a plastics recycling facility.			

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
Category 61A: Solid waste facility: premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated, or discharged onto land.	4,500 tonnes per annual period

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: Managed under Part V ☒ Assessed under Part IV ☐

Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes ☐ No ☒	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes ☐ No ☒	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ☒ No ☐	Certificate of title ☐ Current Lease ☒ Lot 202 Lease Expiry: 28 February 2022 Part Lot 86 Lease Expiry: 28 February 2022 Other evidence ☐ Expiry:
Has the applicant obtained all relevant planning approvals?	Yes ☒ No ☐ N/A ☐	Approval: 12 September 2012
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes ☐ No ☒	CPS No: N/A
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes ☐ No ☒	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 ☒	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: N/A Has Regulatory Services (Water) been consulted? Yes ☐ No ☐ N/A ☐
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes ☐ No ☒	Name: NA Priority: NA Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? 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 ☒	NA
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes ☐ No ☒	NA
Is the Premises subject to any EPP requirements?	Yes ☐ No ☒	NA
Is the Premises a known or suspected contaminated site under the *Contaminated Sites Act 2003*?	Yes ☐ No ☒	Classification: N/A