

Decision Report

Application for Works Approval

Part V Division 3 of the Environmental Protection Act 1986

Works Approval Number W6828/2023/1 Applicant Dodd & Dodd Group Pty Ltd ACN 009 238 671 File number DER2023/000332 **Premises** C.D. Dodd - Onslow Legal description Part of Lot 550 on Deposited Plan 414367 Reserve 53324 Certificate of Title Volume LR3169 Folio 963 As defined by the coordinates in Schedule 1 of the works approval 30/11/2023 Date of report

Steve Checker

Decision

MANAGER WASTE INDUSTRIES REGULATORY SERVICES

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

Works approval granted

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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 operation of the premises. As a result of this assessment, works approval W6828/2023/1 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

On 16 May 2023, 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 development of a scrap metal processing and salvaging operation at the premises to support offshore infrastructure decommissioning works. Initially the applicant will accept and process containers and structures retrieved from decommissioned hydrocarbon fields, which will be delivered to the premises by road from the Port of Ashburton. The premises is approximately 30 km south-east of Onslow.

The premises relates to the categories and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6828/2023/1. 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 W6828/2023/1.

2.3 Overview of premises

The proposed premises will be within the current footprint and licensed boundary of the Pilbara Regional Waste Management Facility (PRWMF) which is operated by the Shire of Ashburton under licence L9304/2021/1. The PRWMF was established to service domestic and industrial waste generators across the Pilbara region by providing infrastructure for waste management, including waste reuse, liquid waste disposal, asbestos and tyre disposal and a Class IV secure landfill.

The applicant has undertaken discussions with the Shire of Ashburton, whereby the Shire of Ashburton has agreed to submit an amendment application to DWER for licence L9304/2021/1 to excise the 4 hectares of land required for the works approval premises boundary from their premises boundary. Once this amendment application is finalised, the applicant will enter into a lease agreement with the Shire of Ashburton. The applicant has advised that the amendment application for the PRWMF was submitted to DWER on 31 July 2023.

The premises area will also require native vegetation to be cleared to facilitate construction works. The applicant submitted a native vegetation clearing permit application to DWER's native vegetation regulation branch to authorise this activity.

For noting: The amendment application for the PRWMF will be assessed concurrently with this works approval application, noting that the area proposed for the works approval premises boundary will need to be excised from the PRWMF premises boundary and under legal control of the applicant prior to the granting of the works approval.

DWER also assesses native vegetation clearing applications concurrently with works approval applications. DWER's native vegetation branch have advised that the assessment for the native vegetation clearing permit has been undertaken and a permit was granted to the applicant on 11 September 2023.

2.4 **Proposed works**

Works at the premises are proposed to commence once the clearing of native vegetation is finalised. Access to the premises will be from the existing entry to the PRWMF, and the Shire of Ashburton will construct a new access road to the premises using compacted crushed aggregate. To facilitate decontamination and the processing / storage of wastes the following items of infrastructure will be constructed.

2.4.1 Storage and processing areas

The premises will be divided into storage, cleaning and processing areas as outlined in Figure 1. Hardstand across operational areas of the premises will be constructed using 150 mm of compacted road base, with hardstand in the scrap metal processing area compacted to a 98% maximum modified dry density.

Accepted waste items that are contaminated will be stored and handled within areas having primary and/or secondary containment infrastructure, depending on the level and severity of contamination of the waste items. The location of the containment infrastructure is outlined in Figure 2. Cleaning stations and the fueling station are also containerised and will be self-bunded.

Primary containment infrastructure will be portable and will be constructed using a combination of:

- Engineered steel collapsible, for use around the High Pressure Water Jetting station (HPWJ)
- High Molecular weight polyethylene not collapsible, for use around HPWJ; and
- UV stable 900 gsm PVS or polypropylene collapsible, for use where mercury and cleaning chemicals are stored and handled.

Collapsible bunds will be 100 mm high and supported by external arms to create a contained and bunded area in which waste items can be stored or processed. The size of the bunded area will depend on the infrastructure being stored and handled and will change as infrastructure changes within specific areas. Typical bund sizes that will be used are 2.4 m x 2.4 m, 12 m x 4 m, and 7 m x 7 m, however each bund will be sized to contain more than 125% of the volume of the largest container to be stored within the bunded area. All bunds will be fitted with rain plugs, drains and filters, with filter type determined based on the bund size and potential contaminants. Clean rainwater falling within a bunded area will only be discharged through the drains if no spills or leaks have occurred within the bunded area, indicating that this liquid will be free of contaminants.

Secondary bunding will be formed using an impermeable ground liner which will be made using UV treated reinforced polymer-treated PVC with a thickness of 0.55 mm. The liner will be installed over compacted ground and will have a 100 mm high earthen bund wall constructed at each location where a primary bund is located. The liner will be laid in single sheets in the locations indicated in Figure 2, with no overlapping or joining required during installation.



Figure 1: Premises layout

Works Approval: W6828/2023/1

IR-T13 Decision report template (short) v3.0 (May 2021)



Figure 2: Premises bunding locations

Works Approval: W6828/2023/1

IR-T13 Decision report template (short) v3.0 (May 2021)

2.4.2 Decontamination infrastructure

To decontaminate waste items only contaminated with marine growth, the applicant will install a modular steel wash bay which will be located in the scrap metal processing area on a concrete pad. The wash bay will be a purpose built facility with a self-contained water recycling unit.

The applicant intends to install five fully enclosed High Energy Flushing Units (HEFU) and an Automatic High Pressure Decontamination Facility (AHDF) containing a High Pressure Water Jetting station (HPWJ) for the wash down of contaminated wastes. One HEFU will be used exclusive for hydrocarbon cleaning and four will be used for contaminant cleaning. The HEFUs are a three part chemical resistant system, consisting of a reservoir/catchment tank with an integral hard-piped centrifugal pump skid, a filtration/holding skid with a second hard-piped centrifugal pump, and a catchment mounted header manifold, which delivers the chemical into the pipes.

The AHDF cleaning stations will be fitted with spray curtains of 3mm thick, 150 mm wide UV stabilised PVC polyester strips and cowlings to prevent spray drift. The general configuration of the AHDF is detailed in Figure 3.

All waste items with mercury contamination will be processed through the HEFU as chemical cleaning is required. Flexible waste items (i.e. pipework) with NORM scale will be processed through the AHDF. Rigid waste items with NORM scale will be processed through either the HEFU or the AHDF, dependent on thickness of scale. This will be assessed by supervisors on site once the waste item is identified to require decontamination.

The HPWJ station within the AHDF will collect all wastewater and scale for the purpose of recycling the water so that excess water is not generated. The AHDF will recycle wastewater by:

- Filtering the water through a slotted spear to retain all scale down to 1,000 μm;
- Passing water through a self cleaning filter down to 50 $\mu\text{m},$ then through 1 μm duplex filters; and
- Pumping filtered water back to the high-pressure pump intake tank for reuse.

All wastewater generated from the HEFU will be transported to the AHDF for treatment. The water and scale filtration process will occur in the bunded containerised section of the AHDF. All scale will be collected within UN-rated waste drums prior to disposal offsite.



Figure 3: AHDF configuration

2.4.3 Wastewater treatment infrastructure

Wastewater generated through the cleaning station decontamination process may require further treatment depending on the contaminant that is being removed from accepted waste items. To facilitate additional treatment when required, all wastewater will be collected in a dedicated containment system prior to undergoing a series of segregation and treatment steps to remove the different contaminants that may be present, including:

- Solid particulate removal using particulate filters and settling tanks;
- Separation of oil and grease using absorbent filters and skimming;
- Chemical neutralisation to bring the water to neutral pH; and
- Further advanced treatment to remove specific contaminants, where methods will be chosen to target each identified contaminant and their effectiveness for removal.

The applicant anticipates that accepted waste items will generally be contaminated by one or more of the following:

- Naturally occurring radioactive material (NORM) radium amalgamation and diffusion into scale;
- Mercury adsorption and chemisorption to steel surfaces, primarily through amalgamation and diffusion into scale;
- Hydrogen sulfide (H2S);

- BTEX (benzene, toluene, ethylbenzene and xylene) compounds; and
- Marine growth.

The wastewater treatment system will be installed incorporating a closed-loop containment system to prevent leaks and spills and will be placed within a bunded area. The area in which the treatment system is located will be regularly inspected and maintained to ensure its integrity and prevent any potential failures. The treatment system, including the filter configurations are depicted in Figure 4.



Figure 4: Filtration and separation process for NORMs and Mercury

2.5 **Premises operation**

2.5.1 Waste acceptance

Waste items will be accepted to the premises via two different gates dependent on the waste type, with dangerous goods accepted via 'Gate 1' and all other wastes accepted via 'Gate 2'. Most waste items will be delivered in bunded flat rack containers and directed to the appropriate storage area for that waste type. Where waste is not received in containers, it will be stored within a bunded area. Waste items to be accepted at the premises will include structures such as skids, heat exchangers, subsea tree production systems, chains and anchors.

Stored waste items will be inspected and surveyed for contamination at various points across the external surfaces of the structures using the equipment specified below:

- NORMs Tracerco T407 NORM Monitor with SA-49 Geiger-Muller Probe for surface contamination, and a SA-50 Scintillation Detector for gamma dose rate;
- Mercury Jerome J405 Mercury Vapor detector and an Olympus VANTA portable XRF to survey for mercury on the surface of materials;
- H2S Honeywell Micro-Clip X3 4-gas monitor; and
- BTEX UltraRAE3000 Photoionization Detector (PID) to detect Volatile Organic Compounds (VOCs) if detected, a benzene specific filter will be added to the PID.

The applicant considers that waste items that have not carried production liquids, gases or well service gas can be considered as uncontaminated and hence will not be subject to contamination inspection or surveying. Examples of these items include (but are not limited to) concrete anchors, metal chains and umbilicals. These items are expected to only be contaminated by marine growth and hence will only require decontamination within the modular

steel wash by to remove this prior to further processing.

The applicant has specified trigger levels for each contaminant which if exceeded, will deem the waste item to be contaminated and require processing for decontamination. These trigger levels are outlined below in Figure 5.

Criteria	Method	Trigger Levels	
Surface contamination (SCO)	Contamination meter	≥0.2 Bq/cm²	
Surface gamma dose rate	Gamma radiation	Above twice reference background	
	monitoring	(BG) <mark>(</mark> μSv/h)	
Workplace exposure standards for elemental	Jerome mercury vapour	>12.5 µg/m³	
mercury (vapour) 8-hour exposure	monitor		
Surface mercury contamination	Olympus Vanta portable XRF	>1 ppm	
Workplace exposure standards for hydrogen	Micro-Clip X3 4-Gas	>5 ppm	
sulfide (8-hour exposure)	Detector		
Workplace exposure standards for VOC and	UltraRAE 3000+	>0.5 ppm VOC	
BTEX (benzene) ++		>0.5 ppm benzene	

Figure 5: Contamination screening criteria

2.5.2 Waste processing

Waste items deemed to be contaminated will be subject to one or more of the following decontamination methods depending on the substance contaminating the waste item:

- Structures will be connected to cleaning pumps and flushed with water and/or chemicals until clean;
- Bundles of flexible flowlines or rigid pipework will be cleaned within the HEFU station or the ADHF;
- Items contaminated with marine growth will be power washed in the modular steel wash bay within the scrap metal processing area.

All waste items (i.e. flowlines and/or pipework) contaminated with mercury will be processed through the HEFU. To facilitate decontamination, lances with several spray nozzles are fitted to the interior of the pipe lengths, the insertion end is sealed, and the lance connected to a chemical flushing header manifold .The other end is placed into a return reservoir/catchment tank. Cleaning chemicals are then sprayed through the interior of the pipes by low pressure pumps. The liquid circulates through the long lances to ensure that the entire inner surface of the length of pipe is washed to remove the contamination. The pipeline is first cleaned within the dedicated hydrocarbon HEFU to remove residual hydrocarbon, then the item is rinsed before it is moved to the next HEFU station where it is cleaned to remove the contamination and rinsed again. Once the item is successfully cleaned it is removed from the HEFU and the lances are removed to be re-used.

The applicant proposes to use the chemical MerCure within the HEFU to facilitate the removal of mercury from accepted waste items. MerCure will act to dissolve and break scale from waste items, releasing elemental and compound mercury. Elemental mercury is then stabilised into an insoluble compound and compound mercury is sequestered into solution, where the lixiviant properties of MerCure prevent mercury in solution from redepositing. This conversion is irreversible.

NORM contamination is anticipated to be in the form of an insoluble barite compound particle due to the nature of the contaminated waste items received. Therefore, no chemicals are proposed for use within the HEFU station or AHDF to facilitate the removal of NORMs, as particulate NORM should be removed from contaminated waste items through the action of wash down with water.

Chemicals (such as MerCure) used in the decontamination process will be stored in bunded areas within the HEFU station on an area with both primary and secondary bunding

infrastructure. Water used in decontamination is proposed to be tankered into the premises and stored in 1000 L IBCs.

Once they have undergone decontamination, wastes will be further inspected and surveyed for remaining contamination. Wastes will be considered adequately decontaminated and suitable for further processing if contamination is below the clearance criteria as outlined in Table 1 below.

Criteria	Method	Clearance Criteria
NORM Surface Contamination	Contamination Meter	<0.2 Bq/cm ² above BG
NORM Surface Gamma Dose Rate	Gamma Survey Meter	<2 x BG (µSv/h)
Mercury Vapour (Elemental)	Mercury Vapour Monitor	<0.012 mg/m ³
Elemental Mercury (Liquid)	Visual	None
Mercury in Scale and Surface Bound Mercury	pXRF Surface Measurement	<mdl (<90="" ppm)<br=""><20 μg/cm²</mdl>
Hydrogen Sulphide (H ₂ S)	H ₂ S Gas Monitor	<5 ppm
Benzene (BTEX)	PID Gas Monitor	<0.5 ppm

Table 1: Decontamination acceptance criteria and testing methods

Once decontaminated, steel structures will be moved to the scrap metal processing area where they will be processed using a combination of shearing and oxy cutting. Once at an appropriate size these items will be stored pending removal from the premises. Stockpiled scrap metal stored at the premises should not exceed more than 3m in height and not occupy an area greater than 100 m^2 at any given time.

Umbilicals and flowline pipes will be taken to the processing building within the scrap metal processing area to be cut down into smaller sizes, where they will then be stripped to separate metal from plastic. Recovered plastic will be chipped or shredded and stored in containers for export to an appropriate recycling facility. Flexible flowlines and rigid pipes will be stored in racks adjacent to the decontamination stations prior to removal from the premises.

The premises is proposed to operate 24 hours a day 7 days a week, with the exception of scrap metal processing activities, which will generally occur only during daylight hours unless extreme temperatures need to be avoided.

2.5.3 Wastewater treatment

Wastewater generated from the decontamination of waste items contaminated with NORMs, mercury, H2S and/or BTEX chemicals will be subject to advanced treatment methods to ensure these contaminants are removed from the waste stream. This will include separation processes to effectively filter waste scale and solids containing NORMs or mercury from cleaning fluids. If mixed, NORMs and mercury will not be separated and the mixture will be managed in accordance with the material that poses the highest risk.. Filter configurations for advanced treatment and separation include bulk solid particle filtration and regenerative ion-exchange adsorbent filter media, activated carbon, and ultra-fine polishing filters. For NORMs separation, a filtration medium specific to radioactive materials will be used.

Reuse options for the treated wastewater will depend on the level of decontamination achieved through advanced wastewater treatment and could include:

- Continued use within the decontamination process to minimise freshwater consumption, with potential for treated water to also be diluted with hydrocarbon and scale decontamination chemicals required in the cleaning process; and
- Rinsing of equipment, containers or surfaces to remove residual contaminants, reducing freshwater consumption.

Wastewater that has passed through the filtration mediums will be assessed for potential reuse within the ADHF based on the suitability for use in the pump systems to minimise wear. To ensure this, wastewater is filtered to less than 1 micron to ensure minimal particulate loading in the wastewater and longer life for wastewater recycling. If the wastewater cannot be filtered to less than 1 micron, it will be deemed unsuitable for reuse and will be assessed for disposal. The wastewater will be further filtered and treated so that contaminant loadings will be below the trigger values outlined in Figure 6 below.

Contaminant	Limit for sending to disposal	Reference
Oil in Water	30ppm**	MARPOL
Mercury	0.1 μg/L	ANECC Australian and New Zealand Guidelines for Fresh and Marine Water Quality
NORM – Gross alpha/beta	0.5 Bq/L	ANECC Australian and New Zealand Guidelines for Fresh and Marine Water Quality
NORM – Ra226 or Ra228	1.1 Bq/L	Radiation Safety (General) Regulations WA

** The hydrocarbon content reduction is not a requirement for receiving waste facilities; however, it is in line with the applicant's approach to minimising contaminants in disposed waters.

Figure 6: Wastewater disposal contaminant criteria

Once below trigger values, wastewater will be stored in IBC's within a bunded containment area of the premises prior to removal from site for disposal at an appropriately licenced facility. Waste scale and solids containing NORMs or mercury that have been filtered from wastewater will be stored in sealed drums prior to removal to a Class V Intractable Waste Disposal Facility (for NORMs) or a specialist recovery facility (for mercury).

Wastewater will be tested for mercury using a benchtop direct mercury analyser as per USEPA Method 7473: Mercury in Solids and Solutions by Thermal Decomposition, Amalgamation, and Atomic Absorption Spectrophotometry. A benchtop metal analyser will be used to test for other heavy metal contaminants. Wastewater will be tested for NORMs for gross alpha and beta contamination as per USEPA Method 900.0/302: Gross Alpha and Gross Beta Radioactivity in Drinking Water.

2.5.4 Mercury vapour treatment

Where accepted waste items are contaminated with mercury there is potential for the release of mercury vapour during the decontami nation process. The applicant has proposed two methods for mercury vapour control depending on the decontamination process being used on the waste item.

<u>Closed – loop decontamination systems</u>

The use of MerCure within the HEFU will act to stabilise elemental mercury into an insoluble compound and sequester compound mercury into solution. The nature of this reaction means that the release of mercury vapours is unlikely. Should vapours be released during decontamination, they will be held within the closed-loop system circulation of the HEFU before being captured by the activated carbon bed within the scrubber unit.

Open decontamination systems

Open decontamination of accepted waste items will generally be required where items are processed to facilitate easier handling or decontamination at the premises. This could include removal of flanges, fitting for circulation of chemicals in piping and process loops, or cold cutting of piping and equipment, where there is potential for the release of mercury vapours.

When open decontamination of accepted waste items is required the applicant proposes to manually apply the non-hazardous mercury vapour suppression chemical MeDeX 80 to waste surfaces. MeDeX 80 is a water-soluble liquid and will be applied in a spray. The application of MeDeX 80 acts to convert elemental mercury into stable salts and sequester compound mercury into solution.

Wastewaters produced from both methods of decontamination will be assumed to be contaminated with mercury and will be processed using the wastewater treatment methodology outlined in section 2.5.3.

2.5.5 Sampling and monitoring

The applicant intends to undertake container floor surveys after the unloading of contaminated waste items to ensure that any spills of contaminants are identified and cleaned up. Container floor surveys will involve a NORM surface contamination survey, a floor-level mercury vapour test and a portable XRF test of select locations on the container floor to detect any remnant mercury contamination. If contamination is identified, the floor will be vacuumed with a HEPA filter vacuum then resurveyed. If NORM contamination remains, the floor will be washed using water captured and filtered through the decontamination process until the floor area is deemed to be decontaminated in accordance with the clearance criteria outlined above in Table 1. If mercury contamination is remains, the surface will be sprayed with MeDeX to neutralize the mercury into a stable salt, which will be vacuumed and removed when dry.

Mercury vapour monitoring will be conducted at the following frequencies and locations:

- Daily downwind of stored materials with identified mercury vapour risk and on the boundary of storage areas
- Daily inside and on the immediate external vicinity of containers where mercury contaminated waste is temporarily stored in drums
- Hourly at the cleaning stations when decontamination activites are occuring, immediately downwind of the cleaning stations, at low points within the premises (i.e. within bunds) and when a pipe, valve or filter pod is opened during the mercury decontamination process.

Spills and leaks of other hazardous materials will be identified and cleaned up immediately using spill kills located around the premises. The applicant will also undertake period soil samples during premises operations at the following frequencies:

- Quarterly during operations;
- On completion of decommissioning at the premises; and
- Immediately following the clean up and remediation of a leak or spill event.

The applicant has proposed the following soil remediation investigation values as outlined in Figure 7 below.

Contaminant	Trigger value	Reference		
Hydrocarbons TPH	5 ppm	ASC NEPM B1 ESL		
(based on Benzene)				
Mercury	3.5 ppm	ASC NEPM B1 HIL		
NORM – Ra226, Ra228 or Pb210	0.5 Bq/g	Radiation Safety (General)		
		Regulations WA		
		ARPANSA RPS 6 National Directory		
		(50% of the excluded from regulatory consideration value)		

Figure 7: Soil remediation investigation levels

If concentrations of contaminants within soil samples are found to be elevated above the trigger values, the soil will be subsequently sampled in a 5 m x 5 m grid surrounding the original sample point to various depths to determine the extent of contamination and required remediation. Once this has been idented, the soil will be removed and stored in drums for disposal off site. The affected area will be backfilled with clean soil.

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 2 below. Table 2 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Emission	Sources	Potential pathways	Proposed controls					
Construction	Construction							
Dust	Construction of access tracks.	Air / windborne pathway	A water cart will be on site for dust suppression.					
Noise	scrap metal processing area, storage areas and	painway	Vehicle speeds will be limited to less than 25 km/hr on unsealed roads.					
	cleaning areas		All vehicles and machinery will be maintained to the manufacturer's specifications.					
Operation	Operation							
Contaminated stormwater	Acceptance and storage of contaminated	Contact of contaminated wastes with	Bunding regularly inspected to ensure integrity and capacity is maintained.					

Table 2: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
	wastes	stormwater producing runoff	Rainwater contained in bunds discharged only when no spills or leaks have occurred within bunded area, with clean rainwater discharge to ground and contaminated water contained in IBCs for removal off-site.
			Container floor contamination surveys carried out after each loadout.
			Periodic soil sampling undertaken as required.
Contaminated water sprays	Decontamination of wastes	Air / windborne pathway	The AHDF cleaning stations will be fitted with spray curtains to prevent spray drift.
or mists			The high-pressure water jetting equipment within the AHDF will be fitted with cowlings to help mitigate spray.
			Wind direction and strength will be observed prior to the decontamination of wastes and activities will be moderated according to conditions.
Mercury vapour		Air / windborne pathway	Chemicals used in cleaning process bind the mercury into solution or salts to prevent release of mercury vapours.
			Mercury wastes stored in lined, sealed drums in a lockable container.
			Periodic mercury vapour monitoring around cleaning station and racks, and waste storage area.
Contaminated stormwater		Contact of contaminated	Bunding regularly inspected to ensure integrity and capacity is maintained.
		wastes with stormwater producing runoff	Rainwater contained in bunds discharged only when no spills or leaks have occurred within bunded area, with clean rainwater discharge to ground and contaminated water contained in IBCs for removal off-site.
Liquid wastes / wastewater – direct		Spills and leaks of environmentally	Wastewater generated from decontamination activities is filtered and treated for reuse across the premises.
discharge		hazardous material	Where wastewater cannot be reused it is further filtered to below trigger levels and stored in drums within a bunded area for disposal offsite.
			Cleaning stations will be installed incorporating a closed-loop containment system to prevent leaks and spills and will be placed within a bunded area.
			The area in which the treatment system is located will be regularly inspected to ensure integrity of area is maintained.
Liquid wastes	Storage of	Spills and leaks	Drums stored on portable bunds in secure

Emission	Sources	Potential pathways	Proposed controls
- direct	environmentally	of	container with secondary bunding.
discharge	materials	hazardous material	Bunding regularly inspected to ensure integrity and capacity is maintained.
			Regular inspection of drums for defects, leaks.
			Container floor contamination surveys carried out after each loadout.
			Periodic soil sampling undertaken as required.
Contaminated stormwater		Contact of contaminated	Bunding regularly inspected to ensure integrity and capacity is maintained.
		wastes with stormwater producing runoff	Rainwater contained in bunds discharged only when no spills or leaks have occurred within bunded area,, with clean rainwater discharge to ground and contaminated water contained in IBCs for removal off-site.
Contaminated stormwater	Processing and storage of scrap metal	Contact of contaminated wastes with stormwater producing runoff	Scrap metal will have met decontamination specifications prior to being processed within the scrap metal area.
			Secondary containment infrastructure regularly inspected to ensure integrity and capacity is maintained.
			Rainwater contained in bunds discharged only when no spills or leaks have occurred within bunded area,, with clean rainwater discharge to ground and contaminated water contained in IBCs for removal off-site.
Noise		Air / windborne pathway	Significant distance to noise-sensitive receptors
			Operations will only occur during daylight hours.
			Some processing activities will occur inside the processing building.
			All vehicles and machinery will be maintained to the manufacturer's specifications.

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 and Figure 8 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)).

Human receptors	Distance from prescribed activity
Pastoral stations and leases	Lands used for agricultural purposes (grazing) on Minderoo and Peedamulla station extend from ~3.2 km west and ~8 km north of the premises.
	Minderoo Station homestead is located ~20 km south-west of the premises.
	Peedamulla Station homestead and campground are located ~40km east north east of the premises.
Onslow town site and industrial areas	Wheatstone oil and gas worker accommodation is located ~22 km north-west of the premises.
	Onslow town site is located ~30 km north-west of the premises.
Users of Conservation Park (existing and proposed)	The proposed extension to the Cane River Conservation Park (CRCP) includes all lands surrounding the premises except easements associated with the Onslow Road and associated infrastructure.
	The boundary of the proposed extension to the CRCP is located between 150 and 1,500 m from the premises boundary
Environmental receptors	Distance from prescribed activity
Cane River Conservation Park	Current: located approximately 32 km south-east.
Cane River Conservation Park (CRCP)	Current: located approximately 32 km south-east. Proposed extension: surrounding the premises, between approximately 150 m and 1,500 m from the PRWMF infrastructure.
Cane River Conservation Park (CRCP)	Current: located approximately 32 km south-east. Proposed extension: surrounding the premises, between approximately 150 m and 1,500 m from the PRWMF infrastructure. No management plan has been published for the existing or proposed extension to the CRCP. Consistent with section 56 of the CALM Act, the purpose of conservation parks is to conserve the natural environment, protect flora and fauna and preserve features of archaeological, historic or scientific interest while providing for suitable levels of public recreation.
Cane River Conservation Park (CRCP) Public Drinking Water Source Area (PDWSA) under the Country Areas Water Supply Act 1947	Current: located approximately 32 km south-east. Proposed extension: surrounding the premises, between approximately 150 m and 1,500 m from the PRWMF infrastructure. No management plan has been published for the existing or proposed extension to the CRCP. Consistent with section 56 of the CALM Act, the purpose of conservation parks is to conserve the natural environment, protect flora and fauna and preserve features of archaeological, historic or scientific interest while providing for suitable levels of public recreation. The Cane River Water Reserve Priority 1 PDWSA is located approximately 21.1 km north-east (upgradient) of the premises.
Cane River Conservation Park (CRCP) Public Drinking Water Source Area (PDWSA) under the Country Areas Water Supply Act 1947 Surface Water: River systems	Current: located approximately 32 km south-east. Proposed extension: surrounding the premises, between approximately 150 m and 1,500 m from the PRWMF infrastructure. No management plan has been published for the existing or proposed extension to the CRCP. Consistent with section 56 of the CALM Act, the purpose of conservation parks is to conserve the natural environment, protect flora and fauna and preserve features of archaeological, historic or scientific interest while providing for suitable levels of public recreation. The Cane River Water Reserve Priority 1 PDWSA is located approximately 21.1 km north-east (upgradient) of the premises. The premises is located along the divide of the Ashburton River and Cane River catchment which discharges into the Ashburton River catchment.
Cane River Conservation Park (CRCP) Public Drinking Water Source Area (PDWSA) under the Country Areas Water Supply Act 1947 Surface Water: River systems	Current: located approximately 32 km south-east. Proposed extension: surrounding the premises, between approximately 150 m and 1,500 m from the PRWMF infrastructure. No management plan has been published for the existing or proposed extension to the CRCP. Consistent with section 56 of the CALM Act, the purpose of conservation parks is to conserve the natural environment, protect flora and fauna and preserve features of archaeological, historic or scientific interest while providing for suitable levels of public recreation. The Cane River Water Reserve Priority 1 PDWSA is located approximately 21.1 km north-east (upgradient) of the premises. The premises is located along the divide of the Ashburton River and Cane River catchment which discharges into the Ashburton River: Approximately 20.5 km west of the premises (down-gradient).
Cane River Conservation Park (CRCP) Public Drinking Water Source Area (PDWSA) under the Country Areas Water Supply Act 1947 Surface Water: River systems	Current: located approximately 32 km south-east. Proposed extension: surrounding the premises, between approximately 150 m and 1,500 m from the PRWMF infrastructure. No management plan has been published for the existing or proposed extension to the CRCP. Consistent with section 56 of the CALM Act, the purpose of conservation parks is to conserve the natural environment, protect flora and fauna and preserve features of archaeological, historic or scientific interest while providing for suitable levels of public recreation. The Cane River Water Reserve Priority 1 PDWSA is located approximately 21.1 km north-east (upgradient) of the premises. The premises is located along the divide of the Ashburton River and Cane River catchment which discharges into the Ashburton River: Approximately 20.5 km west of the premises (down-gradient). Cane River: Approximately 22 km north-east of the premises (up-gradient)

Table 3: Sensitive human and environmental re-	ceptors and distance from prescribed
activity	

	River surface water resource proclaimed portion.
	Surface water areas are proclaimed for the purposes of regulating the taking of water from watercourses and wetlands and where there is a need for systematic management for the use of water.
Surface water bodies	A series of non-perennial lakes are situated to the west (down- gradient), south-west (up-gradient) and north-east (up- gradient) of the premises. The closest of these is located approximately 2.3 km west of the premises.
	Beyond these is a series of Saline Coastal Flats which extend towards the Indian Ocean.
Threatened Ecological Communities (TEC) (buffers)	The closest TEC buffer, being Tanpool land system, is situated 36.8 km north-east of the premises.
	A Tanpool land system is a "highly restricted land system that occurs between Pannawonica and Onslow. It consists of stony plains and low ridges of sandstone and other sedimentary rocks supporting hard spinifex grasslands and snakewood shrublands" (DBCA, 2017), with a Priority 1 category rating.
Indian Ocean	Approximately 40.3 km north-west (down-gradient) of the premises.
Groundwater: superficial and	The premises is located with the Carnaryon confined Birdrong
confined aquifers	aquifer and Carnarvon superficial aquifer. Talis (2018a) reported that the superficial aquifer was not encountered during intrusive investigations at the premises.
confined aquifers	aquifer and Carnarvon superficial aquifer. Talis (2018a) reported that the superficial aquifer was not encountered during intrusive investigations at the premises. Depth to groundwater ranges across the premises from 5.4 metres below ground level (m BGL) (BH03 January 2018) to 20.9 m BGL (BH10 April 2019).
confined aquifers	 aquifer and Carnarvon superficial aquifer. Talis (2018a) reported that the superficial aquifer was not encountered during intrusive investigations at the premises. Depth to groundwater ranges across the premises from 5.4 metres below ground level (m BGL) (BH03 January 2018) to 20.9 m BGL (BH10 April 2019). Groundwater dependent ecosystems have not been investigated within the unallocated crown land surrounding the premises, proposed as an extension to the CRCP, for the purposes of the risk assessment they are assumed to be potentially present.
Users of groundwater resources	 aquifer and Carnarvon superficial aquifer. Talis (2018a) reported that the superficial aquifer was not encountered during intrusive investigations at the premises. Depth to groundwater ranges across the premises from 5.4 metres below ground level (m BGL) (BH03 January 2018) to 20.9 m BGL (BH10 April 2019). Groundwater dependent ecosystems have not been investigated within the unallocated crown land surrounding the premises, proposed as an extension to the CRCP, for the purposes of the risk assessment they are assumed to be potentially present. The premises is located within the RIWI Act proclaimed Pilbara Groundwater Area.
Users of groundwater resources	 aquifer and Carnarvon superficial aquifer. Talis (2018a) reported that the superficial aquifer was not encountered during intrusive investigations at the premises. Depth to groundwater ranges across the premises from 5.4 metres below ground level (m BGL) (BH03 January 2018) to 20.9 m BGL (BH10 April 2019). Groundwater dependent ecosystems have not been investigated within the unallocated crown land surrounding the premises, proposed as an extension to the CRCP, for the purposes of the risk assessment they are assumed to be potentially present. The premises is located within the RIWI Act proclaimed Pilbara Groundwater Area. Groundwater licences are granted ~20 km south-west (Ashburton River – bore is up-gradient), ~27 km north-east (Cane River – up-gradient) and from ~16 km north-west (down-gradient) of the premises. A series of licences are also granted along the Onslow Road from ~5 km north-west (up-gradient) and ~1 km south-east (up-gradient) that are predominately granted to Main Roads Western Australia.



Figure 8: Premises siting

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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 W6828/2023/1 that accompanies this decision report authorises construction 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. decontamination and processing 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	Applicant		Justification	
Sources / activities	Durces / Potential Potential pathways and impact Receptors Applicant controls		C = consequence L = likelihood	controls sufficient?	Conditions ² of works approval	for additional regulatory controls		
Construction								
Construction of access tracks, scrap metal processing area, and storage and cleaning areas	Dust	Air / windborne pathway causing impacts to health and amenity	Cane River Conservation Park	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	To be regulated under the general provisions of the EP Act	N/A
	Noise			Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	To be regulated under the Environmental Protection (Noise) Regulations 1997	N/A
Operation (inclue	ling time-limited	d-operations operat	ions)					
Acceptance and storage of contaminated wastes	Contaminated stormwater	Contact of contaminated wastes with stormwater producing runoff	Cane River Conservation Park Proclaimed surface water area and associated surface water bodies Proclaimed groundwater area, underlying groundwater and users of down gradient groundwater	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Conditions 1, 6, 7, 8, 9, 10, 11, 18, 19, and 20	N/A
Decontamination of wastes	Contaminated water sprays or mists	Air / windborne pathway causing impacts to health and amenity	Cane River Conservation Park	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Conditions 1, 6 and 12	

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Risk events				Risk rating ¹	rating ¹		Justification		
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	for additional regulatory controls	
	Mercury Vapour S		Refer to Section 3.1						
Contaminated stormwaterSpills and leaks of environmentally hazardous materialCane River Conservation ParkContaminated stormwaterProclaimed surface water area and associated surface water bodiesProclaimed stormwater producing runoffProclaimed groundwater area, underlying groundwater and users of down gradient groundwater		Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Conditions 1, 6, 12, 13, 18, 19 and 20	N/A			
	Liquid wastes / wastewater - direct discharge Liquid wastes / wastewater - direct discharge Liquid wastes / wastewater - direct discharge Liquid wastes of environmentally hazardous material Cane River Conservation Park Proclaimed surface water area and associated surface water bodies Proclaimed groundwater area, underlying groundwater and users of down gradient groundwater		Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Conditions 1, 6, 12, 13, 16, 17, 18, 19 and 20	N/A		
Storage of environmentally hazardous materials	Liquid wastes – direct discharge	Spills and leaks of environmentally hazardous material	Cane River Conservation Park Proclaimed surface water area and associated surface water bodies Proclaimed	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Conditions 1, 6, 16, 18, 19 and 20	N/A	

Risk events				Risk rating ¹	Risk rating ¹		Justification	
Sources / activities	Potential emission	Potential pathways and impact	otential ways and Receptors Applicant mpact		C = consequence L = likelihood	controls sufficient?	Conditions ² of works approval	for additional regulatory controls
groundwater area, underlying groundwater and users of down gradient groundwater								
	Contaminated stormwater	Contact of contaminated wastes with stormwater producing runoff	Cane River Conservation Park Proclaimed surface water area and associated surface water bodies Proclaimed groundwater area, underlying groundwater and users of down gradient groundwater	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Conditions 1, 6, 14, 15 16, 18, 19 and 20	N/A
Processing and storage of scrap metal	ssing and e of scrap Contaminated stormwater Contaminated stormwater Contact of wastes containing residual chemicals and/or heavy metals with stormwater producing runoff Cane River Conservation Park Proclaimed surface water area and associated surface water bodies Proclaimed groundwater area, underlying groundwater and users of down gradient groundwater		Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Conditions 1, 6, 12, 14 and 15	N/A	

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 27 July 2023	None received	N/A
Shire of Ashburton advised of proposal on 27 July 2023	The Shire has no comments to make on the referral application.	Noted. It is the responsibility of the applicant to ensure all relevant approvals are in place prior to commencing the construction works authorised by this works approval, including any approvals that may be required by the Shire of Ashburton.
Department of Mines, Industry Regulation and Safety (DMIRS) advised of proposal on 27 July 2023	With respect to the works approval the applicant has responsibilities under the <i>Dangerous Goods Safety</i> <i>Act 2004</i> and subsequent regulations to minimise risk of dangerous goods to people, property and the environment to as low as is reasonably practicable. The applicant may require a dangerous goods licence for the storage of Division 6.1 dangerous goods on site. The applicant should liaise with the Department for further information if required.	The Delegated Officer advises the applicant to liaise with DMIRS to determine whether a dangerous goods licence will be required. It is the responsibility of the applicant to ensure all relevant approvals are in place prior to undertaking any activities at the premises.
Radiological Council of WA advised of proposal on 27 July 2023	None received.	The Delegated Officer notes that a Radiation Management plan may be required for proposed activities and recommends the applicant contact the Radiological Council of WA for advice. It is the responsibility of the applicant to ensure all relevant approvals are in place prior to undertaking any activities at the premises.
Applicant was provided with draft documents on 9 October 2023	Outlined in Appendix 1	Outlined in Appendix 1

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.

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

Condition	Summary of applicant's comment	Department's response				
N/A – throughout works approval	The applicant has clarified that the High Pressure Water Jetting (HPWJ) station is part of the Automated High Pressure Decontamination Facility (AHDF). The separate chemical cleaning station is known as the High Energy Flushing Unit (HEFU). The HEFUs were specified in the application and supporting information but were incorrectly termed the 'Chemical cleaning (HPWJ) stations' or 'GEP Cleaning Station'. Additional information outlining the components of the HEFU has been provided by the applicant.	The Delegated Officer notes that the High Energy Flushing Unit (HEFU) was not mentioned in any supporting documentation provided with the works approval application. However, since the inclusion of this infrastructure was assessed under a different name (HPWJ), the Delegated Officer will amend the names of infrastructure across the works approval and decision report. The additional information on components of the HEFU will also be incorporated into the decision report. The works approval and decision report will also be amended to reflect that the HPWJ is a component of the AHDF as this does not change the outcome of the risk assessment.				
Condition 1, Table 1	The applicant requests changes to the design and construction/installation requirements to clarify the location and specification of some equipment, and to amend terminology to be consistent with what will be used during operation of the premises. None of the amendments alter the environmental risk associated with the construction/installation of the premises.					
	'Portable bund' specification to change to 'Portable and collapsible bund', specifying collapsible bunds will be 100 mm high not 300 mm.	It is noted in Section 2.4.4 of the Supporting Information document that collapsible bunds were to be 300 mm high. However, the Delegated Officer will amend their height to 100 mm to reflect operational requirements, as the 100 mm height should still be sufficient to contain leaks and spills noting that bunds must be sized around containment infrastructure so as to be able to contain more than 125% of the volume of the largest container stored within the bunded area.				
	Chemical cleaning station is the HEFU station, not the HPWJ.	Name updated as requested.				
	Underlying ground to the HEFU will be constructed using 150 mm of compacted road base, not compacted in-situ soils.	Underlying ground specifications updated as requested, noting this does not change the outcome of the risk assessment.				
	The HEFU will be located within a bunded steel container, not surrounded by engineered steel bunds.	Location will be updated to reflect the bunded steel container, noting that this does not change the outcome of the risk assessment.				
	Bunds will be 100 mm high, not 300 mm (collapsible bunds). Spray curtain requirements are not applicable to the HEFU as they	Bunding height will be amended as requested, noting that the originally proposed height was 300 mm.				

Condition	Summary of applicant's comment	Department's response
	are located within the AHDF – requirements need removing.	Spray curtain requirements removed as requested.
	AHDF name requires updated.	AHDF name updated as requested.
	Underlying ground to the AHDF will be constructed using 150 mm of compacted road base, not compacted in-situ soils.	Underlying ground specifications updated as requested, noting this does not change the outcome of the risk assessment.
	Spray curtains within the AHDF will be constructed using 3mm thick 150 mm wide UV stabilised PVC polyester strips – no option required for construction materials.	Spray curtain specifications updated to reflect applicants chosen construction method.
	The applicant has changed the wash bay design from concrete to a modular steel structure. A new figure depicting this has been provided.	The Delegated Officer considers that this change in decision does not alter the outcome of the risk assessment. As such, the change in design will be reflected in works approval conditions.
	Underlying ground to the wash bay will be constructed using 150	New figure added to Schedule 1 of the works approval.
	mm or compacted road base, not compacted in-situ solis.	Underlying ground specifications also updated as requested, noting this does not change the outcome of the risk assessment.
	 Wastewater treatment infrastructure will be located in a bunded container. The wastewater treatment infrastructure is part of the AHDF. Wastewater from the HEFU will be taken to the AHDF for treatment but the two stations will not be connected. Filtrations mediums within the wastewater treatment infrastructure for 'Hydrogen sulphide' should be for 'hydrocarbons' – this was an error within the supporting documentation. 	Location of wastewater treatment infrastructure will be amended to reflect the bunded container as this does not alter the outcome of the risk assessment.
		Reference to a connection between the two units will be deleted as requested. Noting that wastewater will be transferred between the HEFU and the AHDF, the below requirement has been incorporated into the operational requirement for the HEFU within Condition 6. Table 2:
		'Wastewater must be taken to the AHDF for treatment and transported within impermeable vessels'
		This specification ensures that a controls is still in place to prevent spills and leaks of wastewater, which was originally included in the licence when it was assumed the units were connected.
		'Hydrogen sulphide' will be replaced with 'hydrocarbon', noting that this change in contaminants will not increase the risk to the environment. Controls in place will also be sufficient for hydrocarbons.
	NORM and Mercury wastes will be located within portable secondary bunds which are 100 mm high, not 300 mm (collapsible bunds).	It is noted in Section 2.4.4 of the Supporting Information document that collapsible bunds were to be 300 mm high. However, the Delegated Officer will amend their height to 100 mm to reflect operational requirements, as the 100 mm height should still be sufficient to contain leaks and spills noting that bunds must be sized around containment infrastructure so as to be able to contain more than 125% of the

Condition	Summary of applicant's comment	Department's response			
		volume of the largest container stored within the bunded area.			
	Underlying ground to the Scrap metal processing area will be constructed using 150 mm of compacted road base, not compacted in-situ soils.	Section 2.4.5 of the Supporting Information document outlines that the Scrap metal processing area will be contructed using the natural ground which will be compacted to 90% maximum modified dry density.			
		However, the Delegated Office will amend the underlying ground specifications, noting that this does not change the outcome of the risk assessment.			
	Underlying ground to the fuel tank and fueling station will be constructed using 150 mm of compacted road base, not compacted in-situ soils.	Underlying ground specifications updated as requested, noting this does not change the outcome of the risk assessment.			
Condition 6, Table 2	The applicant requests changes to the operational requirements to clarify the locations and specifications of some equipment, and to amend terminology to be consistent with what will be used during operation of the premises.				
	 'Portable bund' specification to change to 'Portable and collapsible bund', specifying collapsible bunds will be 100 mm high not 300 mm. The bunds are designed to allow clean captured rainwater to be discharged. Request following change in wording – 'liquid environmentally bazardous material contained within bunds. 	It is noted in Section 2.4.4 of the Supporting Information document that collapsible bunds were to be 300 mm high. However, the Delegated Officer will amend their height to 100 mm to reflect operational requirements, as the 100 mm height should still be sufficient to contain leaks and spills noting that bunds must be sized around containment infrastructure so as to be able to contain more than 125% of the volume of the largest container stored within the bunded area.			
	must not be discharged to the environment.'	The Delegated Officer will amend wording to 'Liquid <u>contaminated with spills or</u> <u>leaks of environmentally hazardous material</u> contained within bunds must not be discharged to the environment', which will better reflect the applicants proposed measures for discharging captured rainwater from bunds as outlined above in this report:			
		'Clean rainwater falling within a bunded area will only be discharged through the drains if no spills or leaks have occurred within the bunded area, indicating that this liquid will be free of contaminants'.			
	Chemical cleaning station is the HEFU station, not the HPWJ.	Name updated as requested.			
	No chemicals are stored within the AHDF – remove chemical storage requirements.	Chemical storage specifications removed as requested, noting that chemical storage is also regulated under the <i>Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007.</i>			
	The applicant has changed the wash bay design from concrete to	The Delegated Officer considers that this change in decision does not alter the			

Condition	Summary of applicant's comment	Department's response
	a modular steel structure. A new figure depicting this has been provided.	outcome of the risk assessment. As such, the change in design will be reflected in works approval conditions. New figure added to Schedule 1 of the works approval.
Condition 8 The applicant requests that the conditions are amended to clarify that only potentially contaminated items will be inspected and surveyed. Some items that will be accepted at the facility will not be contaminated (e.g., anchors, chains, concrete mattresses) and will not require inspection or surveying.		Conditions 7, 8 and 9 require items accepted to the premises to be tested to determine whether or not contamination exists. In this regard, all items accepted to the premises could be considered as 'potentially contaminated', so adding the applicants proposed wording will not provide any distinction between accepted items.
	'The works approval holder must inspect and survey each <u>potentially contaminated</u> item of offshore decommissioned infrastructure accepted at the premises in accordance with Table 4.' The applicant also wishes to clarify that an 'item' as referenced in the condition (and conditions 12, 14 and 15) may include soveral	The Delegated Officer sought additional clarification from the applicant, who advised that items that will not undergo testing will be those known not to have contained production liquids, gases or well service gas. Examples of these items include concrete anchors, metal chains and umbilicals, which should only be contaminated with marine growth and hence will only require cleaning using the modular steel waste down bay.
	pieces e.g., a flowline is considered one item but will be broken into several pieces for transport to the site. Not all pieces of an item will be inspected or surveyed.	The Delegated Officer agrees with the applicants assumption that waste items that have not contained any of the above products will not be contaminated. As such, the Delegated Officer will amend condition 8 of the works approval to reflect that these waste items will not be subject to inspection and surveying requirements. The decision report will also be updated with this information and a definition for these items will be added to the works approval.
		The Delegated Officer does not see any issue with the distinctions made for what constitutes an 'item', so long as a representative piece of the whole item of infrastructure (i.e. a flow line) is inspected and surveyed in accordance with the requirements of condition 8.
Condition 10	Correct typographical error as follows:	Error corrected.
	'The works approval holder must undertake contain <u>er</u> floor surveys after the unloading of contaminated offshore decommissioned infrastructure in accordance with Table 5.'	
Condition 21	Correct reference to licence holder as follows: 'The licence works approval holder must record the total amount of waste accepted onto the premises, for each waste type listed in Table 9, in the corresponding unit, and for each corresponding time period, as set out in Table 9.'	Error corrected.

Condition	Summary of applicant's comment	Department's response			
N/A - Definitions	Correct definition of AHDF to 'Automated High-Pressure Decontamination Facility'.	Definitions updated as requested.			
	Add definition of HEFU – 'High Energy Flushing Unit'.	area of geotechnical engineering' within the definition for a suitably qualified civil or			
	Correct typographical error in definition of premises as follows:	structural engineer will not be required based on the type of infrastructure being construction.			
	'the premises to which this-licence works approval applies, as specified at the front of this licence works approval and as shown on the premises map (Figure 1) in Schedule 1 to this works approval.'				
	Amend definition of suitably qualified civil or structural engineer to: 'means a person who:				
	a) holds a Bachelor of Engineering recognized by Engineers Australia; and				
	 b) has a minimum or 5 years of experience working in a- supervisory area of 				
	geotechnical engineering; and				
	 c) is employed by an independent third party external to the <u>Works Approval</u> Licence Holder's business; 				
	or is otherwise approved in writing by the CEO to act in this capacity.'				
	The current definition requires the person to have five years of experience working in a supervisory area of geotechnical engineering, which is not relevant to the type of infrastructure being constructed and installed.				

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)					
Application type					
Works approval					
Date application received		15 May 2023			
Applicant and premises details					
Applicant name/s (full legal name/s)		Dodd & Dodd Group Ltd			
Premises name		C.D. Dodd Scrap Metal Recyclers			
		Part of Lot 550 on Plan 414367, Reserve 53324			
Premises location		Onslow Road			
		TALANDJI WA 6710			
Local Government Authority		Shire of Ashburton			
Application documents					
HPCM file reference number:		DER2023/000332			
Key application documents (additional to application form):		Onslow Decommissioning Project – Works approval application supporting information			
Scope of application/assessment					
Summary of proposed activities or changes to existing operations.		Development of the Onslow Decommissioning Project within the premises boundary of the existing Pilbara Regional Waste Management Facility (PRWMF) L9304/2021/1.			
		The project involves scrap metal cleaning and salvaging operations to support offshore infrastructure decommissioning works. Initially, the applicant will process containers and structures retrieved from decommissioned hydrocarbon fields.			
		Part of the premises will be used to process scrap metal and store flexible flowlines and umbilical cables. The applicant has partnered with Radiation Professionals Australia (RPA) who will use the other part of the premises to clean the materials, which may contain naturally occurring radioactive material (NORM), hydrocarbon residue, mercury and marine growth.			
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 47: Scrap metal Recovery	20 000 tonnes per annual period	
Category 61A: Solid waste facility	20 000 tonnes per annual period	

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	SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)						
	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 ⊠ General lease □ Expiry: Mining lease / tenement □ Expiry: Other evidence □ Expiry:			
	Has the applicant obtained all relevant planning approvals?	Yes 🗆	No 🛛 N/A 🗆	Approval: Expiry date: Development approval application was submitted to the Shire on 11 April 2023			
	Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes ⊠	No 🗆	CPS No: Application submitted to Native Vegetation branch concurrent with works approval application			
	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 Licence/permit No: N/A No clearing is proposed.			
	Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes 🗆	No 🖂	Application reference No: Licence/permit No: Licence / permit not required.			
	Does the proposal involve a discharge of waste into a designated area (as defined	Yes 🗆	No 🗆	Name: Pilbara Groundwater Area and Pilbara Surface Water Area Type: Proclaimed Groundwater Area/Surface Water Area Has Regulatory Services (Water)			

in section 57 of the EP Act)?

been consulted?

Yes \Box No \boxtimes N/A \Box

Regional office: North West

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)							
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes □ No ⊠	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to <u>WQPN 25</u>)? 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 □	Dangerous Goods Safety Act 2004 Radiation Safety Act 1975 Environmental Protection (Unauthorised Discharge) Regulations 2004					
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes □ No ⊠						
Is the Premises subject to any EPP requirements?	Yes 🗆 No 🛛						
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes □ No ⊠	Classification: N/A Date of classification: N/A					