# Decision Report

## Application for Works Approval

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

| | |
|---|---|
| **Works Approval Number** | W6531/2021/1 |
| **Applicant** | Controlled Waste Disposals Pty Ltd |
| **ACN** | 163 120 803 |
| **File Number** | DER2018/001042-4 |
| **Premises** | Controlled Waste Disposals<br>9 Cocos Drive, Bibra Lake WA 6163<br>Legal description<br>Lot 197 on Deposited Plan 17235<br>Certificate of Title Volume 1879 Folio 848<br>As defined by the Premises map attached to the issued works approval |
| **Date of Report** | 14 February 2022 |
| **Decision** | Works approval granted |

Jarrod Abrahams

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Date: 2022.02.14 10:27:30 +08'00'

**MANAGER WASTE INDUSTRIES**
**REGULATORY SERVICES**

*An officer delegated by the CEO under section 20 of the EP Act*

# Table of Contents

# 1. Decision summary

This Decision Report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the Premises. As a result of this assessment, Works Approval W6531/2021/1 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

On 9 November 2020, 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 acceptance, storage and treatment of bulk and packaged liquid wastes at the Premises. The Premises is located at 9 Cocos Drive, Bibra Lake WA 6163.

The Premises relates to the categories and assessed design capacities under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in Works Approval W6531/2021/1.

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 Works Approval W6531/2021/1.

### 2.2.1 Construction scope

The premises contains an existing industrial workshop (1,650 $m^2$) and an external hardstand area (3,500 $m^2$). Works at the premises will be limited to:

- Construction of bunded compounds will be constructed within the existing building
- Installation of waste treatment infrastructure within the bunded compounds.
- Installation of air filtration infrastructure.
- Construction of a tank farm at the northeaster corner of the premises for the acceptance and storage of bulk liquids.
- Construction of bunding and containment systems within the existing external hardstand.

Further information relating to the waste treatment infrastructure is provided in Section 2.4.

## 2.3 Overview of Premises

The applicant currently operates a liquid waste facility at 107 Garling Street, O'Connor under Licence L8730/2013/1. The applicant has secured an alternative location for the facility, being the proposed Bibra Lake premises, with existing infrastructure to be transferred and additional works to also be undertaken.

The premises covers an area of approximately 7,100 $m^2$, with existing infrastructure present, including an industrial workshop (1,650 $m^2$) and an external hardstand area (3,500 $m^2$).

The applicant proposes to accept the following general types of liquid waste for treatment:

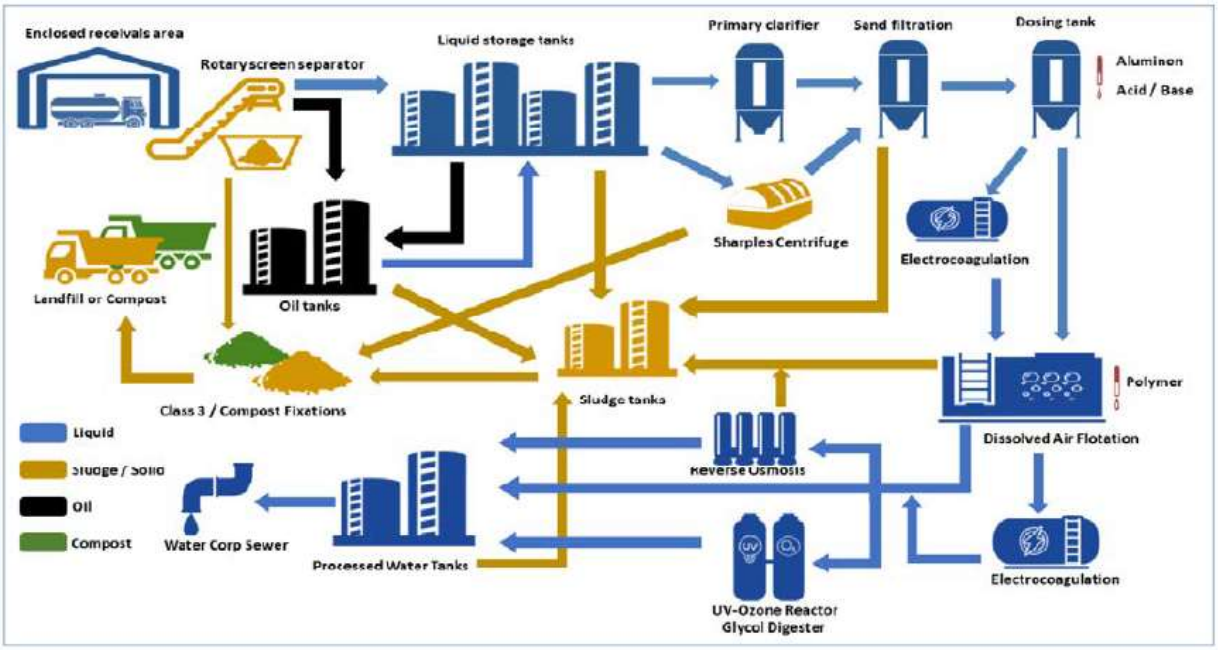
- water-based paint washings
- waste oil and emulsions
- engine coolants
- wetting agents
- galvanizing liquid wastes (acids)
- concrete truck and batching plant wash down (alkalis)
- low strength industrial wash water
- drilling mud.

The treatment processes that will be employed on-site include oily water separation, electrocoagulation and ozone treatment. Treated wastewater will be disposed of directly to the existing sewer through a Water Corporation Trade Waste Permit, as issued on 8 February 2022 (refer Appendix 3).

Sludges and precipitates from the various treatment processes will be solidified with sawdust (or other inert material) to a spadeable form, which will be subsequently removed from the premises for landfill disposal at an authorised facility.

The process flow of the proposed facility is shown in Figure 1.

**Figure 1. Process flow diagram**



## 2.4 Waste treatment infrastructure

Proposed waste treatment infrastructure and associated operational throughput is specified in Figure 2.

**Figure 2. Waste treatment infrastructure**

| # | Equipment | Capacity | Operational throughput | Maintenance |
|---|---|---|---|---|
| 1. | Centrifuge | 15,000 L/h | 10,000 L/h | Clean up and inspect every 12 month |
| 2. | Dissolved air floatation unit | 30,000 L/h | 10,000 L/h | Clean up and inspect monthly |
| 3. | Electro-coagulation unit | 15,000 L/h | 10,000 L/h | Clean up and inspect monthly |
| 4. | Sterilizer unit | 41,000 L/h | 10,000 L/h | Clean up and inspect monthly |
| 5. | Activated carbon unit | 20,000 L | 20,000 L | Clean up and inspect monthly |
| 6. | Reverse osmosis unit | 70,000 L/h | 30,000 L/h | Clean up and refill every 6 month |
| 7. | Corrosive neutralisation | 4,000 L/batch | 2,000 L/batch | Clean up and replace cartridges every 3 to 6 month |
| 8. | Aerosol paint cans press | 500 kg/h | 200 kg/h | Clean up and inspect monthly |
| 9. | Drum press | 500 kg/h | 200 kg/h | Clean up and inspect monthly |
| 10. | Rotary screen | N/A | 40,000 L/h | Clean up and inspect monthly |

Waste will be discharged, unloaded and stored in the areas specified in Figure 3.

Typically, liquid waste will be passed to a primary settlement tank and then through a solids separation process via a rotary screen before being transferred into bulk storage tanks. Recovered solids will be transferred to a storage bin for disposal at an approved off-site facility. Once liquid waste has been unloaded, waste carriers may then washout residual liquid waste in the transport vehicle with clean water, with vehicle wash-waters discharged in the same manner as the corresponding liquid waste.

Oil that separates in the primary settlement tank or liquid storage tanks will be pumped to the oil storage tanks. Wastewater that separates in the oil storage tanks will be pumped back to the liquid storage tanks. Sludge that accumulates in the liquid and oil storage tanks will be pumped to the sludge tanks and then sent to the centrifuge prior to mixing with other wastes and transport off site for disposal to landfill.

Surfactants and detergents (wetting agents) and drilling muds will be delivered to the site and unloaded directly into the solid sorting treatment area.

The throughput capacity of liquid waste treatment will be limited both by the capacity of the treated wastewater storage tank (60 kL) and the discharge rate of treated wastewater to sewer allowed under the trade waste permit.

### 2.4.1 Sharples centrifuge

The centrifuge physically separates heavy solids from waste liquids, with all sludge collected (gravity fed from tanks) or discharged to the dissolved air flotation (DAF) sludge tank (via sludge/hydrocarbon removal scrapers). Sludge can also be processed through the centrifuge for further de-watering. The centrifuge is a machine for applying centrifugal force to a liquid. The rotor, called a bowl, has an opening in the bottom to allow the liquid to enter, and openings in the top of the bowl to allow the fluid or fluids to discharge. The fluid entering the rotating bowl is caused to rotate with the bowl. A centrifugal separator force is adjusted to continuously separate and discharge oils and water. Since this force is also acting on any solids present, clarification takes place at the same time through the deposit of these solids against the wall of the bowl.

### 2.4.2 Dissolved Air Floatation

Primary-treated wastewater with residual hydrocarbon content will be transferred to the DAF unit. The waste stream will be pre-injected with a polymer flocculation agent for separation of suspended solids, precipitation and biochemical oxygen demand (BOD) reduction. Air-flotation

treated wastewater will then transferred to a settling tank for further solid/precipitate settlement prior to polishing via the electro-coagulation plant or reverse osmosis filtration, and/or to the sewer discharge holding tank.

### 2.4.3 Electrocoagulation

Electrocoagulation is utilised for:

- removal of surfactants, detergent and phosphates from industrial wash water which could affect further treatment processes (i.e. flocculation)
- removal of emulsified oil and total petroleum hydrocarbons
- removal of suspended solids larger than 30 µm
- stabilisation/neutralisation of pH of the wastewater
- BOD reduction
- heavy metal reduction.

Electrocoagulation applies an electrical charge to the wastewater allowing suspended matter to agglomerate. The process removes suspended solids to sub-micrometre levels, breaks emulsions such as oil and grease or latex, oxidises heavy metals and destroys bacteria and viruses without the use of filters or the addition of separation chemicals.

Electro-coagulation also presents an alternative to dosing of high strength acids. Acidic wastes are slowly dosed into the unit's aqueous medium. The excess hydroxide anion generated during the process gradually neutralises the acid to achieve a pH value of 6 to 9.

The applicant is currently adapting the electrocoagulation unit at the existing premises to work as an electrowinning unit so that it can be used to extract zinc metal from waste galvanising liquids.

Treated liquid will be quarantined in a separate tank for sampling. Once the treated liquid meets the trade waste discharge criteria, it will be processed in the wastewater treatment stream.

### 2.4.4 Reverse Osmosis Filtration

Wastewater with high electrolyte concentration (electrical conductivity > 3,000 µs/cm) will be processed through reverse osmosis filters as a final polishing method, or will be diluted with low electrolyte processed water in small quantities. Reverse osmosis uses a semi-permeable membrane to remove ions, molecules and larger particles from wastewater.

### 2.4.5 UV-ozone reactor/glycol digestion

The UV-ozone reactor treats liquids with high BOD / Chemical Oxygen Demand (COD) content (BOD greater than 3,000 mg/L, COD greater than 6,000 mg/L). These wastewaters will be processed though the DAF process then stored in an isolated tank to await processing via the UV-ozone reactor until water quality satisfies the trade waste permit discharge criteria.

The ozone generator converts oxygen into ozone by using ultraviolet radiation or an electric discharge field. Using ozone can kill bacteria and oxidise substances such as iron and sulphur so that they can be filtered out of the solution through a sequence of carbon, sand, and zeolite filters prior to discharge to the holding tank.. The UV-ozone reactor can also be linked to the anaerobic/aerobic digestion process for degenerating glycol content.

### 2.4.6 Hydrocarbon Storage

All free hydrocarbons removed during the processing cycle will be stored in an isolated oil tank. Hydrocarbons will not be permitted to be cross-contaminated with liquids in the water storage tanks. All pipework and hoses used for hydrocarbon transfers will be separated from

water pipework and hoses, or thoroughly cleaned before use for different purposes.

Hydrocarbons in the oil storage tank will be allowed to settle and de-watered several times until the water content is as low as possible. Emulsion separating agent can be added if the oil contains high levels of emulsions before further de-watering is carried out.

Oil/water interface liquids will be collected in an isolated tank for later processing through the centrifuge and electrocoagulation treatment when extracted from tanks and/or trucks. The final hydrocarbon product will be sampled and tested by a licensed oil recovery operator then decanted to an approved road tanker by the licensed oil recovery operator for export from the site.

### 2.4.7 Solidification process

Surfactants, detergents (wetting agents) and drilling muds will be accepted in a slurry/sludge state into the solid sorting treatment area, where they will be mixed with residual sludge material from the various wastewater treatment systems, including:

- tanker residue cleanout
- gravity sedimentation
- filtering
- rotary screening
- centrifuging
- DAF processing.

The sludge mixture will be pumped through a belt press to remove liquid with the residual solid component captured and mixed with sawdust as part of the solidification process. Liquids are directed back into the wastewater treatment process. The sludge and sawdust will be blended to a spadeable consistency and to meet Class III landfill acceptance criteria as specified in the *Landfill Waste Classification and Waste Definitions 1996* (as amended 2019). The blended material will be removed off site for disposal at an authorised facility.

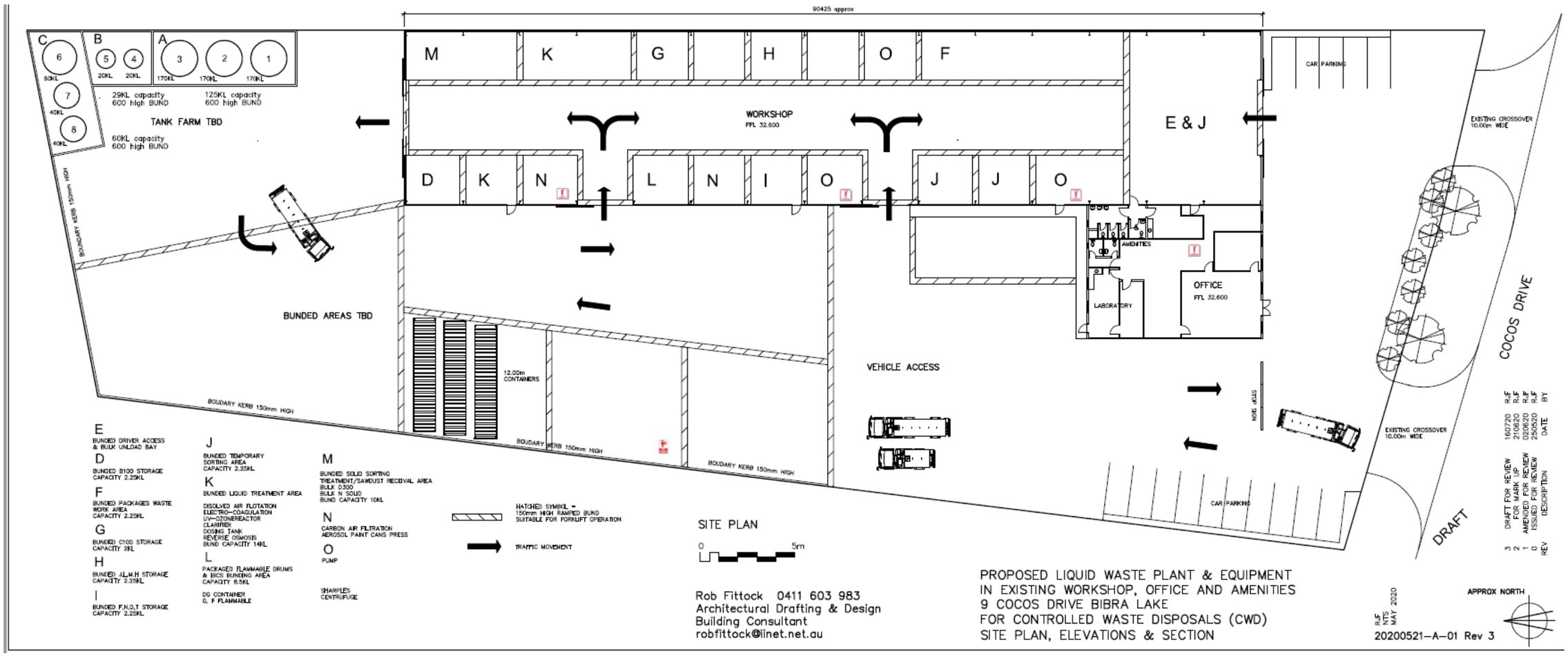
The Delegated Officer acknowledges that at the Garling Street premises, the applicant currently mixes solid and liquid waste with sawdust prior to it being disposed of offsite. This practice is also proposed for the Cocos Drive premises. The supporting documentation provided with the application refers to this process as solidification. The Delegated Officer does not consider ‘solidification’ to be an accurate term for this process. This process is better described as absorption. Absorption does not render the hazardous constituents of liquid wastes immobile or less mobile via chemisorption mechanisms such as attenuation, chemical reaction and neutralization or precipitation, ion exchange or encapsulation.

The hazardous contaminants in absorbed liquid wastes are not chemically treated or otherwise remediated by blending with absorbent materials. The waste is only made spadeable and/or the contaminants diluted in order to meet the landfill acceptance criteria for Class II or III putrescible landfills as outlined in the *Landfill Waste Classification and Waste Definitions 1996*.

Biodegradable absorbents (such as sawdust) readily decompose once landfilled, releasing absorbed liquid waste in liquid form, while soils release absorbed liquids when compressed or waterlogged, as might occur during routine landfill operations.

The department acknowledges that absorption is currently common practice in industry and is therefore reviewing liquid waste treatment and disposal practices across industry to align with current legislative principles. The intent of the review is to develop guidelines and policy in this area, which also includes the blending of liquid waste with absorbent material to facilitate disposal via landfilling. Once the department has developed guidelines/policies in this area, relevant licenses may be reviewed with the intent to update regulatory controls to include requirements that reflect some of the limitations/concerns outlined above.

**Figure 3. Proposed site plan**



## 2.5 Planning Approval

An application for development approval was submitted by the applicant to the City of Cockburn on 28 January 2021 (reference number DA21/0093 - 4412617), with planning approval issued on 15 July 2021.

Conditions of environmental relevance include:

- All stormwater must be contained and disposed of on-site.
- Prior to commencement, an odour management plan shall be prepared to the satisfaction of the City of Cockburn and the Department of Water and Environmental Regulation.
- If odour is detected at adjacent premises and is deemed to be a nuisance by the City, then any process, equipment and/or activities that are causing the odour nuisance shall be stopped until the process, equipment and or activity has been altered to prevent the odour to the satisfaction of the City.
- A noise management plan is to be provided to the City for approval and maintained thereafter to the satisfaction of the City of Cockburn.

## 2.6 Compliance inspections and compliance history

The Department of Water and Environmental Regulation's (DWER) published Guidance Statement: Risk Assessments (February 2017) states that operator history is a relevant consideration in establishing risk context and in determining risk likelihood criteria.

Due to the shared operational history of the applicant and similarity in operations at the current facility at 107 Garling Street, O'Connor operated under Licence L8730/2013/1, the compliance history of that premises has been considered in the department's assessment of risk. Table 1 sets out the matters that have been considered.

**Table 1. Compliance history of the L8730/2013/1 premises**

| Date | Findings |
|---|---|
| 15/01/2018 | Breach of licence conditions relating to:<br>- the types and quantities of waste permitted for acceptance at the premises.<br>- cleaning out of vehicles that carried Controlled Waste.<br>- management of sludge from desludging process.<br>- caused unreasonable odour emissions.<br>- installation and operation of infrastructure without approval. |
| 26/06/2019 | Breach of licence conditions relating to:<br>- the types and quantities of waste permitted for acceptance at the premises.<br>- cleaning out of vehicles that carried Controlled Waste. |
| 18/08/2020 | Breach of licence conditions relating to:<br>- suitability of the premises' qualified chemistry technician.<br>- storage and labelling of waste.<br>- operational requirements of infrastructure.<br>- record keeping.<br>- processing of waste. |
| 13/10/2020 | Same findings as 18/08/2020. |
| 11/05/2021 | Breach of licence conditions relating to:<br>- storage and labelling of waste.<br>- record keeping. |

| Date | Findings |
|---|---|
| | - processing of waste.<br>- operational requirements of infrastructure.<br>- hardstand infrastructure. |

### 2.6.1 Environmental Protection Notice CEO182/18

From 8 January 2018 to 13 January 2018, the Department received 21 complaints from 11 residents with regards to the impacts of chemical odours allegedly emanating from the L8730/2013/1 premises. In response to this, the Department attended the premises and undertook an inspection (refer Table 1).

Given the non-compliances identified at the Premises and in response to the community impacts from unreasonable odour emissions, the Department issued an Environmental Protection Notice (EPN) under section 65 of the EP Act for the L8730/2013/1 premises. The Notice was issued because the Department suspected that there were emissions of odours from the Premises and the emissions caused pollution, being a direct alteration of the environment to its detriment.

The key requirements of the EPN were to immediately:

- Cease operations of waste treatment equipment and processes not authorised under Licence L8730/2013/1.
- Cease use of the receival pit, also known as the mixing pit and / or leach pit, completely empty the pit, clean all residues from the receival pit.
- Once cleaned, the receival pit is only to receive, handle, treat and stored surfactants & detergents and drilling mud (other than drilling mud contaminated with hydrocarbons).
- Within one week of the Notice being issued, prevent the emission of unreasonable odours from the Premises by ensuring all wastes except surfactants, detergents and drilling muds, are received, stored and processed in tanks, vessels or fully enclosed buildings.
- Within 14 days of the Notice, the Owner to engage an Environmental Consultant to prepare a Remediation Plan, for the prevention control or abatement on odour emissions.

The department approved the Remediation Plan on 16 July 2018, which included the installation of the following odour mitigating controls:

- Waste pit canopy.
- DAF enclosure.
- Carbon filter and exhaust.
- Ductwork from all storage and processing tanks to the carbon filter.
- Enclosure and air extraction for the Waste Receival Area
- Enclosure for the Tanker Unloading Point.
- Walls for the enclosure at the Tanker wash.

The works associated with the Remediation Plan were completed and implemented by 16 November 2018. The department has not received any complaints pertaining to odour from the premises since March 2018, suggesting that the new infrastructure was effective in mitigating odour emissions..

### 2.6.2 Compliance considerations relevant to the risk assessment

The Delegated Officer considers that the demonstrated history of non-compliances and need for enforcement action associated with the Garling Street premises points to a failure in the applicant's management of the premises and consideration of risks to the environment and public health.

Operator history has therefore been factored into the department's assessment of risk (as included in Section 3) in line with *Guidance Statement: Risk Assessment (February 2017*), as the department considers that it is possible that similar management practices could be expected at the new Bibra Lake Premises and therefore has considered this in its assessment of likelihood of a risk event occurring.

The demonstrated effectiveness of the implementation of the Remediation Plan, following issue of the EPN, particularly in relation to odour mitigating infrastructure, has also been considered in the department's assessment, with similar controls proposed for the Bibra Lake Premises by the applicant.

# 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 construction and operation which have been considered in this Decision Report are detailed in Table2 below. Table2 also details the proposed control measures the applicant has proposed to assist in controlling these emissions, where necessary.

**Table 2: Proposed applicant controls**

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| **Construction** | | | |
| Dust | Construction works (internal and external infrastructure) | Air/windborne pathway | - Wetting down of dust generating activities. |
| Noise | Construction works (internal and external infrastructure) | Air/windborne pathway | - Construction works will be carried out between 7am and 7pm, Monday to Saturday.<br>- *Environmental Protection (Noise) Regulations 1997* apply. |
| Spills of hydrocarbons and other chemicals | Construction works (internal and external infrastructure) | Direct discharge to land and surface | - Appropriate spill containment equipment will be provided at strategic locations.<br>- *Environmental Protection (Unauthorised* |

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| from vehicles and equipment | | waters causing contamination | *Discharges) Regulations 2004.* |
| **Operation** | | | |
| Odour | Acceptance, treatment and storage of waste (liquid and sludge) | Air/windborne pathway | - A large portion of the identified odour sources to be contained within a large industrial building with filtration.<br>- Activated carbon filter designed for a flow rate of 3000 $m^3$/hr.<br>- Extraction hoods ducted to an activated carbon filter above the:<br>- Bulk unload bay<br>- Electrocoagulation/electrowinning unit and feed tank<br>- oily water plate separator vessel<br>- UV-ozone reactor vessel<br>- DAF unit<br>- Solid sorting treatment area<br>- At least a 90% reduction in odour concentration (measured as odour units OU) and VOC concentration (mg/$m^3$) from odorous air reporting to extraction hoods, in the exhaust air after activated carbon treatment.<br>- Scrubbed air from the activated carbon filtration unit will exhaust via vents at roof level.<br>- Sampling of odorous air near the inlet side of the activated carbon filter and the exhaust air discharged from the filter.<br>- Use of closed hose couplings for tanker deliveries unless pump out occurring within the enclosed bulk receivals area.<br>- Vents on the external storage tanks will be connected to the carbon filtration system.<br>- Tanker vents to be connected to storage tank during loading to create a closed loop. |
| Noise | Acceptance, treatment and storage of waste (liquid and sludge)<br>Vehicle movements | Air/windborne pathway causing impacts to health and amenity | - The normal operating hours of the facility will be 7 am to 6 pm, Monday to Saturday.<br>- Given its noise generating potential, the centrifuge will be enclosed within an insulated booth which will be installed in the main building.<br>- *Environmental Protection (Noise) Regulations 1997* apply. |

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| Dust | Acceptance, treatment and storage of waste (liquid and sludge)<br>Vehicle movements | Air/windborne pathway causing impacts to health and amenity | - No waste types proposed for receival that are potential significant sources of dust.<br>- All deliveries and processing of sawdust will be within the main building.<br>- Sawdust/sludge blends will have a relatively high moisture/hydrocarbon content and will not present a high dust emission potential. |
| Contaminated or potentially contaminated stormwater | Acceptance, treatment and storage of waste (liquid and sludge) | Direct discharge to land and surface waters causing contamination | - Stormwater generated on the site is contained and managed on-site via infiltration sumps.<br>- A drainage reserve is located approximately 75 m to the south of the site boundary at 3 Coolibah Way.<br>- No waste materials will be handled or stored outside of designated containment areas.<br>- Bulk storage of liquids will be in tanks with bunding that has a capacity of at least 110% of the largest tank.<br>- Individual drums and IBCs containing liquid waste will be stored within containment areas that provide at least 25% of the total waste volume stored in that area.<br>- Bulk liquid receivals will take place inside the main building which will be kerbed (150 mm) providing an effective containment capacity of 250 kL.<br>- Tank-level monitoring (Capacitance-Diaphragm Sensors [CDS]).<br>- Daily tank and bund inspection.<br>- The solidification area will comprise concrete panel walls, flooring and bunding over a solid metal plate floor with 10 kL containment. The area is within in the building, which itself will be kerbed. |
| Treated wastewater | Treatment of liquid waste | Degradation of surface water and groundwater quality | - Treated wastewater will be stored within an 8 tank networks within the tank farm.<br>- Tank farm is located within a concrete bunded compound with capacity to contain 110% of the largest tank.<br>- The applicant will apply for a trade waste permit from the Water Corporation to discharge treated wastewater to sewer. The permit will define the type of wastewater allowed to be discharge to the sewer and will specify limits for discharge rate and concentrations of contaminants. |

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| Particulates and noxious gases | Fire (from the mixing of incompatible waste types or otherwise) | Air/windborne pathway | - Operational procedures for:<br>- Waste arrivals and acceptance<br>- Tanker liquid waste discharge<br>- Waste storage<br>- Liquid waste treatment<br>- Containers to be clearly labelled and equipped with well-fitting lids, caps, any valves secure.<br>Tanker and bulk liquid wastes shall be sampled prior to acceptance.<br>- Other than pure product chemicals and laboratory chemicals, no wastes shall be accepted without sampling, checking, and testing being carried out.<br>- Packaged waste dangerous goods will be separated/segregated.<br>- Packaged Class 3 flammable liquid will be isolated and stored in dangerous goods container.<br>- The applicant maintains an Emergency Response Plan and Hazmat Plan.<br>- Fire-fighting equipment will be available on site.<br>- Elimination and control of ignition sources within internal and external waste storage areas, including:<br>- Prohibition of naked flames and hot surfaces;<br>- Use of hot work permits;<br>- Inspection, testing, and maintenance of electrical equipment (fixed, portable, and wiring);<br>- Use of diesel pumps and pressure cleaners where appropriate. |
| Contaminated fire water | Washwater resulting from a fire event | Degradation of surface water and groundwater quality | - Isolate stormwater drains during fire events.<br>- Controls as per Contaminated or potentially contaminated stormwater controls |

### 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's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table3 and **Error! Reference source not found.**4 provide a summary of potential human and e nvironmental 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 3: Sensitive human and environmental receptors and distance from prescribed activity**

| **Human receptors** | **Distance from prescribed activity** |
|---|---|
| Residential Premises (Yangebup) | 750 m southeast |
| Commercial/industrial property | Adjacent to the west, within 100 m to the east, north and south |
| Recreational areas | South Lake Reserve (270 m northeast), Nicholson Reserve (950 m southeast), Levi Park (750 m southeast) and Little Rush Lake (1 km east) |
| **Environmental receptors** | **Distance from prescribed activity** |
| Protected ecological community (Tuart woodland) | 300 m northeast |
| Bush Forever site | 650 m northeast |
| Multiple use / Resource enhancement geomorphic wetland (South Lake) | 725 m northeast |
| Underlying groundwater (non-potable purposes) | The Perth Groundwater Map states that the site is underlain by Tamala Limestone and that groundwater beneath the site is 27 m below ground level. There are no groundwater abstraction bores or public drinking water source areas located within 1,000 m of the site. |


**Figure 4: Distance to environmental 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 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 W6531/2021/1 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. 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 Event | | | | | Risk rating[1] C = consequence L = likelihood | Applicant controls sufficient? | Conditions[2] of works approval | Justification for additional regulatory controls |
|---|---|---|---|---|---|---|---|---|
| **Source/Activities** | **Potential emission** | **Potential pathways and impact** | **Receptors** | **Applicant controls** | | | | |
| **Construction** | | | | | | | | |
| Construction works (internal and external infrastructure) | Dust | Air/windborne pathway causing impacts to health and amenity | Residences 750 m southeast<br>Commercial/industrial receptors – adjacent to the west, within 100 m to the east, north and south | Refer to Section 3.1 | C = Minor<br>L = Rare<br>**Low Risk** | Y | Condition 1 | The Delegated Officer considers that the provisions of section 49 of the EP Act is sufficient to regulate dust emissions from construction activities. |
| | Noise | | | Refer to Section 3.1 | C = Moderate<br>L = Rare<br>**Medium Risk** | Y | Condition 1 | The Delegated Officer considers that the provisions of *the Environmental Protection (Noise) Regulations 1997* are sufficient to regulate noise emissions from construction activities. |
| | Spills of hydrocarbons and other chemicals from vehicles and equipment | Direct discharge to land and surface waters causing contamination | Drainage reserve is located approximately 75 m to the south of the site boundary | Refer to Section 3.1 | C = Moderate<br>L = Rare<br>**Medium Risk** | Y | Condition 1 | Minor hydrocarbon and chemical spillages are adequately regulated by the *Environmental Protection (Unauthorised Discharges) Regulations 2004*. |
| **Commissioning and Operation (including time-limited-operations operations)** | | | | | | | | |
| Liquid waste acceptance, storage and treatment via wastewater treatment system<br>Solidification of sludge residue | Odour | Air/windborne pathway causing impacts to health and amenity | Residences 750 m southeast<br>Commercial/industrial receptors – adjacent to the west, within 100 m to the east, north and south | Refer to Section 3.1 | C = Moderate<br>L = Possible<br>**Medium Risk** | N | Conditions 1, 6, 7, 9, 15 and 21<br>**Conditions 2, 3, 4, 5, 11, 12, 16, 22, 24 and 31** | Refer to Section 3.3 |
| Waste laden vehicle | Noise | Air/windborne pathway | Residences 750 m southeast | Refer to Section | C = Moderate | Y | Condition 1 | The Delegated Officer considers that the provisions of *the Environmental* |

| Risk Event | | | | | Risk rating[1]<br>C = consequence<br>L = likelihood | Applicant controls sufficient? | Conditions[2] of works approval | Justification for additional regulatory controls |
|---|---|---|---|---|---|---|---|---|
| **Source/Activities** | **Potential emission** | **Potential pathways and impact** | **Receptors** | **Applicant controls** | | | | |
| movements | | causing impacts to health and amenity | Commercial/industrial receptors – adjacent to the west, within 100 m to the east, north and south | 3.1 | L = Unlikely<br>**Medium Risk** | | | *Protection (Noise) Regulations 1997* are sufficient to regulate noise emissions during time-limited operations. |
| | Dust | Air/windborne pathway causing impacts to health and amenity | Residences 750 m southeast<br>Commercial/industrial receptors – adjacent to the west, within 100 m to the east, north and south | Refer to Section 3.1 | C = Minor<br>L = Rare<br>**Low Risk** | Y | Condition 1 | The Delegated Officer considers that the provisions of section 49 of the EP Act is sufficient to regulate dust emissions during time-limited operations. |
| | Contaminated or potentially contaminated stormwater | Degradation of surface water and groundwater quality | Drainage reserve is located approximately 75 m to the south of the site boundary<br>Groundwater (27 mbgl) | Refer to Section 3.1 | C = Moderate<br>L = Unlikely<br>**Medium Risk** | N | Conditions 1, 15, 21 and 22<br>**Conditions 2, 3 and 23** | The Delegated Officer considers the applicant's controls to be sufficient to mitigate the potential for hazardous spills generated by waste storage and treatment activities.<br>Conditions 2 and 3 require the submission of an Environmental Compliance Report to verify the works have been constructed in accordance with the relevant requirements.<br>To mitigate the discharge of spills through the stormwater drain network, the instrument will restrict the location of stormwater drains to outside areas that are not designated as waste storage areas. |
| | Treated wastewater (discharge to the sewer network) | Degradation of surface water | Woodman Point ocean outfall | Refer to Section 3.1 | C = Moderate<br>L = Rare<br>**Medium Risk** | N | Conditions 1, 15, 21 and 22<br>**Conditions 11, 12 and 24** | The Delegated Officer considers the possession of a trade waste permit, and subsequent conformance with its requirements, sufficient to mitigate the potential for emissions caused by the |

| Risk Event | | | | | Risk rating[1]<br>C = consequence<br>L = likelihood | Applicant controls sufficient? | Conditions[2] of works approval | Justification for additional regulatory controls |
|---|---|---|---|---|---|---|---|---|
| **Source/Activities** | **Potential emission** | **Potential pathways and impact** | **Receptors** | **Applicant controls** | | | | |
| | | | | | | | | discharge of treated wastewater to the sewer network.<br>Conditions 11 and 12 require the submission of an Environmental Commissioning Report to verify the treatment infrastructure operates in accordance with the relevant discharge requirements. |
| Fire (from the mixing of incompatible waste types or otherwise) | Particulates and noxious gases | Air/windborne pathway causing impacts to health and amenity | Residences 750 m southeast<br>Commercial/industrial receptors – adjacent to the west, within 100 m to the east, north and south | Refer to Section 3.1 | C = Major<br>L = Possible<br>**High Risk** | N | Conditions 1, 15, 21 and 22<br>**Conditions 2, 3, 11, 12, 16, 17, 18, 19 and 20** | Refer to Section 3.4 |
| Washwater resulting from a fire event | Contaminated washwater | Degradation of surface water and groundwater quality | Drainage reserve is located approximately 75 m to the south of the site boundary<br>Groundwater (27 mbgl) | Refer to Section 3.1 | C = Major<br>L = Unlikely<br>**Medium Risk** | N | Conditions 1, 15, 21 and 22<br>**Conditions 2, 3 and 23** | The Delegated Officer has included a requirement to install automatic shut-off valves within the stormwater network to ensure fire contaminated wastewater is contained in the event of a fire..<br>The requirements within the instrument which mitigate the risk of fire, as identified above, subsequently reduce the potential for firewater generation and discharge.<br>Conditions 2 and 3 require the submission of an Environmental Compliance Report to verify the works have been constructed in accordance with the relevant requirements. |

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.

## 3.3 Detailed risk assessment for odour

### 3.3.1 Criteria for assessment

There are no set threshold or concentration criteria for odour assessment. Under section 49(5) of the EP Act, it is an offence to emit or cause to be emitted, an unreasonable emission from any premises.

An unreasonable emission is defined in the EP Act (section 49(1)) as an emission or transmission of noise, odour or electromagnetic radiation which unreasonably interferes with the health, welfare, convenience, comfort or amenity of any person.

Individual responses to odour emissions may vary depending on age, health status, sensitivity and odour exposure patterns. Perceived odour intensity may increase or decrease on exposure. Community response to an odour can include annoyance, potentially leading to stress, and loss of amenity. Exposure to repeated odour events can create a nuisance effect.

### 3.3.2 Referral to Air Quality Sciences Branch

Due to the shared operational history of the applicant and similarity in operations at the previous facility at 107 Garling Street, O'Connor operated under Licence L8730/2013/1, the odour complaint history of that premises has been considered in the department's risk assessment. Following the issue of the EPN to the O'Connor premises, which stipulated numerous odour reduction measures, reports of odour complaints dramatically reduced. DWER has received no complaints pertaining to odour from the premises since December 2018, when odour mitigating infrastructure was installed. It is anticipated that these measures will be retained and improved upon relocation to the Bibra Lake premises.

Given the potential for odour emissions, the application was referred to the department's Air Quality Sciences Branch (AQB), Science and Planning, for technical advice. This advice was provided on 25 May 2021, as summarised below:

**Key findings:**

1. The proposed controlled waste facility appears to pose low odour impact risk at the nearest park receptor (270 m) and residential receptors (750 m) if the management practices, operations and odour controls of the current facility (O'Connor) are maintained at the new premises.
2. Implementation of an odour management plan is recommended that formalises the procedures, triggers and corrective actions described in the application document and includes complaints management procedures and regularly scheduled maintenance checks on the integrity of infrastructure involved in activated carbon operation.
3. No fatal flaws were noted with the activated carbon filter commissioning procedure.
4. Improved activated carbon filter performance monitoring is recommended.

In further detail, the technical advice identified issues which may negatively impact odour control efficiency at the premises, including:

- poor monitoring and maintenance of the fiberglass particulate prefilters, ductwork or activated carbon scrubber media integrity
- settling over time of the activated carbon bed causing an air gap
- larger than anticipated liquid or fugitive odour release resulting from waste transfer activity

- accidental liquid spillage external to the building
- the presence of low-polarity odorous gases in the gas waste stream
- high moisture content (humidity) in the waste gas stream.

A number of these issues relate to good infrastructure maintenance and management processes. Preparation and implementation of an odour management plan is recommended to formalise the management, triggers, mitigation and contingency actions described in the application. The odour management plan should include a complaints management procedure and regularly scheduled maintenance checks on the integrity of infrastructure involved in activated carbon operation such as prefilters, ductwork and fans.

Monthly monitoring by nose, VOC and dynamic olfactometry appears to be insufficiently frequent as scrubber odour removal efficiency can drop from 99% to 0% in a matter of minutes if scrubber media saturation and mass transfer zone breakthrough occurs. Monitoring and management of the activated carbon filters could be improved by installing activated carbon bed breakthrough detection equipment or other appropriate continuous emissions monitoring equipment.

### 3.3.3 Consequence

Due to the waste types proposed to be accepted and treated at the Premises, and considering compliance history as discussed in section 2.6, the Delegated Officer has determined that odour emissions may cause mid-level impact to amenity at a local scale and low level or occasional medical treatment for immediately surrounding sensitive and industrial receptors. Therefore, the Delegated Officer considers the consequence of odour emissions associated with the premises' activities to be Moderate.

### 3.3.4 Likelihood

Considering the location of surrounding receptors, the operational history of the applicant as discussed in section 2.6 and the applicant's proposed controls, the Delegated Officer has determined that the risk event could occur at some time. Therefore, the Delegated Officer considers the likelihood of impacts associated with a odour emissions to be 'Possible'.

### 3.3.5 Overall rating of smoke and particulate emission and impact

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix contained in Guidance Statement: Risk Assessment (DER 2017) and determined that the overall rating for the risk of smoke and particulate emissions is 'Medium'.

Medium risk events are acceptable, generally subject to regulatory controls. As such, the activities as proposed can be tolerated with outcome-based conditions where practical and appropriate.

### 3.3.6 Determination

In addition to the applicant's proposed controls, further regulatory controls have been specified within the works approval to align with the technical advice, notably in relation to the preparation and implementation of an odour management. The odour management plan will be received by the department prior to commissioning and will allow a review and assessment of the appropriateness of the management measures, including maintenance and integrity checks to confirm the continued performance of the activated carbon filter. It is the departments expectation that the activated carbon filter will be maintained to achieve at least a 90% reduction in odour concentration (measured as odour units OU) and VOC concentration ($mg/m^3$) from odorous air reporting to extraction hoods.

Following time-limited operations, and as part of the subsequent licence application assessment, the department will review the odour management plan in conjunction with the

monitoring information provided during commissioning and time-limited operations. This review will inform the adequacy of odour mitigation measures and the potential requirement for further regulatory controls, which may include the installation of an activated carbon bed breakthrough detection equipment or other appropriate continuous emissions monitoring equipment. Environmental compliance reporting and environmental commissioning reporting will also be required prior to the commencement of time limited operations to confirm the construction of odour mitigating infrastructure in accordance with the works approval.

## 3.4 Detailed risk assessment for smoke and particulate emissions

### 3.4.1 Criteria for assessment

The Premises has the potential to emit smoke and noxious particulates in the event that a waste storage fire occurs. Fire events may occur through ignition by external factors, such as operational practices, mixing of incompatible wastes, non-conforming waste, arson, or by spontaneous combustion.

There are a number of potential air quality criteria that may apply to smoke emissions. These criteria are generally distinguished by the exposure level they relate to, with short term (acute) exposure and long term (chronic) exposure levels having different screening criteria. As the Premises is expected to emit smoke or particulates only under abnormal conditions (waste storage fire), the emissions would be infrequent and non-continuous, accordingly short-term exposure criteria are considered most relevant to the assessment.

The US Environmental Protection Agency provides guideline levels for acute exposure to airbourne chemicals (USEPA 2020). Short term airbourne particulate criteria used in Western Australia are provided in *Bushfires and Other Vegetative Fires, Protecting Community Health and Well Being from Smoke Exposure* (DoH 2012).

The National Environment Protection (Ambient Air Quality) Measure provides criteria for both $PM_{10}$ and $PM2_{.5}$ particulate concentrations in ambient air. These criteria are set for protection from exposure to particulates and although they may be exceeded, particularly from large events, are not the most suitable criteria to provide relevant and timely information during a fire event.

Of relevance to the risk posed at the Premises is the fire incident that occurred at the Waste Control Pty Ltd hazardous waste and solvent recycling facility on Bulbey Street, Bellevue on 15 February 2001. The hazardous nature and impact of the fire emergency was such that a request for an inquiry into the incident was referred to the Economics and Industry Standing Committee, with a report by the Economics and Industry Standing Committee[1] produced based on this inquiry.

In the incident at Bellevue, the combustion of stored toxic waste together with flammable material contributed to the creation of a toxic plume. The plume had the potential to cause a range of health impacts and a number of fire-fighters and residents exposed to the smoke plume experienced nausea, sickness and anxiety.

The ferocity of the fire destroyed the majority of chemicals stored on the site, with toxic fumes discharged into the atmosphere and residue from the fire landed in surrounding areas and covered buildings and vehicles in the vicinity that subsequently had to be decontaminated.

The Committee found that there exists a low probability of medium to long term serious or

1

https://www.parliament.wa.gov.au/Parliament/commit.nsf/%28Report+Lookup+by+Com+ID%29/90C2478C0FE8CB1148257831003E94F1/$file/BellevueFinalReport.PDF

chronic health effects to the fire-fighters and residents exposed to the fire or plume.

### 3.4.2 Referral to Department of Mines, Industry Regulation and Safety

Due to concerns arising with respect to compliance with the *Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007* at the L8730/2013/1 premises, the Department of Mines, Industry Regulation and Safety (DMIRS) was consulted for advice, with correspondence received on 11 June 2021.

The primarily concerns to DMIRS are that:

(i) The quantity of dangerous goods stored and handled onsite must be kept below the manifest quantities outlined in Schedule 1 of the *Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007*. The site does not have a current dangerous goods storage licence, and as such the inventory of the site must be maintained at below manifest quantities at all times.

(ii) The site premises does not appear to be adequately designed for the processing and storage of waste which includes dangerous goods (in particular, Class 3 flammable liquids and Class 5 oxidising substances), and strongly recommends that the works approval does not include class 3 flammable liquids and class 5 oxidising substances for acceptance.

In addition, the following advice was provided:

- The main building for the storage and handling of flammable liquids, aerosol cans andr flammable corrosives could not be deemed adequate for this purpose in terms of:
    - The location and proximity to the adjacent office.
    - Design and capacity of ventilation within the building to effectively cater for flammable vapour release and build up.
    - Hazardous area assessment to establish the presence of hazardous zones within the building.
    - Suitability and selection of equipment for use in a potential hazardous area.
    - Elimination of ignition sources within the area (fixed, portable and wiring).
- With reference to the tank farm and liquid treatment area, a testing regime should be implemented to ensure that the storage tanks do not store class 3 flammable liquids (dependent upon flash point).
- Ensuring details on waste acceptance for correct identification and marking as dangerous goods (where applicable)
- Ensuring chemical compatibility during neutralisation treatment.
- Ensuring adequate ventilation for the DAF unit to ensure no build-up of flammable vapour.
- Ensuring adequate ventilation for the electrocoagulation/electrowinning unit.
- Ensuring equipment used in the handling of tanker venting emissions is suitably rated for use with flammable vapour and within a hazardous zone.

### 3.4.3 Consequence

Due to the waste types proposed to be accepted and stored at the Premises, if smoke and particulate emissions occur from a large scale fire, the Delegated Officer has determined that

the emission may cause high-level loss of amenity at a local scale and mid-level or frequent medical treatment for immediately surrounding sensitive and industrial receptors during a significant fire event. Therefore, the Delegated Officer considers the consequence of smoke and particulate emissions associated with a large fire event to be 'Major'.

### 3.4.4 Likelihood

Considering the location of surrounding receptors, the operational history of the applicant as discussed in section 2.6 and the applicant's proposed controls, the Delegated Officer has determined that the risk event could occur at some time. Therefore, the Delegated Officer considers the likelihood of impacts associated with a large fire event is 'Possible'.

### 3.4.5 Overall rating of smoke and particulate emission and impact

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix contained in Guidance Statement: Risk Assessment (DER 2017) and determined that the overall rating for the risk of smoke and particulate emissions is High.

High risk events may be acceptable subject to multiple regulatory controls. We may apply multiple regulatory controls, including both outcome-based and management conditions.

### 3.4.6 Determination

Due to the assessment, the department further liaised with DMIRS to discuss the advice and risk profile. It was confirmed that the concerns identified above, which were factors in the high risk rating determination, would be alleviated by restricting the acceptance of certain waste types, specifically not allowing the acceptance or treatment of dangerous goods, being Class 3 flammable liquid, Class 4 flammable solids and Class 5 oxidising substances.

As such, the acceptance of Class 3, 4 and 5 dangerous goods will not be authorised due to the inadequate design of the premises for the acceptance and processing of dangerous goods waste, and the inherent environmental and public health hazards associated with the storage of such waste types. Upon further advice from DMIRS, those wase type associated with the classes identified above include:

- Solvent based-wastes from the production, formulation and use of inks, dyes, pigments, paints, lacquers and varnish(Controlled waste code: F120);
- Solvent based wastes from the production, formulation and use of resins, latex, plasticisers, glues and adhesives (Controlled waste code: F130);
- Ethers & highly flammable hydrocarbons (Controlled waste code: G100);
- Non-halogenated organic solvents (Controlled waste code: G110); and
- Aerosol cans.

Revised risk assessment:

A revised risk assessment can be determined with regulatory controls implemented to restrict these dangerous goods waste types being accepted at the premises.

In consideration of restricting these waste types being accepted at the premises, the Delegated Officer considers that the consequence of smoke and particulate emissions associated with a large fire event to remain as 'Major'. The emission may cause high-level loss of amenity at a local scale and mid-level or frequent medical treatment for immediately surrounding sensitive and industrial receptors during a significant fire event

The Delegated Officer considers the likelihood of impacts associated with a large fire event is 'Unlikely', determining that the risk event will probably not occur in most circumstances.

The Delegated Officer has compared the revised consequence and likelihood ratings described

above with the risk rating matrix contained in Guidance Statement: Risk Assessment (DER 2017) and determined that the overall rating for the risk of smoke and particulate emissions is 'Medium'.

The imposed regulatory controls that will assist in reducing the associated risk from 'High' to 'Medium' are detailed in Table 4.

# 4. Consultation

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

**Table5: Consultation**

| Consultation method | Comments received | Department response |
|---|---|---|
| Application advertised on the department's website (10/05/2021) | None received | N/A |
| City of Cockburn advised of proposal (10/05/2021) | The City of Cockburn replied on 26 May 2021, confirming that the application is currently still under assessment and no determination has been made by Council at this time.<br>Regarding the proposal itself, the City was concerned about odour emissions given the history of the Garling Street premises. These concerns included:<br>- regulatory measures to be proposed to minimise odour emissions<br>- identify the specific causes of odour at Garling Street and the actions taken by DWER<br>- the process for investigating odour complaints<br>- the proposed staged commissioning process to ensure that each process and associated infrastructure is installed and operating effectively before that process is approved to accept waste products. | Planning approval (reference number DA21/0093 - 4412617) was issued on 15 July 2021.The concerns raised prior to the issue of the planning approval are addressed below:<br>Refer to section 3.3 regarding the technical advice from the department's Air Quality Branch, and subsequent regulatory controls proposed.<br>Refer to section 2.6 regarding compliance issues at the Garling Street premises and subsequent actions taken by DWER.<br>The department's *Compliance and Enforcement Policy* (May 2021) outlines the process for compliant management and enforcement process.<br>Commissioning requirements relating to the effective operation of treatment infrastructure are specified in conditions 6, 9 and 10 of the works approval. |
| Department of Mines, Industry Regulation and Safety (DMIRS) advised of proposal (10/05/2021) | DMIRS replied on 11 June 2021. Refer to Section 3.4 for further information. | Refer to Section 3.4 for further information. |
| Department of Fire and Emergency Services (DFES) advised of proposal (10/05/2021) | No comment was provided | N/A |

| | | |
|---|---|---|
| Water Corporation advised of proposal (10/05/2021) | Water Corporation replied on 23 June 2021, confirming that a trade waste permit application had yet to be submitted. It was also confirmed that a sewer connection is located within the premises. | Trade Waste – Approval to Construct (Permit No. 65601) was issued on 8 February 2022 for the premises (refer Appendix 3). |
| Applicant was provided with draft documents on 6 September 2021 | Refer to Appendix 1 | Refer to Appendix 1 |

# 5. Conclusion

The Delegated Officer has considered the applicant's operating history including non-compliances with licence conditions and the enforcement action taken by DWER in relation to activities at the Garling Street remises in assessing the acceptability of the application.

The risk assessment undertaken for the application clearly shows that operator history/performance is significantly increasing the risk profile of the Premises, particularly where management actions are required to control and mitigate risks associated with emissions and discharges. The Delegated Officer is not confident, based on the history of the Garling Street operations, that the required management actions will be consistently and effectively implemented as proposed by the applicant and as required by the conditions of the proposed instrument.

In particular, the following risks have increased to high:

(i) Risks to amenity and public health from smoke and gaseous emissions released during a fire event.

As such, 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 increased risk profile and necessary for administration and reporting requirements.

Following the completion of works, and prior to the assessment of a potential licence application, the department will undertake a site inspection of the premises to determine compliance with the works approval.

The licence application will also be subject to s. 57(2) of the EP Act, whereby the CEO may decline to deal with the application if, in the opinion of the CEO, the works concerned have not been completed satisfactorily in accordance with the conditions to which the works approval is subject.

# References


1. Department of Environment Regulation (DER) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
2. DER 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
3. DER 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
4. Department of Water and Environmental Regulation (DWER) 2019, Guideline: Decision Making, Perth, Western Australia
5. DWER 2019, Guideline: Industry Regulation Guide to Licensing, 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 |
|---|---|---|
| Table 1: Design and construction / Installation requirements – 1. Main building<br><br>Table 6: Infrastructure and equipment requirements during time limited operations. | - It is not practical to demonstrate that the existing concrete floor meets a permeability of less than 1 x $10^{-9}$ m/s without obtaining a sample of the concrete for analysis in an external laboratory, with implications on the integrity of the floor and also on time and cost.<br>- The floor will be sealed with chemical and oilproof coatings and can be inspected by the suitably qualified civil or structural engineer as required by condition 3 of the draft works approval to confirm that the integrity of the floor is intact.<br>- All waste acceptance, storage and treatment areas in the main building will be on the concrete floor; therefore, there is no specific requirement for these areas to have a hardstand. | The departments understanding is that hardstand infrastructure comprising of steel-reinforced concrete generally meets a permeability of equal to or less than 1 x $10^{-9}$ m/s, where installed correctly. As such, the requirement to confirm the permeability of the existing concrete floor has been removed. The requirements have also been amended to require the hardstand and bunding, including all joints, cuts or incursions, to be sealed with chemical resistant and oil resistant coating.<br><br>Verification requirements have also been included in Condition 3 (Environmental Compliance Report) to ensure that the integrity and intactness of all respective hardstand and bunding infrastructure is included in this reporting requirement. |
| Table 1: Design and construction / installation requirements – 2. Tank farm | - The configuration of the tank farm has changed from 8 tanks totaling 690 kL to 11 tanks totaling 690 kL (the 3 x 170 kL tanks have been replaced with 6 x 85 kL tanks).<br>- The additional tanks of reduced volume will provide greater operational flexibility; however, the total capacity in the tank farm has not changed.<br>- The same comments regarding permeability of the concrete made in Item 1 above also apply. | The configuration of the tank farm has been amended, with Figure 2 also updated to reflect the change.<br>The bunding requirement has been amended as per the response provided for Table 1, noting that while the bunding may not comprise steel-reinforcement, it is still considered to meet a permeability of equal to or less than 1 x $10^{-9}$ m/s, where installed correctly. |
| Table 1: Design and construction /<br>installation requirements<br>– 3. Liquid treatment area<br>– 4. Solid treatment area | - Both the liquid treatment area and solid treatment area are contained in the main building.<br>- Solid spading will be carried out in steel-floored containers placed in the bunded area.<br>- The requirements for the main building are specified in row 1 of the table (see comments in Item 1 above).<br>- The same change is also requested in Table 6: Infrastructure and equipment requirements during time limited operations. | The hardstand and bunding requirements have been amended as per the response provided for Table 1. Main building. |
| Table 1: Design and | - The requirement specifies that the air filtration unit must contain visual breakthrough detection equipment or other appropriate monitoring | The requirement for the installation of visual breakthrough detection equipment has been removed. However, following |

| Condition | Summary of applicant's comment | Department's response |
|---|---|---|
| construction / installation requirements – 5. Air filtration unit<br><br>Table 6: Infrastructure and equipment requirements during time limited operations. | equipment which indicates the presence of organic material.<br>- The reference to visual breakthrough detection equipment is not fully understood as CWD is not aware of common monitoring techniques that use visual methods to indicate the presence of organic material.<br>- Visual monitoring of air extraction flow (not presence or organic material) will be carried out using a flow indicator to ensure adequate extraction is maintained.<br>- CWD accepts that monthly olfactory assessment of the filter outlet may not be sufficient to detect issues and may need to be more frequent; however, breakthrough in the filter bed is expected to occur over days rather than minutes and does not require the use of complex breakthrough detection or continuous emissions monitoring equipment.<br>- CWD will formalise procedures, triggers and corrective action relating to the performance of the filtration unit in the odour management plan required by condition 20, which will also include the frequency and specification of scheduled maintenance checks of the air filtration unit.<br>- The performance of the air filtration unit has been demonstrated at CWD's existing Garling Street premises, which has been managed without the need for breakthrough detection or continuous emissions monitoring equipment. | time-limited operations, and as part of the subsequent licence application assessment, the department will review the odour management plan in conjunction with the monitoring information provided during commissioning and time-limited operations. This review will inform the adequacy of odour mitigation measures and the potential requirement for further regulatory controls, which may include the installation of an activated carbon bed breakthrough detection equipment or other appropriate continuous emissions monitoring equipment.<br>It is also the departments expectation that the activated carbon filter will be maintained to achieve at least a 90% reduction in odour concentration (measured as odour units OU) and VOC concentration ($mg/m^3$) from odorous air reporting to extraction hoods. |
| Table 1: Design and construction / installation requirements – 6. External storage areas | - As per item 1, compliance with the requirement for the external hardstand areas to meet a permeability of less than $1 \times 10^{-9}$ m/s will be challenging to achieve.<br>- The requirement for the external yard areas to be located within bunded hardstand areas is considered sufficient to mitigate the risk. | The department considers the applicant's request acceptable, with additional controls applied to the hardstand requirement. Thus, the bituminous external waste storage areas must be coated with a trafficable, chemical resistant sealant for the purpose of reducing the permeability of the bitumen.<br>It is acknowledged that external yards areas will be used for the storage and crushing of empty containers, posing a lower risk than the internal treatment areas. It is also noted that the bitumen and sump system provide secondary containment in the event that the primary containment, being predominately IBCs and drums, are compromised.<br>Condition 23 of the works approval also requires the works approval holder to immediately recover, or remove and dispose of, any liquid resulting from spills or leaks of liquid waste, whether inside or outside of bunded areas. |
| Definitions – Suitably qualified Chemist | - The following conditions require action by a suitably qualified chemist:<br>- Pre-acceptance verification – all waste types (Condition 16)<br>- Post-acceptance verification – liquid wastes (Condition 17) | The department has reviewed the proposed alternative qualification and considered the related core competencies and elective options (www.training.gov.au). Based on this review, the department does not consider that the proposed |

| Condition | Summary of applicant's comment | Department's response |
|---|---|---|
| | - The decision document does not justify why the chemist must have a Bachelor Degree in Chemistry and a minimum of three years of experience working in the field of chemistry and in a related waste management and processing field as defined in the works approval.<br>- CWD has employed a chemistry technician at the site who is now experienced in the organisation's operations and is sufficiently qualified and experienced to meet the requirements of the works approval.<br>- CWD requests that the definition of a suitably qualified chemist is changed as follows to allow the existing employee to continue in the role:<br>- *Suitably qualified chemist means a person who holds an Australian Qualifications Framework (AQF) Chemistry Technician Diploma or equivalent.*<br>- This definition is consistent with that in Licence L8730/2013/1 for CWD's existing Garling Street premises. | qualification is adequate in relation to the identification of chemicals and/or wastes and the need to make informed decisions on the reactivity, storage and segregation of waste materials and in relation to appropriate handling and treatment measures for respective waste types.<br>As such, the existing requirement for a person holding a Bachelor Degree in Chemistry remains, as the competencies of this qualification will adequately manage the risks associated with the accurate identification, handling and management of hazardous waste types.<br>This determination also considers the overall increased likelihood of a risk event occurring at the new premises with regard to the previous operating history at the Garling St premises as detailed in section 2.6.2. |
| Condition 20 | - The requirement for waste to be verified pre-acceptance (all waste types) and post-acceptance (liquid wastes) by a suitably qualified chemist is specified in conditions 16 and 17.<br>- The decision report does not justify why the same chemist must be present for all waste to be accepted onto the premises (condition 20).<br>- CWD considers that his requirement is too onerous and does not provide sufficient operation certainty or flexibility. | The requirement for the chemist to be present for all waste acceptance activities has been removed, with the department considering that the risk is mitigated due to only acceptance of waste being undertaken, rather than treatment at that time. |
| Condition 24 | - CWD requests that condition 24 is amended as it is currently too restrictive in that it prohibits the transfer of solid waste to facilities other than landfills. | The condition has been amended to remove reference to landfill and allow the transfer of solid wastes to a premises authorised for the acceptance of that waste. |
| Conditions 25 | CWD requests that conditions 25 is amended to only relate to solid waste that is sent off-site to landfill for disposal. | The department considers that the analysis of solid wastes prior to transfer to another premises, whether to a landfill or otherwise, is essential to confirm the acceptance suitability of that waste to the new premises. As such, the requirement for analysis remains, being amended to differentiate between transfer to landfill for disposal and transfer to other authorised premises. |
| Section 3.4.1 Criteria for assessment | - CWD requests that the references to an incident at a waste facility in Bellevue 20 years ago are removed from the detailed risk assessment for smoke and particulate emissions.<br>- It is acknowledged that the premises has the potential to emit smoke and particulates in the event that a waste storage fire occurs and that those emissions have potential air quality and human health impacts. | It is acknowledged that the applicant's premises and activities differ from those at Waste Control Pty Ltd in Bellevue. However, the Delegated Officer considers that the Waste Control Pty Ltd incident is relevant to the potential risk posed by the applicant's premises, and provides context for the potential emissions and impacts caused in the event of a fire. |

| Condition | Summary of applicant's comment | Department's response |
|---|---|---|
| | - It is not clear how the hazards and impacts of a different site, handling different types and quantities of waste located in a separate environmental setting are of relevance to the risks posed at the premises, the assessment of which should be based on site-specific information. | |

# Appendix 2: Application validation summary

| SECTION 1: APPLICATION SUMMARY | | | | | |
|---|---|---|---|---|---|
| **Application type** | | | | | |
| Works approval | ☒ | | | | |
| Licence | ☐ | Relevant works approval number: | | None | ☐ |
| | | Has the works approval been complied with? | | Yes ☐ No ☐ | |
| | | Has time limited operations under the works approval demonstrated acceptable operations? | | Yes ☐ No ☐ N/A ☐ | |
| | | Environmental Compliance Report / Critical Containment Infrastructure Report submitted? | | Yes ☐ No ☐ | |
| | | Date Report received: | | | |
| Renewal | ☐ | Current licence number: | | | |
| Amendment to works approval | ☐ | Current works approval number: | | | |
| Amendment to licence | ☐ | Current licence number: | | | |
| | | Relevant works approval number: | | N/A | ☐ |
| Registration | ☐ | Current works approval number: | | None | ☐ |
| Date application received | | 9 November 2020 | | | |
| **Applicant and Premises details** | | | | | |
| Applicant name/s (full legal name/s) | | Controlled Waste Disposals Pty Ltd | | | |
| Premises name | | Controlled Waste Disposals Pty Ltd | | | |
| Premises location | | 9 Cocos Drive, Bibra Lake WA 6163<br>Lot 197 on Plan 17235 | | | |
| Local Government Authority | | City of Cockburn | | | |
| **Application documents** | | | | | |
| HPCM file reference number: | | DWERDT363408 | | | |
| Key application documents (additional to application form): | | Supporting Information (Attachment 8), JBS&G Australia Pty Ltd, Document No. 57750/123,456 (Rev 0), 9 November 2020 | | | |
| **Scope of application/assessment** | | | | | |

| | |
|---|---|
| Summary of proposed activities or changes to existing operations. | The applicant proposes to operate a waste treatment facility at the site that will primarily accept, store and treat a broad range of bulk and packaged liquid wastes, including:<br>• paint washings<br>• waste oil and emulsions<br>• coolants<br>• wetting agents<br>• galvanizing liquid wastes (acids)<br>• concrete truck and batching plant wash down (alkalis)<br>• industrial wash water<br>• drilling mud.<br>The treatment processes that will be employed on-site include oily water separation, electrocoagulation and ozone treatment. Treated wastewater will be disposed of to the existing sewer under a trade waste permit. Sludges and precipitates from the various treatment processes will be solidified with sawdust (or other inert material) to a spadeable form, which will be subsequently removed from the site for landfill disposal at an authorised facility.<br>The existing building on the premises will be used for the majority of the waste receipt, handling, storage and treatment activities. A tank farm will be constructed at the northeaster corner of the site for the receipt and storage of bulk liquids and external yards areas will be used for the storage and treatment (e.g. crushing) of empty bulk (e.g. isotainers) and small containers (e.g. steel drums and intermediate bulk containers).<br>The applicant has yet to apply for a trade waste permit from the Water Corporation to discharge treated wastewater to sewer (sewer connection is available at the premises).<br>The applicant currently operates a liquid waste facility at 107 Garling Street in O'Connor under L8730/2013/1. |

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 61: Liquid waste facility | 41,000 tonnes per year | |
| Category 61A: Solid waste facility | 5,000 tonnes per year | |
| Category 57: Used tyre storage (general) | 500 tyres | |

**Legislative context and other approvals**

| | | |
|---|---|---|
| Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal? | Yes ☐ No ☒ | Referral decision No:<br>Managed under Part V ☐<br>Assessed under Part IV ☐ |
| Does the applicant hold any existing Part IV Ministerial Statements relevant to the application? | Yes ☐ No ☒ | Ministerial statement No:<br>EPA Report No: |

| | | |
|---|---|---|
| Has the proposal been referred and/or assessed under the EPBC Act? | Yes ☐ No ☒ | Reference No: |
| Has the applicant demonstrated occupancy (proof of occupier status)? | Yes ☐ No ☒ | Certificate of title ☐<br>Form stated "*Leased from Berrimel Pty Ltd; copy of lease to be provided*"<br>General lease ☐ Expiry:<br>Mining lease / tenement ☐ Expiry:<br>Other evidence ☐ Expiry: |
| Has the applicant obtained all relevant planning approvals? | Yes ☐ No ☒ N/A ☐ | Form states "*Application for Development Approval will be submitted to the City of Cockburn on validation of the works approval application to ensure consistency in information provided.*" The supporting information however, states "*The applicant has applied to the City for planning approval to use the site as a liquid waste facility*." |
| Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal? | Yes ☐ No ☒ | CPS No: N/A<br>No clearing is proposed. |
| Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal? | Yes ☐ No ☒ | Application reference No: N/A<br>Licence/permit No: N/A<br>No clearing is proposed. |
| Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal? | Yes ☐ No ☒ | Application reference No:<br>Licence/permit No:<br>Licence / permit not required. |
| Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)? | Yes ☐ No ☒ | Name:<br>Type:<br>Has Regulatory Services (Water) been consulted?<br>Yes ☐ No ☐ N/A ☐<br>Regional office: |

| | | |
|---|---|---|
| Is the Premises situated in a Public Drinking Water Source Area (PDWSA)? | Yes ☐ No ☒ | Name: N/A<br>Priority: P1 / P2 / P3 / N/A<br>Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)?<br>Yes ☐ No ☐ N/A ☐ |
| Is the Premises subject to any other Acts or subsidiary regulations (e.g. *Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx*) | Yes ☒ No ☐ | Tracking of wastes to premises*: Environmental Protection (Controlled Waste) Regulations 2004*<br>Storage of dangerous goods: *Dangerous Goods Safety Act 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 *Contaminated Sites Act 2003*? | Yes ☐ No ☒ | |

# Appendix 3: Trade Waste Permit

## Trade Waste - Approval to Construct

Permit No: 65601 Effective From: 08/02/2022
Issue To: Controlled Waste Disposals Pty Ltd
ABN: 15 163 120 803
Trading As: Controlled Waste Disposals Pty Ltd
Located At: 9 Cocos Dr
BIBRA LAKE WA 6163

### Approvals and requirements

**Approved planned, under-construction or additional process(es):**

| Process | Business parameters | Pre-treatment | Planned Date |
|---|---|---|---|
| Wastewater Treatment (Main building and rear tank farm (DWER categories: A100, B100, C100, F100, F110, H100, J120, J130, K200, L100, L150, M130, N140, T100, T120)) | | #1,#2,#3,#4,#5,#6,#7,#8,#9,#10,#11,#12 | 31/03/2022 |

**Required to install pre-treatment equipment:**

| # | Equipment Type | Location | Size | Required Date |
|---|---|---|---|---|
| 1 | Balancing Or Holding Tank | Tank Farm (6x 85 kL, 2x 20kL, 2x 40kL) | 630000 L | 31/03/2022 |
| 2 | Clarifier | Liquid treatment area - TBC | N/A | 31/03/2022 |
| 3 | Centrifuge | Liquid treatment area - TBC | 10000 L/h | 31/03/2022 |
| 4 | Sand filter | Liquid treatment area - TBC | N/A | 31/03/2022 |
| 5 | pH Correction System | Dosing tank - Liquid treatment area - TBC | N/A | 31/03/2022 |
| 6 | Dissolved Air Floatation Unit | Liquid treatment area - TBC | 10000 L/h | 31/03/2022 |
| 7 | Electro-Coagulation unit | Liquid treatment area - TBC | 10000 L/h | 31/03/2022 |
| 8 | Activated Carbon Unit | Liquid treatment area - TBC | 20000 L | 31/03/2022 |
| 9 | Reverse Osmosis | Liquid treatment area - TBC | 30000 L/h | 31/03/2022 |
| 10 | UV-Ozone Reactor | Liquid treatment area - TBC | N/A | 31/03/2022 |
| 11 | Balancing Or Holding Tank | Liquid treatment area - TBC | 60000 L | 31/03/2022 |
| 12 | Screen – Rotary | Receival area - TBC | N/A | 31/03/2022 |

**Conditions of approval:**

**Special**

- This approval has been issued in order to facilitate your building construction, connection of trade waste pipework and pre-treatment fixtures to the Water Corporation's sewerage system. No trade or commercial liquid waste may be discharged through the pipework or fixtures until a written approval has been issued by the Water Corporation
- The business is currently under the process confirmation phase. Following the completion of this process the permit conditions may change.
- All wastewater treatment processes must be validated by Water Corporation officer for the treatment of each DWER category before approval will be given for the discharge of each type of wastewater to sewer.
- Batch testing may be required before any wastewater is discharged to sewer during the DWER time limited operations phase and Water Corporation process confirmation phase.
- Only DWER categories listed on the trade waste permit are to be stored in the designated tank farm connected to the trade waste pre-treatment and discharge line to sewer. All other licenced DWER category waste received onsite must be stored separately with no connection to the trade waste pre-treatment and discharge line to sewer.
- A logbook is to be maintained for the tank farm including date, volume, controlled waste tracking form (CWTF) number and DWER category of all wastewater put into a holding tank, as well as the date and treatment process followed for each batch discharged to sewer. The site must test onsite and record for each batch discharge to sewer the pH, conductivity and concentration of Zinc.

**General**

**Conditions of approval:**

- Prior to any waste being discharged to the Water Corporation's sewer, a final on site inspection must be conducted. It should be noted that all waste facilities, including all monitoring facilities will need to be completed and be operable, before permission to discharge will be given.
- Any change in the nature of wastewater discharged or failure of pre-treatment must be reported to the Water Corporation on 13 13 75.
- All wastewater is to be processed through the pre-treatment facilities. No 'raw' wastewater may be shandied with treated wastewater and discharged to sewer.
- All wastewater, at a minimum, must be processed through the pH correction system and Dissolved Air Floatation unit prior to discharge to sewer.
- Reject water from the Reverse Osmosis unit is not to be discharged to sewer.
- No wastewater from the solid sorting treatment area is to be discharged to sewer.
- pH must be within the range 6 - 10 pH units upon discharge to sewer.
- All probes on your wastewater treatment system are to be inspected, cleaned and re-calibrated regularly, in accordance with the manufacturer's instructions. The frequency should be appropriate to the waste profile and a logbook maintained recording the date, outcome and action taken for each probe inspected. pH probes are to maintain an accuracy of better than 0.5 pH units.
- The concentration of semi-volatile organic compounds, other than those listed in the acceptance criteria, are not to exceed 1 mg/L.
- The concentration of Total Petroleum Hydrocarbons is not to exceed 30 mg/L.
- The concentration of BTEX must not exceed; Benzene 0.08 mg/L, Ethylbenzene 1.0 mg/L, Toluene 1.3 mg/L, Xylene 1.4 mg/L.
- The concentration of Suspended Solids is not to exceed 1,500 mg/L.
- The concentration of Biological Oxygen Demand is not to exceed 3,000 mg/L.
- The concentration of Chemical Oxygen Demand is not to exceed 6,000 mg/L.
- The concentration of Zinc is not to exceed 3 mg/L.
- The concentration of Nickel is not to exceed 3 mg/L.
- The concentration of Copper is not to exceed 5 mg/L.
- The concentration of Aluminium is not to exceed 100 mg/L.
- No pesticides and mixed pesticide residue (including DWER category H100) is to be discharged to sewer until wastewater treatment processes have been verified.
- All residue in drums, IBCs and containers received onsite shall be decanted until the vessels are 'drip empty'. The residue is to be captured and removed offsite. First flush of these drums, IBCs and containers must not be discharged to sewer until treatment of the specific waste has been verified.
- No inhibitors, coolants or heat transfer fluids are to be discharged to sewer until treatment of the specific waste has been verified.
- No wastewater containing Cyanide is to discharged to sewer.
- All pre-treatment must be maintained in working order. Any process failure that affects the quality of the discharge is to be reported immediately, including a meter failure.
- All waste treatment equipment is to be inspected and cleaned up monthly, as outlined in the 'Works Approval Application - Supporting Information' provided to DWER. A logbook is to be maintained clearly showing the date all inspections were carried out, outcome of inspections and any required action / maintenance carried out. The logbook is to be made available to Water Corporation officers upon request.
- The business will be subject to quality and quantity charges which reflect the costs incurred by the Water Corporation in the collection, treatment and disposal of the trade waste. Trade waste quantity will be determined from your effluent meter. The trade waste quality will be determined from an ongoing program of periodic sampling and laboratory testing of your discharge.

**Monitoring**

- An approved flow meter is required to be installed on the discharge line before any trade waste discharged to sewer and maintained in working order.
- The trade waste flow meter must be able to be electronically verified in place and low flow settings set to ensure the recorded trade waste discharge volumes are accurate.
- The flow meter is required to be verified by a metering contractor and a 'Trade Waste Monitoring System Verification Report' must be submitted to the Water Corporation prior to discharge of any trade waste.
- The discharge must pass through a monitoring point, to be installed on the discharge line before any trade waste discharge to sewer, which displays and records instantaneous flow rate, totalised volume, pH and conductivity. The recorded data must be accessible by Water Corporation officers online in real time.

**Discharge**

- Your maximum instantaneous discharge rate to sewer must not exceed 3 L/s.
- The volume of trade waste discharge is not to exceed 10 kL/day, in any one day, during the DWER 'environmental

**Conditions of approval:**

commissioning phase'. When the site transitions to the DWER 'time limited operations phase' your trade waste permit will be reviewed and updated.

**Relevant Information (web links)**

- Acceptance criteria for trade waste
- Trade waste charges
- Trade waste monitoring points
- Trade waste permits
- Trade waste flow metering

**Drawings**

- Trade waste monitoring point
- Trade waste sampling point

## General Conditions

**1 Discharge**

(a) The approval holder must ensure that trade waste is discharged:
  (1) from waste producing processes;
  (2) by pretreatment and monitoring equipment; and
  (3) within the quality, quantity and rate discharge limits specified in this approval.

(b) The Water Corporation will determine, in its absolute discretion, whether the approval holder has complied with the quality, quantity and rate of trade waste discharge limits specified in this approval.

(c) The approval holder must immediately report to the Water Corporation any failure of a fixture, fitting or pipe that is part of or connected to the property sewer connection or any other event that impacts or is likely to impact on the quality or quantity of trade waste discharged by the approval holder.

(d) The approval holder must obtain the Water Corporation's written consent before changing:
  (1) the process of discharging trade waste;
  (2) any fixture, fitting or pipe that is part of or connected to the property sewer connection; or
  (3) the nature, quality, discharge rate or discharge volume of trade waste.

**2 Maintenance of fittings, fixtures and pipes**

The approval holder must:

(a) appropriately maintain all fixtures, fittings and pipes that are part of or connected to the property sewer connection;

(b) appropriately install any fixtures, fittings and pipes that are required to be installed as a condition of this approval in accordance with Water Corporation requirements and standards

(c) provide the Water Corporation with written notice of any pump out of trade waste pretreatment and monitoring equipment within 7 days of the clearance.

**3 Charges and fees**

The approval holder must pay all charges and fees applicable to this approval.

**4 Close of business**

The approval holder must provide the Water Corporation with written notice within 14 days of the approval holder selling or closing its business conducted on the property applicable to this approval.

**5 Indemnity**

The approval holder indemnifies the Water Corporation in respect of any claim, action, damage, loss, cost, charge, expense, outgoing or payment which the Water Corporation suffers, incurs or is liable for in respect of any accident, damage, loss or injury to:

(a) the Water Corporation's sewer or other property;

(b) any authorised officer, servant, agent, contractor or employee of the Water Corporation; or

(c) any third party,

directly or indirectly arising from the approval holder's breach of the conditions of this approval.

**6 Interruptions to service**

(a) The Water Corporation may from time to time, prevent or restrict the approval holder from discharging trade waste during any maintenance or inspection of the Water Corporation's sewers or related works.

(b) The approval holder will not be compensated for any interruption to the approval holder's ability to discharge trade waste.

**7 Right of entry**

The Water Corporation or any authorised officer, servant, agent, contractor or employee of the Water Corporation may, at any time and without notice, enter the approval holder's property to read meters, conduct an inspection, review maintenance records, take samples, attach identification tags to any fixtures or fittings that are part of or connected to the property sewer connection or obtain evidence in relation to the approval holder's breach or suspected breach of this approval.

**8 Approval details to be correct**

(a) This approval is void where any information or detail included in this approval is altered or incorrect.

(b) The approval holder must immediately provide the Water Corporation with written notice of any incorrect information or detail included in this approval.

**9 Compliance with laws**

The approval holder must comply, and ensure that all officers, servants, agents, contractors or employees of the approval holder comply, with all relevant laws and the conditions of this approval, when discharging trade waste.

**10 Breach of approval**

If the approval holder breaches any condition of this approval, the Water Corporation may do one or more of the following:

(a) give a compliance notice to the approval holder;

(b) amend the conditions of this approval, including so that the discharge of trade waste is no longer covered by this approval;

(c) revoke this approval; or

(d) seek an order against the approval holder under section 127 of the Water Services Act 2012 (WA) for the recovery of the water service charges, including interest.

**11 Transfer of approval**

At the written request of the approval holder, or an incoming occupier or owner of the property applicable to this approval, the Water Corporation may, in its absolute discretion, transfer this approval to the incoming occupier or owner of the property.

**12 Amendment of approval**

(a) This approval and its conditions supersede any other trade waste discharge approval or permit issued by the Water Corporation prior to the date of this approval.

(b) The Water Corporation may amend or remove any condition of, or impose a new condition on, this approval at any time by written notice, including upon the transfer of this approval under condition 11 of this approval.

(c) At the written request of the approval holder, the Water Corporation may, in its absolute discretion, amend the conditions of this approval.

**13 Privacy**

The Water Corporation may provide grease arrestor clearance information to liquid waste contractors engaged in the servicing of grease arrestors, including:

(a) the grease arrestor barcode;

(b) the required pump out frequency; and

(c) business identification details,

for the purpose of ensuring that the conditions of this approval are complied with.