



Application for Licence

Division 3, Part V *Environmental Protection Act 1986*

Licence Number	L9143/2018/1
Applicant	Romine Holdings Pty Ltd t/a Wren Oil
ACN	009 331 800
File Number	DER2018/000994
Premises	Wren Oil Newman Depot 10 Pilga Place Via Pardoo Street NEWMAN WA 6753 Legal description - Lot 101 on Plan 403740 As defined in Schedule 1 of the Licence
Date of Report	21 February 2019
Status of Report	Final

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1. Definitions of terms and acronyms

In this Decision Report, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition
AACR	Annual Audit Compliance Report
ACN	Australian Company Number
AER	Annual Environment Report
Annual period	means a 12 month period commencing from 1 January until 31 December in each year
AS1940:2004	means Australian Standard 1940:2004 <i>The storage and handling of flammable and combustible liquids.</i>
Category/ Categories/ Cat.	Categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations.
CS Act	<i>Contaminated Sites Act 2003 (WA)</i>
Decision Report	refers to this document.
Delegated Officer	an officer under section 20 of the EP Act.
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.
DFES	Department of Fire and Emergency Services
DWER	Department of Water and Environmental Regulation As of 1 July 2017, the Department of Environment Regulation (DER), the Office of the Environmental Protection Authority (OEPA) and the Department of Water (DoW) amalgamated to form the Department of Water and Environmental Regulation (DWER). DWER was established under section 35 of the <i>Public Sector Management Act 1994</i> and is responsible for the administration of the <i>Environmental Protection Act 1986</i> along with other legislation.
EPA	Environmental Protection Authority
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
Licence Holder/ Applicant	Romine Holdings Pty Ltd, t/a Wren Oil

m ³	cubic metres
Minister	the Minister responsible for the EP Act and associated regulations
Noise Regulations	<i>Environmental Protection (Noise) Regulations 1997 (WA)</i>
Occupier	has the same meaning given to that term under the EP Act.
Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Decision Report applies, as specified at the front of this Decision Report
Primary Activities	as defined in Schedule 2 of the Licence
Revised Licence	the amended Licence issued under Part V, Division 3 of the EP Act following the finalisation of this Review.
Risk Event	As described in <i>Guidance Statement: Risk Assessment</i>
UDR	<i>Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA)</i>

2. Purpose and scope of assessment

The applicant (Romine Holdings Pty Ltd, trading as Wren Oil) submitted an application to DWER on 18 June 2018 for a new licence for Lot 101 on Plan 403740, Newman, WA, 6753, in accordance with the *Environmental Protection Act 1986*. The application was based on the completion of premises construction under Works Approval W5898/2015/1.

The applicant proposes to operate a Category 61 – Liquid waste facility with a design/throughput capacity of 35,000 tonnes per annual period, in accordance with the *Environmental Protection Regulations 1987*

2.1 Application details

The following documentation has been submitted to DWER for review as part of the application details for the proposed new licence L9143/2018/1 for the prescribed premises.

Table 2 lists the documents submitted during the assessment process.

Table 2: Documents and information submitted during the assessment process

Document/information description	Date received
Email: S57(1)(a) Environmental Protection Act 1986 – Licence Application and supporting documentation received from Kirsten Knox (Emerge Associates). Includes one attachment: <ul style="list-style-type: none">Licence application and cover letter (EP14-040(04)—011a JHL).combined.pdf.	18 June 2018
Email: Response from Kirsten Knox to request for further information received (Emerge Associates). Includes one attachment (EP14-040(04) —015a	12 September 2018

3. Background

The applicant proposed the construction of a new liquid waste facility at Lot 101 on Plan 403740, Newman, within the Shire of East Pilbara (formerly Lot 78 and Lot 79, 10 Pilga Place). The premises was constructed under Works Approval W5898/2015/1 (issued 12 November 2015) for a Category 61 – liquid waste facility, with a proposed throughput capacity of 35,000 tonnes per annual period. On completion of the construction phase, a licence application was received by DWER, on 18 June 2018, to allow the operation of the prescribed premises.

The initial Works Approval permitted a throughput capacity of 20,000 tonnes per annual period, however the applicant has determined that this figure was initially defined against market supply and demand, and has subsequently increased. The applicant has confirmed that the increase in throughput capacity will not modify or alter the current, as constructed, premises under Works Approval W5898/2015/1. The throughput capacity has therefore been increased to 35,000 tonnes per annual period.

According to further information provided by the applicant, the premises is owned by Romine Holdings Pty Ltd.

Table 3 lists the prescribed premises category that has been applied for.

Table 3: Prescribed Premises Categories in the Existing Licence

Classification of Premises	Description	Approved Premises production or design capacity or throughput
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Category 61	Liquid waste facility: premises on which liquid waste produced on other premises (other than sewerage waste) is stored, reprocessed, treated or irrigated.	35,000 tonnes per annual period
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4. Overview of Premises

4.1 Operational aspects

The applicant is proposing to collect and temporarily store waste oil products at the new liquid waste storage facility (L9143/2018/1). The waste oil will be collected from the northern regions of Western Australia for transfer to Wren Oil's waste oil re-refining facility in Picton, Bunbury (L6378/1987/14) for re-refining and recycling.

Once waste oil is collected, it will either be trucked directly to Wren Oil's re-refining facility in Picton via road tankers, or will be stored temporarily within the bulk storage tanks prior at the premises prior to being transported to Picton. The applicant will ensure that all transportation of waste oil products is done in accordance with the *Environmental Protection (Controlled Waste) Regulations 2004*.

The applicant has confirmed that the premises has been constructed, and will be operational with, the following:

- *“Semi-impervious road base hardstand across the entire site.*
- *A partially enclosed ‘Truck Loading / Unloading & Storage’ and ‘Bulk Storage’ area, including a roof and northern exterior wall (which is the wall closest to Pilga Place) and is in accordance with the works approval.*
- *Within the ‘Truck Loading / Unloading & Storage’ and ‘Bulk Storage’ area the following has been provided:*
 - *Reinforced concrete floors in the area identified as ‘Truck Loading / Unloading & Storage’ and ‘Bulk Storage’.*
 - *A 300 mm high concrete wall around the perimeter of the ‘Bulk Storage’ area. The bulk storage area will be bunded .*
 - *The ‘Truck Loading / Unloading & Storage’ area is bunded on the northern and southern perimeter with a 300 mm high concrete wall, with the floor sloping from the entrance and exit ramps to the overflow collection sump in the central portion of the area.*
 - *Concrete apron slab at the entrance and exit of the ‘Truck Loading / Unloading & Storage’ area.*
 - *2 X 110 kL waste oil storage tanks (C2 Classification) that are double-skinned and self-bunded and comply with Australian Standard 1940:2004 The storage and handling of flammable and combustible liquids (AS1940:2004), located within the area identified as ‘Bulk Storage’. The works approval application indicated a single 220 kL waste oil storage tank would be installed. Due to product availability during the construction of the facility, two smaller tanks rather than a single larger tank were installed. There is no change to the overall storage capacity compared to the original application.*
 - *Closed pipe system for the transfer of oil between the road tankers and waste oil storage tanks. Portable containment receptacles (drip buckets) will be used during the transfer operations to capture any accidental spills.*
 - *Collection and deep pump sumps within ‘Bulk Storage’ and ‘Truck Loading / Unloading & Storage’ areas to capture any accidental spills not collected with the portable containment receptacle.*
 - *Oil/water separator within the ‘Bulk Storage’ area, which is connected to all the*

sumps and treats water captured in the sumps prior to discharge to the approved leach drain. Collected oil through this system will be deposited into the waste oil storage tanks and transferred to the recycling facility. The oil/water separator is a system approved by the Water Corporation and will be maintained by an independent contractor in accordance with supplier recommendations.

- *Storage areas for collected pallets, drums and containers within the 'Truck Loading / Unloading & Storage'.*
- *Fire hoses and spill kits at various locations within the 'Bulk Storage' and 'Truck Loading / Unloading & Storage' areas.*
- *Office and rest facilities, including veranda. These include bathroom (with toilet and shower), two rest rooms with beds to assist in managing driver fatigue and an office.*
- *An onsite effluent disposal system, in accordance with the requirements of the Shire of East Pilbara, has been installed and is sized to treat up to 250 L of effluent per day. The disposal system is located between the 'Truck Loading / Unloading & Storage' area and the northern boundary of the site. A leach drain system has been installed adjacent to the northern boundary of the site.*
- *Vegetated open swale adjacent to the northern boundary of the site, planted with endemic species. The topography of the site slopes north with stormwater collected on the semi impervious road base/open hardstand areas directed to the open vegetated swale drain.*
- *Vehicle parking, including 13 car bays (in accordance with Shire of East Pilbara requirements) and parking for two trucks with semi-trailers attached.*
- *Two concrete road access points, providing separate entry and exit points to the site."*

The premises proposes to accept and temporarily store the following waste types prior to being transported by controlled waste carrier to the Wren Oil re-refining facility in Picton:

Table 4: Waste type

Waste code	Waste type/ description
J100	Oils: Waste mineral oils unfit for their intended purpose.
J120	Oils: Waste oil and water mixtures or emulsions, and hydrocarbon and water mixtures or emulsions.
J130	Oils: Oil interceptor wastes
J170	Oils: Used oil filters
J180	Oil sludge
L100	Industrial wash water: Car and truck wash waters
L150	Industrial wash waters: Industrial wash waters contaminated with a controlled waste
M130	Organic chemicals: Non-halogenated organic chemicals
N100	Soils and sludge: Containers or drums contaminated with residues of a controlled waste

4.2 Infrastructure

The Liquid waste storage facility infrastructure, as it relates to Category 61 activities, is detailed in Table 5 and with reference to the Site Plan (attached in the Licence).

Table 5 lists infrastructure associated with each prescribed premises category.

Table 5: Liquid waste facility Category 61 infrastructure

	Infrastructure	Site Plan Reference
	Prescribed Activity Category 61 – Liquid waste facility	
The acceptance and temporary storage of waste oil products		
1	Bulk storage bunded area with concrete hardstand.	See application supporting documentation (See Table 2) in Decision Report.
2	2 x 110 kL Double skinned, self bunded waste oil storage tanks (C2 Classification).	
3	Oil/ water separator located within the 'Bulk Storage' area connected to all sumps.	
3	Truck loading/ unloading & Storage area with concrete hardstand and bunded capacity of 45,100 litres	
	Directly related activities	
Associated equipment and infrastructure		
1	Collection sumps and pumps within the 'Bulk storage' and 'Truck loading/ unloading & Storage' areas.	See application supporting documentation (See Table 2) in Decision Report.
2	Closed pipe system for the transfer of waste oil	
3	Open swale drain (vegetated)	
4	Leach drain (unlined)	See application supporting documentation, Table 1 and Attachment 3 - Works Approval Supporting Documentation (See Table 2) in Decision Report.
5	Drip buckets	See application supporting documentation (See Table 2) in Decision Report.
	Other activities	
1	Management office	See application supporting documentation (See Table 2) in Decision Report.
2	Internal roads and parking areas	
3	Onsite domestic septic tank system	

See Appendix 3 within the Decision Report for the site plan and operational process flow diagram for the proposed facility.

4.3 Exclusions to the Premises

Table 4 above defines all infrastructure and equipment associated with the proposed Category 61 for operation at the new prescribed premises (L9143/2018/1). However, this assessment does not review/ take into account the infrastructure or equipment that does not trigger the threshold value for prescribed premises as defined under the *Environmental Protection Regulations 1987*, Schedule 1, Part 1 and/ or 2 (i.e.: sewage facility). This also includes

activities that are administrative in nature and do not pose any potential environmental harm or risk of pollution from the proposed activity (i.e.: Management office), as defined under the *Environmental Protection Act 1986*, Part V, Division 1.

The onsite domestic septic tank system has been considered under the local government authority (Shire of East Pilbara) planning approval processes (granted November, 2014).

5. Legislative context

Table 6 summarises approvals relevant to the assessment.

Table 6: Relevant approvals and tenure

Legislation	Number	Subsidiary	Approval
<i>Planning and Development Act 2005</i>	PO55/14 (Lot 78 & 79 on Plan 400640 amalgamated into Lot 101 on Plan 403730)	<i>Romie Holdings Pty Ltd (t/a Wren Oil).</i>	<i>Planning Approval granted 18 November 2014, with conditions.</i>

5.1 Contaminated sites

Assessment of the proposed prescribed premises under DWER GIS layers has determined that the premises is currently not identified as a contaminated site.

5.2 Other relevant approvals

5.2.1 Planning approvals

Planning approval was originally granted by the Shire of East Pilbara on 18 November 2014, with conditions. The applicant has stated that all (22) conditions have been complied with.

5.3 Part V of the EP Act

5.3.1 Applicable regulations, standards and guidelines

The overarching legislative framework of this assessment is the EP Act and EP Regulations.

The guidance statements which inform this assessment are:

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Land Use Planning (February 2017)*
- *Guidance Statement: Licence Duration (August 2016)*
- *Guidance Statement: Publication of Annual Audit Compliance Reports (May 2016)*
- *Guidance Statement: Decision Making (February 2017)*
- *Guidance Statement: Risk Assessments (February 2017)*
- *Guidance Statement: Environmental Siting (November 2016)*

5.3.2 Works approval and licence history

Table 7 summarises the works approval and licence history for the premises.

Table 7: Works approval and licence history

Instrument	Issued	Nature and extent of works approval, licence or amendment
W5898/2015/1	12/11/2015	Works Approval for the construction of a Category 61 – Liquid waste facility
L9143/2018/1	7/01/2019	New Licence for the operation of a Category 61 – Liquid waste facility

6. Assessment of operator

Wren Oil currently own and operate a number of prescribed premises within Western Australia, including:

- L6387/1987/14 – Picton, Bunbury.
- L8246/2008/2 – Midvale, Perth.

The applicant has provided the following:

“Wren Oil was established in 1981 and is a Western Australian family owned and operated oil recycling company. Wren Oil are committed to improving waste oil recycling and have committed significant capital expenditure in recent years to ensure that the waste oil recycling process utilised within its facilities are innovative and in accordance with international best practice. A number of upgrades are currently being commissioned within their primary re-refining facility in Bunbury, demonstrating Wren Oil’s commitment to continuous improvement. Wren Oil already operate an ‘Oil Storage and Transport Depot’ in Midvale, approximately 18 kilometres north-east of the Perth Central Business District.”

7. Consultation

The applicant has undertaken consultation with the Shire of East Pilbara regarding the design of the proposed facility. Approval from the Shire for the Oil/Water Separator was granted 16/11/2016.

8. Location and siting

8.1 Siting context

The premises is located within a zoned ‘industrial’ area under the Shire of East Pilbara Town Planning Scheme No. 4, within Lot 101 on Deposited Plan 403740, Newman (10 Pilga Place, Newman, 6753). Newman is located within the Shire of East Pilbara and is found approximately 1,020 kilometres north of the Perth Central Business District and approximately 450 kilometres south of Port Hedland.

The premises is owned by Romine Holdings Pty Ltd, t/a Wren Oil.

The premises is approximately 178 m south of ‘rural’ zoned area and approximately 218 m southeast of ‘residential’ zoned area.

The applicant has identified that *“a number of Mining Act tenements exist over the site and wider Newman area and includes E52/2741-1, G 52/277, TR 70/7484 and ML 2445A”*.

8.2 Residential and sensitive Premises

The distances to residential and sensitive receptors are detailed in Table 8.

Table 8: Receptors and distance from activity boundary

Sensitive Land Uses	Distance from Prescribed Activity
Residential Premises	<i>Approximately 228 m north of the premises boundary</i>

8.3 Specified ecosystems

Specified ecosystems are areas of high conservation value and special significance that may be impacted as a result of activities at or Emissions and Discharges from the Premises. There are no threatened ecological communities, flora or fauna adjacent to or in close proximity to the proposed prescribed premises.

8.4 Groundwater and water sources

The distances to groundwater and water sources are shown in Table 9.

Table 9: Groundwater and water sources

Groundwater and water sources	Distance from Premises	Environmental value
Public drinking water source areas (PDWSA)	<i>Premises located within a PDWSA 'P3' area – Newman Water Reserve.</i>	<i>Water used for Newman town water supply.</i>
Groundwater and surface water	<i>Located within RIWI Act 1914 proclaimed area</i>	<i>RIWI Act 1914 – Proclaimed Pilbara Groundwater and Surface Water Area</i>
Groundwater	<i>Depth to groundwater at the premises is unknown, and variable across the region due to the fractured rock geology of the area. No bores located within 1km of Premises (based on available GIS dataset –WIN Sites).</i>	<i>Groundwater system associated with the East Pilbara, Upper Fortescue River Basin. Groundwater approximately 3.07 km south west from the premises boundary is approximately 68.5 to 146.5 mBGL (Site Id. 70870259).</i>
Surface water	<i>Located within the Upper Fortescue surface water area.</i>	<i>Fortescue River located approximately 2.64 km north west of the premises boundary Minor non-perennial water course located approximately 1.05 km south of the premises</i>

8.5 Soil type

Table 10 details soil types and characteristics relevant to the assessment.

Table 10: Soil and sub-soil characteristics

Groundwater and water sources	Distance from Premises	Environmental Value
Soil type classification	<i>Located within the eastern extent of the Hamersley Plateau</i>	<i>Sandstone and quartzite geology consists of combined fractured rock. Localised red loamy soils within the upper soil profile.</i>

8.6 Meteorology

8.6.1 Regional climatic aspects

Based on information received from the Bureau of Meteorology (BOM Id 7176) Newman is considered as having a semi-arid to arid climate with two distinct seasons; a hot, high humidity summer and a mild winter.

The climate is extreme in nature with severe droughts and major flooding often occurring at close intervals.

8.6.2 Rainfall and temperature

The average annual rainfall is approximately 363 mm.

9. Risk assessment

9.1 Determination of emission, pathway and receptor

In undertaking its risk assessment, DWER will identify all potential emissions pathways and potential receptors to establish whether there is a Risk Event which requires detailed risk assessment.

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. Where there is no actual or likely pathway and/or no receptor, the emission will be screened out and will not be considered as a Risk Event. In addition, where an emission has an actual or likely pathway and a receptor which may be adversely impacted, but that emission is regulated through other mechanisms such as Part IV of the EP Act, that emission will not be risk assessed further and will be screened out through Table 11.

The identification of the sources, pathways and receptors to determine Risk Events are set out in Table 10 below.

Table 11: Identification of emissions, pathway and receptors during operation

Risk Events					Continue to detailed risk assessment	Reasoning	
Sources/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts			
Category 61 – Liquid waste facility	<i>Discharge to leach drain</i>	<i>Wash down wastewater (hydrocarbons, chemicals)</i>	<i>Terrestrial ecosystem</i>	<i>Direct discharge</i>	<i>Contamination of soil profile; Impact on native vegetation; Disruption of normal ecosystem function.</i>	Yes	See section 9.4
	<i>Acceptance of controlled waste substances (waste oil related products)</i>	<i>Odour</i>	<i>Residential sensitive receptors are located approximately 230 m north of the premises. Industrial receptors adjacent/ adjoining prescribed premises</i>	<i>Air/ wind dispersion</i>	<i>Health/ Amenity</i>	Yes	See Section 9.5

Risk Events					Continue to detailed risk assessment	Reasoning	
Sources/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts			
	<i>Truck movements through the delivery and removal of waste oil products</i>	Noise		Amenity	No	<p><i>The primary noise emissions will be generated from the movement of trucks</i></p> <p><i>The Delegated Officer considers low risk noise emissions are adequately addressed under the provisions of the Environmental Protection (Noise) Regulations 2002.</i></p>	
		Dust		Air/ wind dispersion	No		<p><i>Dust emissions are not anticipated as part of the operation process. All road surfaces are sealed. No product is being processed in any manner that would generate dust emissions.</i></p> <p><i>The Delegated Officer considers dust emissions as adequately addressed through the Environmental Protection Act 1986.</i></p>
	<i>Bulk storage of waste oil products (Spills and leaks)</i>	<i>Breach of containment causing hydrocarbon discharge to land (abnormal operation)</i>	<i>Terrestrial ecosystems</i>	<i>Direct discharge to land</i>	<i>Soil contamination inhibiting vegetation growth, and survival and health impacts to fauna</i>	Yes	See Section 9.6
	<i>Bulk storage of waste oil products (Fire)</i>	<i>Smoke (hydrocarbon, dense, dark)</i>	<i>Residential sensitive receptors are located approximately 230 m north of the premises.</i>	<i>Air/ wind dispersion</i>	<i>Health</i>	Yes	See Section 9.7

9.2 Consequence and likelihood of risk events

A risk rating will be determined for risk events in accordance with the risk rating matrix set out in Table 12 below.

Table 12: Risk rating matrix

Likelihood	Consequence				
	Slight	Minor	Moderate	Major	Severe
Almost certain	Medium	High	High	Extreme	Extreme
Likely	Medium	Medium	High	High	Extreme
Possible	Low	Medium	Medium	High	Extreme
Unlikely	Low	Medium	Medium	Medium	High
Rare	Low	Low	Medium	Medium	High

DWER will undertake an assessment of the consequence and likelihood of the Risk Event in accordance with Table 13 below.

Table 13: Risk criteria table

Likelihood		Consequence		
The following criteria has been used to determine the likelihood of the Risk Event occurring.		The following criteria has been used to determine the consequences of a Risk Event occurring:		
			Environment	Public health* and amenity (such as air and water quality, noise, and odour)
Almost Certain	The risk event is expected to occur in most circumstances	Severe	<ul style="list-style-type: none"> onsite impacts: catastrophic offsite impacts local scale: high level or above offsite impacts wider scale: mid-level or above Mid to long-term or permanent impact to an area of high conservation value or special significance[^] Specific Consequence Criteria (for environment) are significantly exceeded 	<ul style="list-style-type: none"> Loss of life Adverse health effects: high level or ongoing medical treatment Specific Consequence Criteria (for public health) are significantly exceeded Local scale impacts: permanent loss of amenity
Likely	The risk event will probably occur in most circumstances	Major	<ul style="list-style-type: none"> onsite impacts: high level offsite impacts local scale: mid-level offsite impacts wider scale: low level Short-term impact to an area of high conservation value or special significance[^] Specific Consequence Criteria (for environment) are exceeded 	<ul style="list-style-type: none"> Adverse health effects: mid-level or frequent medical treatment Specific Consequence Criteria (for public health) are exceeded Local scale impacts: high level impact to amenity
Possible	The risk event could occur at some time	Moderate	<ul style="list-style-type: none"> onsite impacts: mid-level offsite impacts local scale: low level offsite impacts wider scale: minimal Specific Consequence Criteria (for environment) are at risk of not being met 	<ul style="list-style-type: none"> Adverse health effects: low level or occasional medical treatment Specific Consequence Criteria (for public health) are at risk of not being met Local scale impacts: mid-level impact to amenity
Unlikely	The risk event will probably not occur in most circumstances	Minor	<ul style="list-style-type: none"> onsite impacts: low level offsite impacts local scale: minimal offsite impacts wider scale: not detectable Specific Consequence Criteria (for environment) likely to be met 	<ul style="list-style-type: none"> Specific Consequence Criteria (for public health) are likely to be met Local scale impacts: low level impact to amenity
Rare	The risk event may only occur in exceptional circumstances	Slight	<ul style="list-style-type: none"> onsite impact: minimal Specific Consequence Criteria (for environment) met 	<ul style="list-style-type: none"> Local scale: minimal to amenity Specific Consequence Criteria (for public health) met

[^] Determination of areas of high conservation value or special significance should be informed by the *Guidance Statement: Environmental Siting*.

* In applying public health criteria, DWER may have regard to the Department of Health's *Health Risk Assessment (Scoping) Guidelines*.
 "onsite" means within the Prescribed Premises boundary.

9.3 Acceptability and treatment of Risk Event

DWER will determine the acceptability and treatment of Risk Events in accordance with the Risk treatment table 14 below:

Table 14: Risk treatment table

Rating of Risk Event	Acceptability	Treatment
Extreme	Unacceptable.	Risk Event will not be tolerated. DWER may refuse application.
High	May be acceptable. Subject to multiple regulatory controls.	Risk Event may be tolerated and may be subject to multiple regulatory controls. This may include both outcome-based and management conditions.
Medium	Acceptable, generally subject to regulatory controls.	Risk Event is tolerable and is likely to be subject to some regulatory controls. A preference for outcome-based conditions where practical and appropriate will be applied.
Low	Acceptable, generally not controlled.	Risk Event is acceptable and will generally not be subject to regulatory controls.

9.4 Risk Assessment – Wash down wastewater emissions

9.4.1 Description of Wash down wastewater emissions

Operation

The applicant proposes to undertake minor washing of cabin areas, windows, mirrors and dust from the wheels within the concrete hardstand area in the truck loading/ unloading storage area that is graded to sumps. The wash down wastewater will then be directed through an oil/ water separator with any oil being returned to the waste oil storage tanks. The water portion will then be discharged to leach drain for infiltration to land/ soil.

The applicant proposes to use biodegradable detergents in the washing of the vehicles.

9.4.2 Identification and general characterisation of emission

The wash down wastewater will potentially have small volumes of hydrocarbon compounds (solvents, lubricants, brake fluid, fuel, oil, heavy metals), chemical residues (detergents, degreaser), and soil sediment/ particulates from the cleaning process that have not been removed through the collector sump oil/ water separator.

The anticipated volume and frequency of discharge is unknown given washing of vehicles will be sporadic and minor in nature and discharge via the oil/water separator will be intermittent (system will only operate two to four times per year). The installed oil/water separator is a system accredited by Water Corporation and has a capacity to treat up to 1500 L/hour. Testing undertaken by the supplier of the system indicates that under standard working conditions, the oil/water separator would achieve 10 mg/L or less of total recoverable hydrocarbons (TRH) (and is generally less than 1 mg/L).

9.4.3 Description of potential adverse impact from the emission

The discharge of hydrocarbon compounds has the potential to degrade water resources and contaminate terrestrial ecosystems.

The premises is located within a PDWSA 'P3' priority area, located within fractured rock geology and depth to groundwater is unknown.

9.4.4 Applicant/Licence Holder controls

This assessment has reviewed the controls set out in Table 15 below.

Table 15: Applicant's/Licence Holder's proposed controls for wash down wastewater emissions

Site infrastructure	Description	Operation details	Reference
Controls for wash down wastewater			
<i>Sumps (collection sump and deep sump)</i>	<p><i>Concrete bunded facility for the containment of wash down wastewater, silt/ sediment and spills from within the facility.</i></p> <p><i>Collection sumps located within the 'Loading/ Unloading & Storage' areas.</i></p> <p><i>Deep sump located in the 'Loading/ Unloading & Storage' and 'Bulk storage' areas.</i></p>	<p><i>Cleaned out regularly</i></p> <p><i>'Loading/ Unloading & Storage' area floor is bunded (300 mm) on northern and southern perimeter, sloping towards central collection sump.</i></p>	<p><i>Application supporting documentation, See Table 2 of the Decision report.</i></p> <p><i>Appendix 3 of the Decision Report.</i></p>
<i>Oil/ water separator</i>	<p><i>Type: Fox Environmental Systems Oil/ water separator – physio/ chemical treatment process.</i></p> <p><i>Used for the removal of hydrocarbons from wash down wastewater, which may include waste oil from accidental spills.</i></p> <p><i>Connected to all sumps for the treatment of wash down wastewater prior to discharge to the leach drain.</i></p>	<p><i>System approved by Water Corporation.</i></p> <p><i>To be maintained by an independent contractor.</i></p> <p><i>To be regularly emptied and maintained to ensure no overflow.</i></p>	
<i>Spill kits</i>	<i>Absorbency materials</i>	<i>To be used for any spills not captured within the portable containment receptacles.</i>	<i>Application supporting documentation, See Table 2 of the Decision report.</i>

Site infrastructure	Description	Operation details	Reference
Portable containment receptacles (spill buckets)	Spill buckets placed under any connector hose or valve used in the transfer of waste oil product.	To be used during all waste oil transfers at the premises.	

9.4.5 Key findings

The Delegated Officer has reviewed the information regarding wash down wastewater emissions and has found that:

1. *Regulatory controls requiring no mechanical servicing works be undertaken at the premises and hydrocarbon monitoring parameters will be considered on the proposed Licence.*

9.4.6 Consequence

If wash down wastewater emissions occur, then the Delegated Officer has determined that with the proposed applicant and regulatory controls for the unmanned facility, the on-site impact will be *low level*. Therefore, the Delegated Officer considers the consequence of wash down wastewater emissions to be **minor**.

9.4.7 Likelihood of Risk Event

The Delegated Officer has determined that the likelihood of wash down wastewater emissions could occur at some time. Therefore, the Delegated Officer considers the likelihood of wash down wastewater emissions to be **possible**.

9.4.8 Overall rating of wash down wastewater emissions

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix (Table 12) and determined that the overall rating for the risk of wash down wastewater is **medium**.

9.5 Risk Assessment – Odour emissions

9.5.1 Description of odour emissions

Operation

The applicant proposes to receive a wide variety of hydrocarbon based waste types from the Pibara/ north-west region (See Section 4.1 of the Decision Report) for temporary storage, prior to transportation to Wren Oil's licenced premises (L6378/1987/14) in Picton for recycling and re-refining.

9.5.2 Identification and general characterisation of emission

Hydrocarbons consist of an extremely complex mixture of a wide variety of compounds (e.g. saturated alkanes, branched alkanes, alkenes, naphthenes, aromatics including sulfur, oxygen, nitrogen, heavy metal complexes, naphtho-aromatics, large aromatic molecules like resins, asphaltenes, carboxylic acids, ethers, porphyrins, etc.).

The wide variety of waste oil products proposed for storage will be in enclosed 110 kL tanks, and distributed/ transferred through sealed pipe works with a maximum throughput capacity proposed of 35,000 tonnes per annual period. The applicant has confirmed that odour

emissions are likely to be minor and localised to the site given the type of facility and the controls in place.

9.5.3 Description of potential adverse impact from the emission

Hydrocarbons have a varying potential for harm depending on type, and type/ length of exposure and can damage any organ system in the human body such as ‘the nervous system, respiratory system, circulatory system, immune system, reproductive system, sensory system, endocrine system, liver, kidney, etc. and consequently can cause a wide range of diseases and disorders (Costello, 1979)’. Young children and pregnant women are more susceptible to the toxic effects.

Exposure to airborne particulates from volatilisation of compounds (i.e. hydrocarbons with low molecular weight such as aliphatics and aromatic compounds) can impact the health and amenity of sensitive receptors (230 m north), in close proximity to the prescribed premises.

Symptoms may include respiratory issues/ breathing difficulties and have been associated with cancers in children.

The proposed premises is a newly constructed premises for the purposes of temporary hydrocarbon storage prior to final disposal off-site, with all waste oil products to be stored in enclosed tanks.

9.5.4 Applicant/Licence Holder controls

This assessment has reviewed the controls set out in Table 16 below.

Table 16: Applicant’s/Licence Holder’s proposed controls for odour emissions

Site infrastructure	Description	Operation details	Reference
Controls for odour			
<i>Waste oil storage tanks (2 x 110 kL) within the Bulk storage area</i>	<i>Storage tanks and associated pipework</i>	<i>Product transferred from tanker to waste oil storage tank via enclosed pipeline system to fully enclosed storage tanks.</i>	<i>Application supporting documentation, See Table 2 of the Decision report. Appendix 3 of the Decision Report.</i>
		<i>Used oil stored within a self bunded, double skinned and enclosed tanks within the roofed ‘Bulk Storage’ area shed structure.</i>	
<i>Oil/ water separator</i>	<i>Removal of oil from water</i>	<i>Any wash down waters discharged to leach drain will be passed through the oil/water separator prior to discharge.</i>	
		<i>Regularly emptied and monitored to ensure no overflow.</i>	

9.5.5 Key findings

The Delegated Officer has reviewed the information regarding odour and has found that:

1. *Odour emissions have been considered within this proposed licence. The current premises construction will only ensure temporary hydrocarbon storage prior to final disposal off-site, with all waste oil products to be stored in enclosed tanks. Also there will be no processing or refinement of waste oil products which will significantly diminish the potential for odour emissions to occur.*
2. *Regulatory controls will be applied for the type and volume of storage and the ongoing maintenance/ management of infrastructure and equipment.*
3. *Odour emissions are adequately considered under the Environmental Protection Act 1986, with consideration of potential offences and charges.*

9.5.6 Consequence

If odour emissions occur, then the Delegated Officer has determined that the impact of odour will be minimal offsite impacts. Therefore, the Delegated Officer considers the consequence of odour to be **minor**.

9.5.7 Likelihood of Risk Event

The Delegated Officer has determined that the likelihood of odour emissions occurring will probably not occur in most circumstances. Therefore, the Delegated Officer considers the likelihood of odour to be **unlikely**.

9.5.8 Overall rating of odour emissions

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix (Table 12) and determined that the overall rating for the risk of odour emissions is **medium**.

9.6 Risk assessment – Hydrocarbon emissions

9.6.1 Description of hydrocarbon emissions

Operation

The waste oil products received to the premises (see Section 4.1 of the Decision Report) will consist of varying proportions of oil/ water ratio. The waste oil will be stored temporarily at the premises for later final processing and re-refining at the Picton, facility.

The loading/ unloading and storage of waste oil products will be carried out on a concrete hardstand with drip buckets utilised under all transfer connectors/ valves to capture any small spills/ leaks during the transfer process. All pipe works are enclosed and sealed.

All storage tanks within the Bulk Storage area are double skinned, self bunded metal tanks located on concrete hardstand. The accidental discharge of waste oil products from the bulk storage tanks as a result of a breach in the containment tank will result in the waste oil product being contained within the secondary skin of the tank, which in accordance with AS 1940-2017 is required to be able to hold 110% of the volume stored. The concrete hardstand has an additional bunded containment area which has a capacity of 71,400 litres to contain and major leaks/spills.

Small drums held within the loading and storage area, containing all other waste oil products will be placed within a bunded, concrete hardstand area. The accidental discharge of

hydrocarbons (from the loading and storage area) as a result of spills and leaks will be captured on the hardstand area which is graded to a sump that will transfer all liquids through to the oil/ water separator and permits the water portion to be discharged via leach drain. The truck loading/unloading and storage area has a bunded capacity of 45,100 litres.

9.6.2 Identification and general characterisation of emission

The type of emission is considered to only occur under accidental/ abnormal circumstances as a result of hydrocarbon spills within the unloading/loading transfer and storage area, which would pass through the sump into the oil/water separator and then to the leach drain.

The majority of potential accidental hydrocarbon emissions is considered to be small in volume however large volume accidental discharge may result in inadequate processing of hydrocarbons through the oil/ water separator and cause high levels of hydrocarbons discharged to the leach drain.

The unloading/ loading transfer and storage area (where spills/leaks are likely to occur) has a bunded capacity of 45,100 L (with the collection sump having an additional storage area of 11,700 L). If a large volume of waste oil is spilt in this area, Wren Oil would seek to recover this material given it can be re-refined.

Poor management or maintenance of the oil/ water separator would also result in elevated hydrocarbon concentrations being discharged via leach drain. This would result in discharges to land (terrestrial ecosystem).

The potential for an accidental hydrocarbon emission is considered to be ad-hoc, short duration, predominantly of low volume, and of varying concentrations.

9.6.3 Description of potential adverse impact from the emission

Discharge of hydrocarbons from the premises has the potential to impact terrestrial ecosystems via the leach drain, causing localised contamination of the soil profile.

The premises is located within an industrial zoned area, where depth to groundwater is not clearly defined however the premises is located within a fractured rock geology in a PDWSA 'P3' priority area. The closest sensitive receptors are defined within Table 7 & 8 of the Decision Report.

9.6.4 Applicant/ Licence Holder controls

This assessment has reviewed the controls set out in Table 17 below.

Table 17: Applicant's/Licence Holder's proposed controls for hydrocarbon emissions

Site infrastructure	Description	Operation details	Reference
Controls for hydrocarbon emissions			
<i>Waste oil storage tanks</i>	<i>Waste oil product received at the premises for storage, prior to transfer to Picton for recycling and re-refining.</i>	<i>All hydrocarbons stored within double skinned, self bunded, enclosed holding tanks placed on a concrete hardstand. Product transferred from road tanker to waste oil storage tank via enclosed pipe system to fully enclosed storage tanks.</i>	<i>Application supporting documentation, See Table 2 of the Decision report. Appendix 3 of the Decision Report.</i>

Site infrastructure	Description	Operation details	Reference
		<p><i>The loading/ unloading and storage of waste oil products will be carried out on a concrete hardstand with drip buckets utilised under all transfer connectors/ valves to capture any small spills/ leaks during the transfer process</i></p> <p><i>Entire premises is covered with 'semi-impervious' road base.</i></p> <p><i>Spill kits will be made available at the premises for the clean-up of any/ all spills.</i></p>	
	<i>Monitoring</i>	<i>All spills to be recorded within an incident report system, including action taken to remediate the spill.</i>	<i>Application supporting documentation, Attachment 3A, Section 5, Pg 19-24.</i>
	<i>Oil/ water separator</i>	<p><i>To be used to remove any hydrocarbons in the wash down wastewaters generated onsite, prior to discharge to the leach drain. Waste oil residue from wash down wastewaters to be collected and stored within waste oil storage tank or containers.</i></p> <p><i>No oil or oil-related material will be discharged directly via the leach drain system.</i></p> <p><i>To be emptied regularly to ensure no overflow</i></p>	<i>Appendix 3 of the Decision Report.</i>
<i>'Loading and Storage' area</i>		<p><i>Concrete bunded, Impermeable hardstand.</i></p> <p><i>Bunded capacity of 45,100 litres. To accommodate any potential spill that may result from a fitting failure, with the largest tanker compartment that could be spilt during a transfer being 8,000 litres.</i></p>	

Site infrastructure	Description	Operation details	Reference
Entire premises	Compliance with the Dangerous Goods Safety Act 2004 and associated regulations	The applicant will obtain the necessary approvals and be compliant in accordance with Dangerous Goods Safety Act 2004, and AS1940:2004.	
	Management protocols	All spills to be cleaned up immediately; Spill kits and absorbents to be used and made readily available at various locations throughout the proposed facility; All stored waste oil products will be transferred to a licensed facility for recycling or disposal by road train or other suitable transportation.	

9.6.5 Key findings

The Delegated Officer has reviewed the information regarding hydrocarbon emissions and has found that:

1. Regulatory controls will be included within the proposed Licence to ensure ongoing, adequate management and maintenance of hydrocarbon storage at the premises to address potential spills and leaks.

9.6.6 Consequence

If hydrocarbon emissions occur, then the Delegated Officer has determined that the impact of potential contamination will be low level onsite impacts. Therefore, the Delegated Officer considers the consequence of hydrocarbon emissions to be **minor**.

9.6.7 Likelihood of Risk Event

The Delegated Officer has determined that the likelihood of hydrocarbon emissions could occur at some time. Therefore, the Delegated Officer considers the likelihood of hydrocarbon emissions to be **possible**.

9.6.8 Overall rating of hydrocarbon emissions

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix (Table 12) and determined that the overall rating for the risk of hydrocarbon emissions is **medium**.

9.7 Risk assessment – Fire/ smoke risk

9.7.1 Description of fire/ smoke emissions

Operation

Any fire/ smoke generated at the premises would likely be as a result of accidental ignition or arson.

Waste oil products have a lower combustion level as there are less volatile compounds (i.e. water in oil emulsions may contain more than 30% to 50% water inhibiting ignition and support combustion).

Any smoke generated from the burning of waste oil (hydrocarbon) products will generate thick, black smoke.

Waste oil products contain high levels of pollutants which can then be emitted to air for dispersal.

9.7.2 Identification and general characterisation of emission

As the processing of burning of any waste oil products or materials has not been defined as part of the normal operational process of the facility, the type of emission (fire/ smoke) will only be under abnormal considerations and will generate unknown volumes/ concentrations of smoke for varying lengths of time prior to the fire being extinguished. However, it is anticipated that this would be short-lived (< 8 hours) under exceptional circumstances due to the locality of the premises and accessibility to high pressure water supply and fire support services.

9.7.3 Description of potential adverse impact from the emission

The burning of waste oil has the potential to generate high levels of aerosols and particulate concentrations. Sensitive receptors such as the very young and very old, pregnant women and people with pulmonary or cardiovascular diseases, and/ or people with respiratory issues will have a low tolerance to particulates¹.

The burning of oil will predominantly cause the release of carbon dioxide, soot/ dust, toxic gases such as sulfur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), and small amounts of polynuclear aromatic hydrocarbons (PAHs), and potentially volatile organic compounds (VOC's)¹.

In addition, the adequate containment and suppression of a fire within the premises poses a risk to public health should it spread beyond the boundary.

Note 1: Health and Safety Aspects of In-situ Burning of Oil, Nir Barnea, National Oceanic and Atmospheric Administration, Seattle, WA 98115 USA.

9.7.4 Criteria for assessment

Relevant standards and guidelines applicable for the operation include:

- *Dangerous Goods Safety Act 2004*
- *Dangerous Goods Safety (Storage and Handling of non-explosives) Regulations 2007*
- *AS1940:2017*;
- Local by-laws for the Shire of Pilbara;
- DFES guidance for the management and operation of the premises.

9.7.5 Applicant/Licence Holder controls

This assessment has reviewed the controls set out in Table 18 below.

Table 18: Applicant’s/Licence Holder’s proposed controls for fire/ smoke risk

Site infrastructure	Description	Operation details	Reference
Controls for fire/ smoke risk			
Fire extinguishers	Located within the 'Bulk storage' area.	Compliance with the Dangerous Goods Safety Act 2004 and associated regulations Compliance to AS1940:2017.	Application supporting documentation, See Table 2 of the Decision report.
Fire hoses	Located within the 'Bulk storage' and 'Truck loading & Storage' area.	Safety Data Sheets will be available at all times.	Application supporting documentation, Table 2 of the Decision Report.

9.7.6 Key findings

The Delegated Officer has reviewed the information regarding fire/ smoke risk and has found:

1. Regulatory controls may be proposed within the licence to ensure no burning of any waste oil products or materials occur at the premises.

9.7.7 Consequence

If fire/ smoke emissions occur, then the Delegated Officer has determined that the impact of on-site impacts will be high level adverse health effects. Therefore, the Delegated Officer considers the consequence of fire/ smoke emissions to be **major**.

9.7.8 Likelihood of Risk Event

The Delegated Officer has determined that the likelihood of fire/ smoke emissions will probably not occur in most circumstances. Therefore, the Delegated Officer considers the likelihood of fire/ smoke emissions to be **unlikely**.

9.7.9 Overall rating of fire risk

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix (Table 12) and determined that the overall rating for the risk of fire/ smoke emissions is **medium**.

9.8 Summary of acceptability and treatment of Risk Events

A summary of the risk assessment and the acceptability or unacceptability of the risk events set out above, with the appropriate treatment and control, are set out in Table 19 below. Controls are described further in section 10.

Table 19: Risk assessment summary

	Description of Risk Event			Applicant controls	Risk rating	Acceptability with controls (conditions on instrument)
	Emission	Source	Pathway/ Receptor (Impact)			
1.	Wash down wastewater	<i>Vehicle wash down</i>	Via Leach drain to ground (infiltration)	See Table14 in Decision Report	Minor consequence Possible likelihood Medium Risk	Acceptable subject to regulatory controls
2.	Odour	Storage tanks, drums or pipe work	Air/ wind dispersion	See Table15 in Decision Report	Minor consequence Unlikely likelihood Medium risk	Acceptable subject to regulatory controls
3.	Hydrocarbon emissions (spills/ leaks)	Storage tanks, drums, pipe work or vehicles	Via leach drain to ground (infiltration)	See Table16 in Decision Report	Minor consequence Possible likelihood Medium Risk	Acceptable subject to proponent controls conditioned / outcomes based controls
4.	Fire/ smoke emissions	Storage tanks or drums	Air/ wind dispersion	See Table17 in Decision Report	Major consequence Unlikely likelihood Medium Risk	Acceptable subject to proponent controls conditioned / regulatory controls

10. Regulatory controls

A summary of regulatory controls determined to be appropriate for the Risk Event is set out in Table 20. The risks are set out in the assessment in section 10 and the controls are detailed in this section. DWER will determine controls having regard to the adequacy of controls proposed by the Applicant. The conditions of the Licence will be set to give effect to the determined regulatory controls.

Table 20: Summary of regulatory controls to be applied

		Controls (references are to sections below, setting out details of controls)			
		10.1.1 Infrastructure and equipment	10.1.4 Specified action	10.1.5 Monitoring	10.1.6 Monitoring Reports
Risk Items (see risk analysis in section 9)	1. Wash down waster	●	●	●	■
	2. Odour	●	■	■	●
	3. Hydrocarbon emissions	●	●	●	●
	4. Fire/ smoke emissions	●	●	■	●

10.1 Licence controls

10.1.1 Infrastructure and equipment

The applicant will be required to operate and maintain the infrastructure listed in Table 4 in good working condition. The infrastructure was considered by the Delegated Officer in determining the risk of emissions from the Premises and is considered necessary in the minimising the risk associated to contaminated wash-water, odour, hydrocarbon, fire and smoke emissions.

10.1.2 Specified actions

The following will be required:

- ensure wash-down water will be discharged via an oil/waste-water separator prior to discharge to the leach drain;
- the applicant will be required to immediately clean any spills of waste on the Premises

11. Determination of Licence conditions

The conditions in the issued Licence in Attachment 1 have been determined in accordance with the *Guidance Statement: Setting Conditions*.

The *Guidance Statement: Licence Duration* has been applied and the issued licence expires

in 20 years from date of issue.

Table 21 provides a summary of the conditions to be applied to this licence.

Table 21: Summary of conditions to be applied

Condition Ref	Grounds
Emissions Condition 1	Environmental compliance is a valid, risk-based condition to ensure appropriate linkage between the licence and the EP Act.
Infrastructure and Equipment 2	These conditions are valid, risk-based and contain appropriate controls.
Waste acceptance 3	These conditions are valid, risk-based and consistent with the EP Act.
Specified actions 4 and 5	This condition is valid, risk-based and consistent with the EP Act.
Record keeping 6, 7, 8 and 9	These conditions are valid and are necessary administration and reporting requirements to ensure compliance.

DWER notes that it may review the appropriateness and adequacy of controls at any time and that, following a review, DWER may initiate amendments to the licence under the EP Act.

12. Applicant's comments

The applicant was provided with the draft Decision Report and draft Licence on 29 November 2018.

13. Conclusion

This assessment of the risks of activities on the Premises has been undertaken with due consideration of a number of factors, including the documents and policies specified in this Decision Report (summarised in Appendix 1).

Based on this assessment, it has been determined that the Licence will be granted subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

Steve Checker
MANAGER WASTE INDUSTRIES

Delegated Officer
under section 20 of the *Environmental Protection Act 1986*

Appendix 1: Key documents

	Document title	In text ref	Availability
1.	Email: S57(1)(a) Environmental Protection Act 1986 – Licence Application and supporting documentation received from Kirsten Knox (Emerge Associates) on 18 June 2018. Includes one attachment: <ul style="list-style-type: none"> Licence application and cover letter (EP14-040(04)—011a JHL).combined.pdf. 	Licence application and supporting information	DWER records (A1706293)
2.	Email: Response from Kirsten Knox to request for further information received (Emerge Associates). Includes one attachment (EP14-040(04) —015a	Supporting information	DWER records (A1719957)
3.	Works Approval W5898/2015/1 – Newman Waste Oil facility	W5898/2015/1	accessed at www.dwer.wa.gov.au
4.	DER, July 2015. <i>Guidance Statement: Regulatory principles.</i> Department of Environment Regulation, Perth.	DER 2015a	accessed at www.dwer.wa.gov.au
5.	DER, October 2015. <i>Guidance Statement: Setting conditions.</i> Department of Environment Regulation, Perth.	DER 2015b	
6.	DER, August 2016. <i>Guidance Statement: Licence duration.</i> Department of Environment Regulation, Perth.	DER 2016a	
7.	DER, November 2016. <i>Guidance Statement: Risk Assessments.</i> Department of Environment Regulation, Perth.	DER 2016b	
8.	DER, November 2016. <i>Guidance Statement: Decision Making.</i> Department of Environment	DER 2016c	

	Regulation, Perth.		
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Appendix 2: Summary of applicant's comments on risk assessment and draft conditions

Condition	Summary of Licence Holder comment	DWER response
Licence		
Front page	Request name of facility be 'Wren Oil Newman Depot', to align with Wren Oil's internal naming of the facility	Request accepted
2: Infrastructure and equipment controls table 3 Operational requirements: All	<ol style="list-style-type: none"> 1) The planning approval provided by the Shire of East Pilbara does not impose any restrictions on operational hours. To be a viable premises, it needs to operate as a 24 hour/7 day a week facility as it services the operational needs of the mining industry, which also operate 24 hours/7 days a week. Request to remove any restrictions on operational hours; 2) WQPN 68 discusses management of mechanical wash down bays with regard to a range of water-based values, many of which are not applicable to this premises (i.e. they are not present). Minor typographical changes requested. 	<p>Agreed - Removed</p> <p>Typographical errors corrected. Given the premises location within a 'P3' Public drinking water source area, WQPN is applicable. Point 3 of WQPN 68 states that " <i>Within designated priority areas P3, wash down facilities are considered 'compatible with conditions' provided best environmental management practices are used. Unless any project-specific regulatory conditions are set, acceptable environmental management practice is provided in this note.</i>"</p>
2: Infrastructure and equipment controls table 3 Operational requirements: Waste oil storage tanks (2 x 110 kL) within the 'Bulk storage' area.	<ol style="list-style-type: none"> 1) Request the requirement to lock the tanks be removed. The tanks will not be locked. The premises is secured with fencing and lockable gates and accordingly the tanks are not proposed to be locked. 2) Request the requirement for the bunded area storage capacity to be maintained at 71,400 litres at all times be removed. The storage tanks are self-bunded (i.e. double-skinned). in accordance with AS 1940-2017 are designed to contain the entire contents of the primary tank. Therefore, if a breach occurs, the spill would be contained within the second skin of the tank. The concrete hardstand and associated outlined 'bunded capacity' of 71,400 L was based on simple area calculation to indicate the capacity of the concrete hardstand to hold any type of liquid. Based on self-bunded tanks being installed, the bunded capacity of the concrete hardstand is not required from a management/control perspective. 3) Request the requirement for all waste oil products to be stored within the waste oil storage tanks be amended and/or removed. Some waste oil 	<p>Agreed - Removed</p> <p>Agreed – the presence of significant tertiary containment capacity is inherent in the design of the premises and is deemed satisfactory</p> <p>Agreed - Removed</p>

	<p>products are stored in drums/containers in the 'Loading & Storage area' (as per the previous application information) and therefore it is not possible for 'all waste oil products' to be stored in the waste oil storage tanks.</p>	
<p>2: Infrastructure and equipment controls table 3</p> <p>Leach drain and vegetated swale</p>	<ol style="list-style-type: none"> 1) Request the requirement to sample wastewater prior to discharging via the leach drain be removed or wording be amended. The current wording implies that no washdown water could be discharged via the leach drain until the water has been tested. 2) Can DWER clarify where this volume/rate to the leach drain system has come from? The Shire of East Pilbara approval for the septic tank and leach drain system does not specify any restrictions on the volume of water to be processed, nor did the original works approval and licence application. 	<p>Given the advice that the oil water separator will operate only 2-4 times per year, monitoring requirements have been removed. The Delegated Officer considers that the requirement to construct and operate the washdown facilities in accordance with WQPN 68 will provide satisfactory protection of the environment.</p> <p>Supporting information provided with the application (Table 1- under Leach drain for grey water) states that the leach drain is designed to manage 250 L of effluent per day. However since The Shire of East Pilbara approval for the septic tank and leach drain system does not specify any restrictions on the volume of water to be processed the Delegated Officer has determined that this requirement can be removed.</p>
<p>2: Infrastructure and equipment controls table 3</p> <p>Oil/water separator</p>	<ol style="list-style-type: none"> 1) Request the requirement to maintain the Oil/water separator weekly be changed to annually. This requirement be amended as outlined in order to align with risk and to be achievable based on the proposed operations. The oil/ water separator will not require weekly maintenance given it is only likely to operate 2 to 4 times per year, based on the volume of wash water estimated to be generated and the capacity of the collection sump to store/hold wash water. Furthermore, the premises will not be manned, and therefore there will be periods of weeks where no person will visit the facility (as collection tankers may travel directly to Picton rather than via the Newman transfer depot). <p>As outlined within the response to the draft decision report:</p> <p>The volume of wash water generated will vary depending upon the number of vehicles and the level of dust on those vehicles. Wren Oil estimate that at most, 200 to 500 L/week (28 to 71 L/day) of wash water may be generated. Based on 52 weeks in a year, this would be between 10,400 and 26,000 L/year of wash water.</p> <p>The collection sump within the truck unloading/loading area has a capacity to hold approximately 11,700 L. Water within the collection sump is transferred to the oil/ water separator via a submersible pump that activates automatically when a predetermined level is met within the sump. This means the oil/ water separator will only likely operate 2 to 4 times <u>per year</u>.</p> <p>Fox Environmental Systems (manufacturer of the oil/ water separator) indicates that maintenance intervals should be varied in accordance with the volumes and pollutant loadings of the effluent being treated, therefore weekly maintenance is</p>	<p>Agreed - Frequency of maintenance removed. Outcome base requirement inserted</p>

	<p>not required for the system to operate optimally based on the expected use.</p> <p>The proposed wording will ensure manufacturer requirements are satisfied, particularly if the volume of wash water generated increases and the oil/ water separator is activated on a more regular basis.</p> <p>2) Request the requirement to sample wastewater directed to the oil/water separator prior to discharging via the leach drain be removed or wording be amended. This is not an achievable outcome.</p>	Agreed - Removed
<p>2: Infrastructure and equipment controls table 3</p> <p>Sumps (deep pump and collector)</p>	<p>1) Request the requirement to maintain sumps weekly be changed to annually. The premises will not be visited on a weekly basis, given the facility is unmanned and will only be subject to intermittent use (which while it will be a 24 hour a day/7 day a week facility, there may be weeks where no vehicle/person accesses the site). Request this requirement be amended to 'annually' as outlined in order to align with the low risk posed by the facility and to be achievable based on operations.</p>	Agreed - Frequency of maintenance removed. Outcome base requirement inserted
<p>3: Infrastructure and equipment controls table 3</p> <p>Waste acceptance</p>	<p>No quantity limit has been provided. Can DWER confirm if this is required to be provided as part of the 'Waste Acceptance' section. If yes, volume should be 35,000 tonnes per annum.</p>	Updated
<p>4: Table 5: Authorised discharge point</p>	<p>Minor typographical changes requested</p>	Changes adopted
<p>5: Table 6: Emission and discharge limits</p>	<p>Minor typographical changes</p>	Changes adopted
<p>6: spills of waste oil</p>	<p>Clarification required on what type of spill needs to be cleaned up. Request DWER consider re-wording as outlined.</p>	Updated
<p>7: Monitoring</p>	<p>If a monitoring condition is to be applied, it is requested that the number of monitoring events be reduced to a single annual event to enable Wren Oil to comply with this condition, provided water is passing through the system and able to be monitored (it is possible that no water will pass through the oil/ water separator, or at least not regularly). This is based on the low level of risk posed by the facility, the low volume of water to be processed through the oil/ water separator and the intermittent usage of the premises (given it is unmanned) which means monthly monitoring will not be possible.</p>	<p>Given the advice that the oil water separator will operate only 2-4 times per year, monitoring requirements have been removed. The Delegated Officer considers that the requirement to construct and operate the washdown facilities in accordance with WQPN 68 will provide satisfactory protection of the environment.</p>
Decision Report		
<p>Front page</p>	<p>Request name of facility be 'Wren Oil Newman Depot', to align with Wren Oil's</p>	Request accepted

	internal naming of the facility	
Table 2: Documents and information submitted during the assessment process	Request reference be made to additional information (as requested by DWER), submitted by the proponent on the 12 September 2018.	Table 2 updated reflecting receiving further information submitted on 12 September 2018
Section 3: Background-paragraph 3	The premises is owned by Romine Holdings Pty Ltd (trading as Wren Oil). The land the premises is located on is owned by Aljim Pty Ltd and Daveben Pty Ltd but these entities have no responsibility for the premises. The only reason information on Aljim Pty Ltd and Daveben Pty Ltd was provided as part of the application process was to demonstrate (as requested by DWER) that no formal lease agreement (or similar) was required to support the operation of the premise at the proposed landholding given the directors of Aljim Pty Ltd and Daveben Pty (respectively) were the same as Romine Holdings Pty Ltd. Request this be deleted given the applicant is correctly listed on the first page.	Updated
Section 4.1: First paragraph	Minor changes to wordings requested. Text be amended as outlined. In particular, reference to premises as a storage facility.	Changes adopted
Section 4.1: Second paragraph	No waste oil is processed or treated at this facility. This facility is only for the temporary storage of goods prior to transport to the re-refining facility in Picton. We request this be amended as outlined.	Changes adopted
Section 4.1: Third paragraph	Wren Oil would like to clarify that the storage tanks are self-bunded (i.e. double-skinned), and in accordance with AS 1940-2017 are designed to contain the entire contents of the primary tank. Therefore, if a breach occurs, the spill would be contained within the second skin of the tank. Request DWER consider re-wording. The concrete hardstand and associated outlined 'bunded capacity' of 71,400 L was based on a simple area calculation to indicate the capacity of the concrete hardstand to hold any type of liquid. Based on self-bunded tanks being installed, the bunded capacity of the concrete hardstand is not required from a management/control perspective.	Noted.
Section 4.1: Fourth paragraph	Request text be amended as outlined	Amended
Section 4.2: Table 5: Liquid waste facility Category 61 infrastructure	Remove all referrals to concrete hardstand (Bulk storage and truck unloading). The concrete hardstand and associated outlined 'bunded capacity' of 71,400 L was based on a simple area calculation to indicate the capacity of the concrete hardstand to hold any type of liquid. Based on self-bunded tanks being installed, the bunded capacity of the concrete hardstand is not required from a management/control perspective.	References to bunding capacity requirements removed. Reworded to reflect the bunded area.
Section 4.2: Table 5: Liquid waste facility Category 61	Minor changes requested	Changes adopted

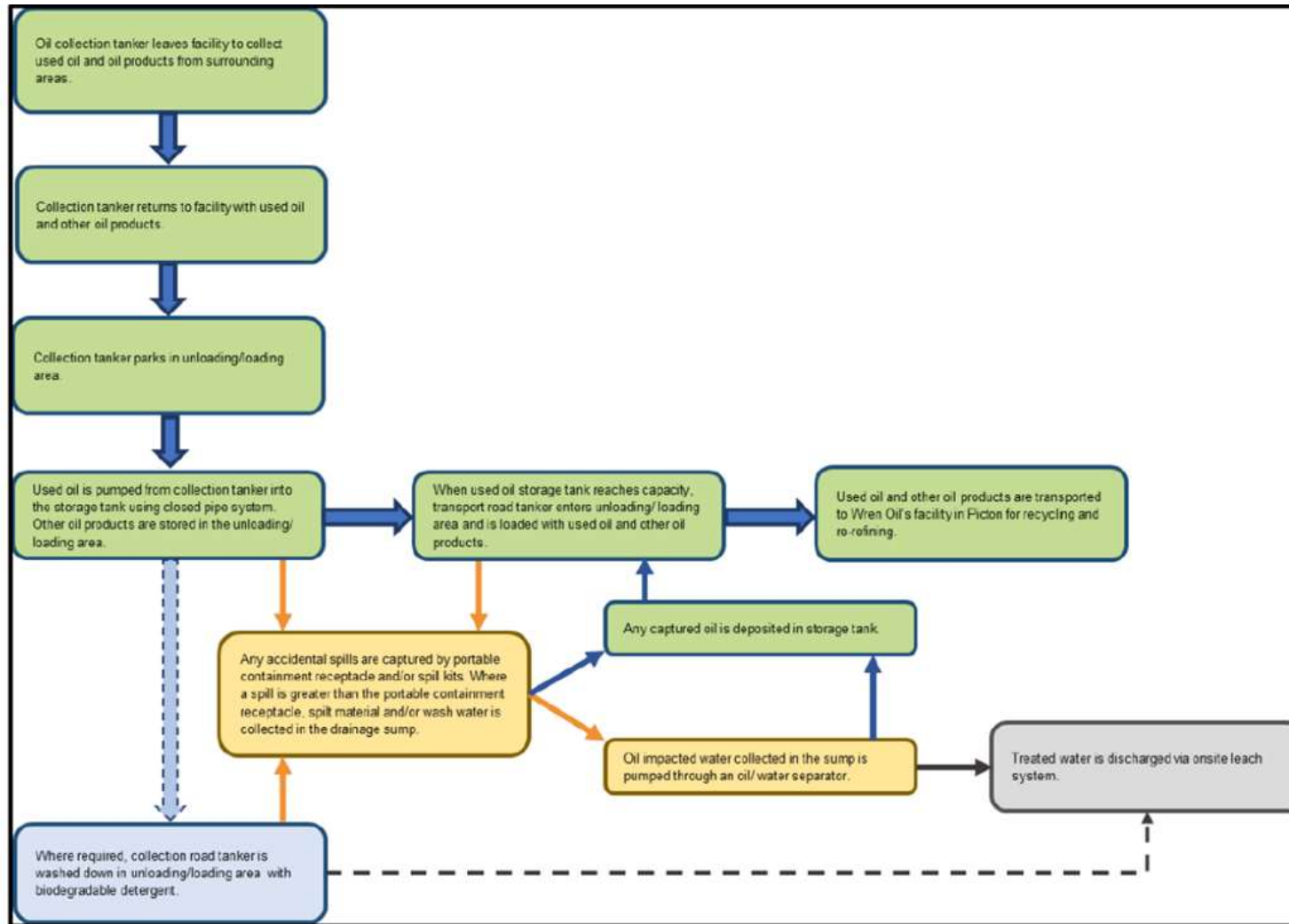
infrastructure		
Section 5: Table 6	The subsidiary should be either 'Wren Oil' or 'Romine Holdings Pty Ltd (t/a Wren Oil)'. The premises is owned by Romine Holdings Pty Ltd (trading as Wren Oil) not Aljim Pty Ltd and Daveben Pty Ltd.	Amended
Section 8.61: 2 nd paragraph	Typographical error	corrected
Section 9.41	Request paragraph be amended as outlined	Amended
Section 9.4.2	Request paragraph be amended as outlined	Amended
Section 9.4.4 : Table 15	Minor typographical changes requested	Adopted
Section 9.4.5: Key findings	The monitoring parameters outlined as part of the licence will not be able to be complied with given monthly monitoring could not be undertaken (based on the volume of water that will be processed).	Agreed
Section 9.4.6: Consequence	Request DWER reconsider the consequence rating based on the following information: <ul style="list-style-type: none"> - The existing controls to minimise spills (i.e. spill buckets, closed pipe transfer system etc.), minimising the presence of hydrocarbons on the concrete hardstand. - Vehicle washing will only be for the external portions of the vehicle/cabin area. No washing of the tanks or containment vessels is proposed. - it is highly likely that there will be periods of weeks where no vehicles will visit the facility (as depending on the volumes collected, road tankers may travel directly from the collection point (i.e. mine site) to the Picton re-refining facility). It is estimated that the volume of wash water generated in a year is likely to be between 10,400 and 26,000 L/year (200 to 500 L/week). - When enough wash water is generated, water will pass through the oil/water separator, prior to discharge via a leach drain. 	Noted – however location is sensitive (P3 area). The Delegated Officer is aware that since it is an unmanned facility, it will be hard to control the washing operations therefore onsite impact will remain minor.
Section 9.5: Risk Assessment (Odour emissions)	Overall, disagree that this is a risk that requires detailed consideration. Odour was not identified as a potential risk at the Midvale transfer depot (which is the same type of facility as the Newman facility), therefore disagree that odour requires a detailed risk assessment. We request DWER reconsider whether this factor	The Delegated Officer is aware that the operation on site will involve the transfer of waste oil/hydrocarbons between the road tankers and waste oil storage tanks therefore has determined that a detailed Odour risk assessment will be required based upon

	requires detailed assessment.	DWER's Guidance Statement: Setting Conditions (October 2015), <i>Guidance Statement: Decision Making (February 2017)</i> and <i>Guidance Statement: Risk Assessments (February 2017)</i> .
Section 9.5.2	Minor typographical changes requested	Changes adopted
Section 9.5.3	Typographical changes requested	Changes adopted
Table 16	Minor typographical changes requested	Changes adopted
Section 9.5.5	Minor typographical changes requested	Changes adopted
Section 9.5.6: Consequences	The potential odour emissions from this facility are minimal and are unlikely to be detected offsite. Request DWER consider amending consequence to 'slight'	The Delegated Officer is aware that the operation on site will involve the transfer of waste oil/hydrocarbons between the road tankers and waste oil storage tanks therefore considers the consequence of odour to be minor
Section 9.6.1	Minor typographical changes requested	Changes adopted
Section 9.6.2	Minor typographical changes requested	Changes adopted
Table 17	Typographical changes requested	Changes adopted
Section 9.6.7: Likelihood of Risk Event	Request DWER reconsider likelihood of risk event. Wren Oil have implemented adequate controls based on normal operations to manage potential hydrocarbon emissions, including clean-up of any potential spills, and capture of larger volumes given the transfer operations will occur in a bunded area, and the waste oil storage tanks are self-bunded therefore any spill would be captured within the vessel. The likelihood of the event is unlikely.	The Delegated Officer is aware that majority of potential accidental hydrocarbon emissions will be small in volume however it is possible that large volume accidental discharge may result in inadequate processing of hydrocarbons through the oil/ water separator and cause high levels of hydrocarbons discharged to the leach drain. The Newman site is an unmanned facility in a sensitive (P3) area. Therefore the likelihood of the event will remain possible .
Section 9.7: Risk assessment- Fire/smoke risk	We request DWER reconsider whether this factor requires detailed consideration. Wren Oil are very concerned about how this is currently written as it implies that they may intentionally burn or process waste oil at the premises, which was not proposed at all. The only time waste oil may burn is as a result of exceptionally abnormal (and likely malicious) events, for which it is not reasonable to plan for (i.e. it would be rare for this to occur) apart from securing the site appropriately. Wren Oil are required to manage waste oil in accordance with the <i>Dangerous Goods Safety Act 2004</i> given the waste oil material is considered to be combustible C2, as well as in	It is noted that the applicant does not propose to burn or process waste onsite. DWER's focus on fire risk management at prescribed premises has increased in recent times. The Delegated Officer has determined that a detailed risk assessment is required based upon DWER's Guidance Statement: Setting Conditions (October 2015), <i>Guidance Statement: Decision Making (February 2017)</i> and <i>Guidance Statement: Risk Assessments (February 2017)</i> Wording from DWER's standard licence template Guidance Statements as outlined under section 5.3 of this document.

	<p>accordance with AS1940-2017 (the guideline was recently updated) which considers potential for fire (hence the controls that are in place). This emission is dealt with through other regulatory controls.</p> <p>In addition, fire/smoke risk was not identified as a potential risk at the Midvale transfer depot (which is the same type of facility as the Newman facility), therefore disagree that it is a relevant consideration. Furthermore, for a separate Cleanaway facility (L8129-2006-2) which stores a range of liquid wastes (including hydrocarbons), fire/smoke was not identified as a risk requiring detailed consideration.</p>	
Section 9.7.2	<p>If this factor is to be considered in detail, request DWER re-word as recommended.</p> <p>As outlined above, Wren Oil are very concerned about how this is currently written as it implies that they may intentionally burn or process waste oil, which was never proposed at this facility.</p>	As above
Section 9.7.3	Minor typographical changes requested	Changes adopted
Section 9.7.4	Minor typographical changes requested	Changes adopted
Table 18	Dangerous Goods Site Licence is not required for this facility. Compliance with this legislation is still required, including construction and operation in accordance with AS1940. Minor typographical changes recommended.	Changes adopted
Section 9.7.6	<p>Request DWER review wording given no burning of waste oil was ever proposed to occur at this facility.</p> <p>As per previous comment, the current wording implies that Wren Oil had proposed or will intentionally burn waste oil at this facility. The only instances that burning of waste oil would occur is as a result of exceptionally abnormal (and likely malicious) event. It is not reasonable for specific management controls to be provided, apart from those reasonably expected as part of typical operations, which Wren Oil have undertaken, including securing the site appropriately.</p>	Wordings from DWER's standard licence template and condition library. Based upon DWER'S GUIDANCE STATEMENTS as outlined under section 5.3 of this document. Also the delegated Officer is aware that any fire/ smoke generated at the premises would be as a result of accidental ignition or arson since the Newman site is an unmanned facility.
Section 9.7.8: Likelihood of Risk Event	Request DWER reconsider likelihood of risk occurring. This would only occur in exceptional circumstances and is therefore 'rare', as defined by the DWER risk criteria table.	The Delegated Officer is aware that any fire/ smoke generated at the premises would be as a result of accidental ignition or arson since the Newman site is an unmanned facility. However since the site will remain locked the risk event will probably not occur in most circumstances as documented.
Section 9.8: Table 19- Summary of acceptability and treatment of Risk Events	Review Table 19 based on comments provided.	The Delegated Officer has determined that as per DWER's guidance statements, the emission risks identified in Table 19 will remain.

Section 10.1.2	It will not be possible for the proponent to undertake monthly monitoring of the total recoverable hydrocarbon (TRH) levels, based on both the likely intermittent use of the facility and the volume of wash water likely to be generated (which means the oil/ water separator is only likely to be used 2 to 4 times per year, when enough wash water is generated). Therefore, this condition in its current form is not able to be complied with.	Agreed
Section 10.1.13: Monthly monitoring of TRH levels	<p>Wren Oil is concerned they will not be able to comply with this requirement, or that the monitoring is warranted given the low level of risk associated with this premises.</p> <p>Request DWER reconsider requirement for monitoring on the basis that:</p> <ul style="list-style-type: none"> - The volume of wash water likely to be generated, the oil/ water separator is only likely to operate 2 to 4 times per year. Therefore, it will not be possible for Wren Oil to monitor output from the oil/ water separator on a monthly basis. - It may not be possible to undertake any monitoring, as it is possible that the oil/ water separator will be engaged after personnel have left the facility (given it is an unmanned facility). - The likelihood of hydrocarbon's being present on the concrete hardstand in high concentrations is considered to be very low given no storage tanks or containment vessels are being washed at the facility, and potential for spills is minor (given the proponent control measures). - The oil/ water separator is a system approved by Water Corporation. No wash water will be discharged from the premises without first being passed through the oil/ water separator. <p>If a monitoring condition is to be applied, it is requested that the number of monitoring events be reduced to a single annual event to enable Wren Oil to comply with this condition, provided water is passing through the system and able to be monitored (it is possible that no water will pass through the oil/ water separator, or at least not regularly). This is based on the low level of risk posed by the facility, the low volume of water to be processed through the oil/ water separator and the intermittent usage of the premises (given it is unmanned) which means monthly monitoring will not be possible.</p>	Agreed
Appendix 1:	Include Wren Oil response to request for further information, provided on the 12 September 2018.	Included

Appendix 3: Process Flow Diagram



Attachment 1: Licence L9143/2018/1
