



Application for licence

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

Licence number	L9188/2018/1
Licence holder	Cleanaway Pty Ltd
ACN	000 164 938
DWER file number	DER2018/001659
Premises	Kalgoorlie Materials Recovery Facility (MRF) 5 Carnegie Street BROADWOOD WA 6430 Lot 500 on Plan 22525
Date of report	12 September 2019

1. Definitions

Key terms relevant to this decision report and their associated definitions are listed in Table 1.

Table 1: Definitions

Term	Definition
Applicant	Cleanaway Pty Ltd
Category / categories	Categories of prescribed premises as set out in Schedule 1 of the EP Regulations.
Decision Report	refers to this document.
Delegated Officer	An officer delegated under section 20 of the EP Act.
Department	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.
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.
Emission	has the same meaning given to that term under the EP Act.
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
Licence Holder	Cleanaway Pty Ltd
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	This 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
Risk Event	As described in <i>Guidance Statement: Risk Assessment</i>

2. Overview of premises

2.1 Classification of Premises

Table 2: Classification of premises and assessed design capacity

Category	Description	Assessed production or design capacity or throughput
Category 62	Solid waste depot: premises on which waste is stored, or sorted, pending final disposal or re-use	500 tonnes or more per year

2.2 Description of proposed activity

Cleanaway Pty Ltd (The Applicant) proposes to operate a Materials Recovery Facility located within the West Kalgoorlie industrial area which receives recyclable materials from municipal verge collections for the City of Kalgoorlie-Boulder, commercial and industrial clients. Most incoming waste is transported by the Applicant's fleet or clients vehicles, with a small number of public drop-offs. Recyclable materials accepted at the Premises include paper, cardboard, mixed plastics, glass, aluminium and steel. Waste types other than those accepted at the Premises are considered contaminated are removed from the site and disposed of at Yarri Road landfill.

The recyclable material is brought in via truck and tipped directly onto a conveyor which transfers the material through a series of conveyors with all material other than paper and cardboard ending in a compactor unit. This process sorts the material, sending paper and cardboard through a baler system to produce bales weighing approximately 500kg each. The bales are stored onsite at the rear of the facility until the bales and full compactor units are transported by truck to Cleanaway's South Guildford MRF for final sorting and separation. The entire process occurs on a concrete hardstand, inside an enclosed steel-fabricated shed approximately 15x38m.

The Premises will receive up to 5,000 tonnes of recyclable materials per annual period with an estimated operating period of 10 years.

Fire-fighting equipment in place at the Premises includes 13 extinguishers and a hose within the MRF, 2 extinguishers in the office, 1 extinguisher per heavy vehicle and the forklift, and 3 extinguishers at the cardboard facility. In addition to the fire-fighting equipment kept onsite, site personnel must adhere to the Licence Holder's *Kalgoorlie Solids Site Emergency Management Plan 2019* which includes training and procedures to adopt in the case of a fire or explosion.

The infrastructure and equipment are outlined in Table 3 below and the site layout is shown in Figure 1.

Table 3: Infrastructure or Equipment

Infrastructure or Equipment	Site Layout Plan reference (Figure 1)
Baler system	Front Shed
Compactor units	Front Shed
Conveyors	Main Conveyor for MRF
MRF	Front Shed

Infrastructure or Equipment	Site Layout Plan reference (Figure 1)
Other activities	
Septic System	Septic System
Wash Down Bay	Undercover wash bay
Admin building	Admin building
Staff Car Park	Staff car park

Figure 1: Aerial overview of the Premises and related infrastructure and Layout Plan



3. Legislative context and other approvals

Approvals relevant to the premises are outlined in Table 4 below.

Table 4: Approvals

Legislation	Number	Approval
City of Kalgoorlie-Boulder	Approval number: 173	Approval from the City of Kalgoorlie-Boulder to construct and use the septic system / wash down

Legislation	Number	Approval
		bay (Appendix 5 and 6)
Planning and Development Act 1928 (as amended)	OUT02/643738	Local government planning approval.

4. Emission sources, receptors and pathways

4.1 Emissions

The potential for emissions to impact on sensitive receptors has been assessed in accordance with the Department's Risk Framework. The key emissions which have been considered in this report are Fugitive odour, windblown waste, and noise from the operation of the MRF activities including contaminated recyclable waste, equipment use and vehicle movement.

The Applicant has proposed measures to assist in controlling these emissions, where necessary. The control measures are outlined in Section 4.4 below and have been considered when undertaking the risk assessment detailed in Section 5.

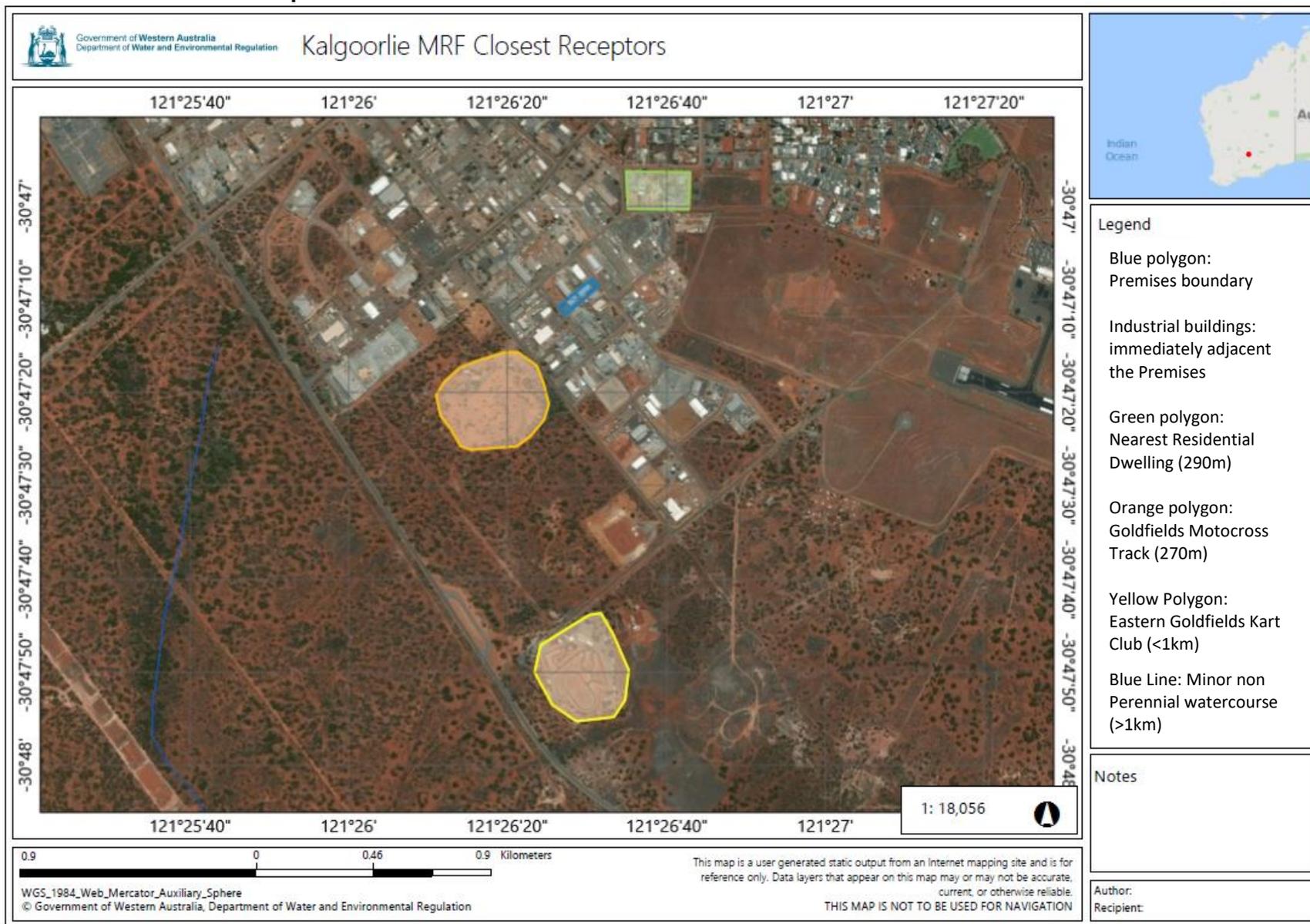
4.2 Receptors

Risk is assessed as a combination of emission sources, the proximity and sensitivity of receptors to those emission sources and any pathways that can allow the emission to reach and potentially harm the receptor. Figure 2 and Table 5 below provides a summary of human and environmental receptors in proximity to the premises which have a potential to be impacted from site activities, and the risk assessment in Section 5 considers these receptors in the context of emissions and potential pathways.

Table 5: Human and Environmental Receptors

Human receptors	Distance from activity or prescribed premises
Commercial/Industrial buildings/ Workshops	Immediately adjacent on all sides of the Premises
Goldfields Motocross Track	270m SW of Premises
Nearest residential building	290m NNE of Premises
Eastern Goldfields Kart Club	<1km S of Premises
Environmental receptors	Distance from activity / prescribed premises
Proclaimed groundwater area under the <i>Rights in Water and Irrigation Act 1914</i> : - Goldfields Groundwater Area	Premises mapped within this area
Minor unnamed watercourse	1.13km W of Premises
Priority 3 TEC buffer zone	<3.6km NE of Premises
Multiple Threatened Fauna sightings scattered around the region	All >3.9km of Premises
Underlying groundwater	Groundwater in the area is believed to be 15-20m below ground level.

Figure 2: Distance to sensitive receptors



4.3 Pathways

As odour, dust, noise, and windblown waste are considered potential emissions, the prevailing wind direction has been considered. Using information available on the Bureau of Meteorology’s website, the closest available weather station for climate data is Kalgoorlie-Boulder Airport (No. 012038). Based on the climate data for the Kalgoorlie-Boulder Airport station (22 Mar 1939 to 10 Aug 2018), the prevailing wind direction is north-easterly in the morning and north-westerly or south-easterly in the afternoon. Wind roses for average morning and afternoon winds at Kalgoorlie-boulder airport are presented in Appendix 3 and 4.

Kalgoorlie is within the Goldfields Groundwater Area as proclaimed under the RIWI act. Depth to groundwater in the region is estimated to be greater than 15-20m below ground level and water quality is hypersaline (~35,000mg/L).

These pathways have been considered in the risk assessment table in Section 5.

4.4 Applicant controls

Table 6 below represents the Applicant’s proposed management controls as part of the application:

Table 6: Applicants proposed management controls

Emission (as identified above)	Source	Proposed controls
Fugitive Odour	Contaminated recycling waste	Contaminated recycling waste including putrescible waste is taken off site on a daily basis and disposed of at Yarri Road Landfill to limit the amount of odour emitted from the Premises.
Windblown waste	General operations	Operations are carried out undercover and indoors. Regular housekeeping minimises windblown debris.
Noise	Plant and Equipment operation Vehicle movements	The Premises is located within the West Kalgoorlie industrial area. Plant and equipment is maintained to manufacturer’s specifications to minimise noise emissions.
Dust	General operations	Operations are carried out under cover and inside on a hardstand area.
Weeds and pests	General operations	Weed and pest control program is conducted every 3 months.

5. Risk assessment

Risk ratings have been assessed for each key emission source and take into account potential source-pathway-receptor linkages. The mitigation measures / controls proposed by the Applicant have been considered in determining the risk rating.

5.1 Risk assessment – operation

Table 7: Risk Assessment – Operation of Facility

Risk Event					Consequence rating**	Likelihood rating**	Risk**	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities*	Potential emissions	Potential receptors,	Potential pathway & impact	Applicant controls					
Waste acceptance, handling, storage and transfer	Dust: vehicle movements and general operation	Commercial/ industrial premises adjacent to Premises Residential premises 290m north of the Premises Motocross track and Kart Club (recreational places) 270m south west of premises and >1km south of premises respectively.	Air; Health and amenity impacts	All activities will be conducted inside the sheds Haul road is sealed so dust pickup from truck movements on site is not expected.	Slight	Rare	Low	Activities from the MRF is expected to only emit minimal amounts of dust. The Applicant's proposed dust mitigation controls are likely to be sufficient at mitigating dust emissions.	General Emissions: Condition 1
	Waste: windblown waste	Commercial/ industrial premises adjacent to Premises Residential premises 290m north of the Premises Motocross track and Kart Club (recreational places) 270m south west of premises and >1km south of premises respectively.	Air: Amenity impacts Adverse impacts to the health and survival of fauna	Regular housekeeping is undertaken to minimise windblown debris. Waste management operations occur inside enclosed sheds.	Minor	Possible	Medium	Movement and transfer of loosely packed household recyclable waste due to machinery movements and processes could at some point escape the containment of the enclosed shed.	Infrastructure and Equipment Condition 10 Waste Processing Condition 8
	Odour: waste management activities	Commercial/ industrial premises adjacent to Premises Residential premises 290m north of the Premises Motocross track and Kart Club (recreational places) 270m south west of premises and >1km south of premises respectively.	Air: Amenity impacts	Waste only handled and stored within enclosed sheds. Contaminated recycling including putrescible waste is taken off site on a daily basis and disposed of at Yarri Road landfill.	Minor	Possible	Medium	Due to the nature of materials (recyclables) being accepted, on-site odour emissions should not occur in most circumstances and may only occur when non-conforming wastes are received in the recycling waste stream. Additionally the handling and storage of waste materials will only occur within the enclosed sheds.	Infrastructure and Equipment Condition 10 Waste Acceptance Conditions 5 and 6 Waste Processing Conditions 7 and 8 Monitoring Input and Output Condition 9
	Leachate/ Contaminated storm water	Minor un-named water course 1.13km west of the Premises (non-perennial). Residential premises 290m north of the Premises	Storm water and surface water runoff	Waste only handled and stored in the enclosed sheds. Non-conforming / contaminated recycling waste is removed off site on a daily basis and disposed of at Yarri Road Landfill. The Premises is located on a hardstand.	Slight	Rare	Low	Operations are undertaken on a hardstand in an enclosed shed therefore the potential for storm water to come in contact with waste is highly unlikely. Additionally the nature of recyclable materials received should result in minimal leachate produced directly from the waste.	Infrastructure and Equipment Condition 10
	Noise: vehicle movement and waste management activities	Commercial/ industrial premises adjacent to Premises Residential premises 290m north of the Premises Motocross track and Kart Club (recreational places) 270m south west of premises and >1km south of premises respectively.	Air: Health and amenity impacts	MRF operations occur within an enclosed shed. Plant and equipment is maintained to manufacturer's specifications.	Minor	Possible	Medium	Machinery and plant involved in the MRF operations are located within the enclosed sheds. Localised noise may occur from truck movements in and out of the Premises. The Premises is located in the West Kalgoorlie industrial area surrounded by commercial and industrial premises including boilermakers.	Infrastructure and Equipment Condition 10 Noise emissions from on-site-operations will be subject to the provisions specified in the Noise Regulations.

Risk Event					Consequence rating**	Likelihood rating**	Risk**	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities*	Potential emissions	Potential receptors,	Potential pathway & impact	Applicant controls					
	Smoke: from fire at the premises	Commercial/ industrial premises adjacent to Premises Residential premises 290m north of the Premises Motocross track and Kart Club (recreational places) 270m south west of premises and >1km south of premises respectively.	Air: Health and amenity impacts	Fire-fighting equipment onsite: 13 extinguishers and a hose within the MRF, 2 extinguishers in the office, 1 extinguisher per heavy vehicle and the forklift, and 3 extinguishers at the cardboard facility. Staff must adhere to the Licence Holder's <i>Kalgoorlie Solids Site Emergency Management Plan 2019</i> which includes training and procedures to follow in the case of a fire or explosion.	Moderate	Possible	Medium	DFES has been contacted for comment on the fire management protocols and infrastructure – no response received. The Delegated Officer considers the Licence Holders fire management controls are adequate in mitigating and managing the risk of impacts from smoke in the event of a fire at the Premises.	Fire controls Condition 9

*Consequence ratings, likelihood ratings and risk descriptions are detailed in the Department's Guidance Statement: Risk Assessments (February 2017)

6. Consultation

Method	Comments received	DWER response
Application advertised on DWER website	No comments received	N/A
Application referred to the City of Kalgoorlie-Boulder (CKB) for comment 22 July 2019	No response received as of 12/9/2019 The Delegated Officer contacted the CKB planning department who confirmed that the proposal is consistent with current planning approvals for the site.	N/A
Application referred to DFES for comment 22 July 2019	No response received as of 12/9/2019	The Delegated Officer considers the fire management protocols as adequate and has conditioned the use of <i>Kalgoorlie Solids Site Emergency Management Plan 2019</i> into the licence.
Applicant notified of Draft – 21 day referral period	Comments received 11/09/2019: <ul style="list-style-type: none"> Confirmed Lot number 500; Table 3: Up to 300 tonnes of minor quantities of other putrescible wastes expected; Table 4: Cardboard will be tipped onto the shed floor and loaded onto the baler conveyor using a forklift. Putrescible waste bins will not be “lidded” as they are required to sit under chutes. Fire Controls: The fire alarm at the site is a manually operated system Table 5: Units at the site are measured in tonnes. Table 6: Front shed is approximately 855m³ and rear shed is approximately 660m³ Update Site Layout 	Requested changes approved by Delegated Officer and made to Licence.

7. 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 2).

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

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 approval under the EP Act.

Steve Checker
**MANAGER WASTE INDUSTRIES
REGULATORY SERVICES**

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

Appendix 1: Premises map

Premises Map: the Premises boundary is defined by the blue line.



Appendix 2: Key documents

Document title	Availability
Licence (L9188/2018/1) application form and supporting documentation (December, 2018)	DWER records (A1746228)
DER, July 2015. <i>Guidance Statement: Regulatory principles</i> . Department of Environment Regulation, Perth.	accessed at www.dwer.wa.gov.au
DER, October 2015. <i>Guidance Statement: Setting conditions</i> . Department of Environment Regulation, Perth.	
DER, August 2016. <i>Guidance Statement: Licence duration</i> . Department of Environment Regulation, Perth.	
DER, February 2017 <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.	
DWER, June 2019. <i>Guideline: Decision Making</i> . Department of Water and Environmental Regulation, Perth.	
DWER, June 2019. <i>Guideline: Industry Regulation Guide to Licensing</i> . Department of Water and Environmental Regulation, Perth..	

Appendix 3: 9am average wind rose – Kalgoorlie-Boulder Airport

Rose of Wind direction versus Wind speed in km/h (22 Mar 1939 to 10 Aug 2018)

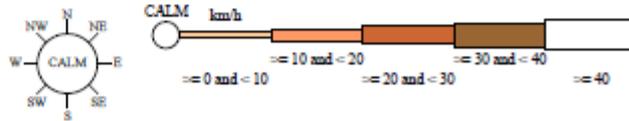
Custom times selected, refer to attached note for details

KALGOORLIE-BOULDER AIRPORT

Site No: 012038 • Opened Feb 1939 • Still Open • Latitude: -30.7847° • Longitude: 121.4533° • Elevation 365.m

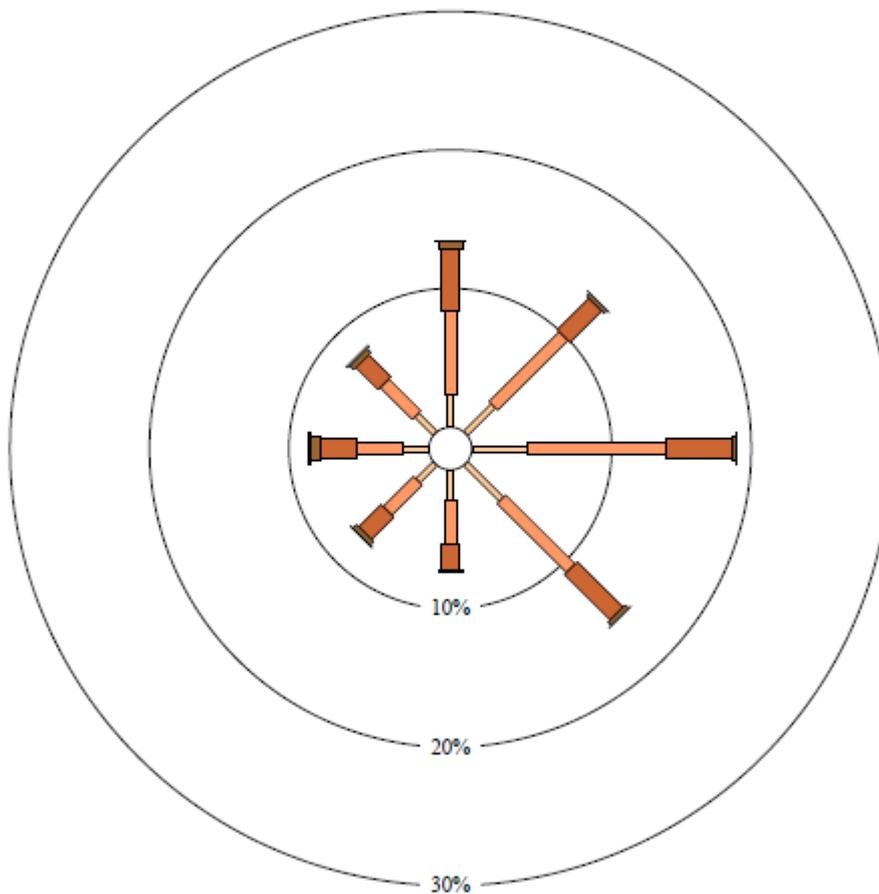
An asterisk (*) indicates that calm is less than 0.5%.

Other important info about this analysis is available in the accompanying notes.



9 am
28912 Total Observations

Calm 8%



Appendix 4: 3pm average wind rose – Kalgoorlie-Boulder Airport

Rose of Wind direction versus Wind speed in km/h (22 Mar 1939 to 10 Aug 2018)

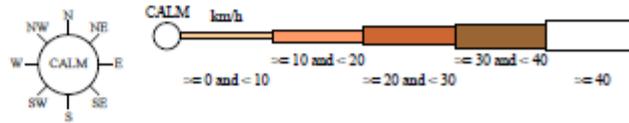
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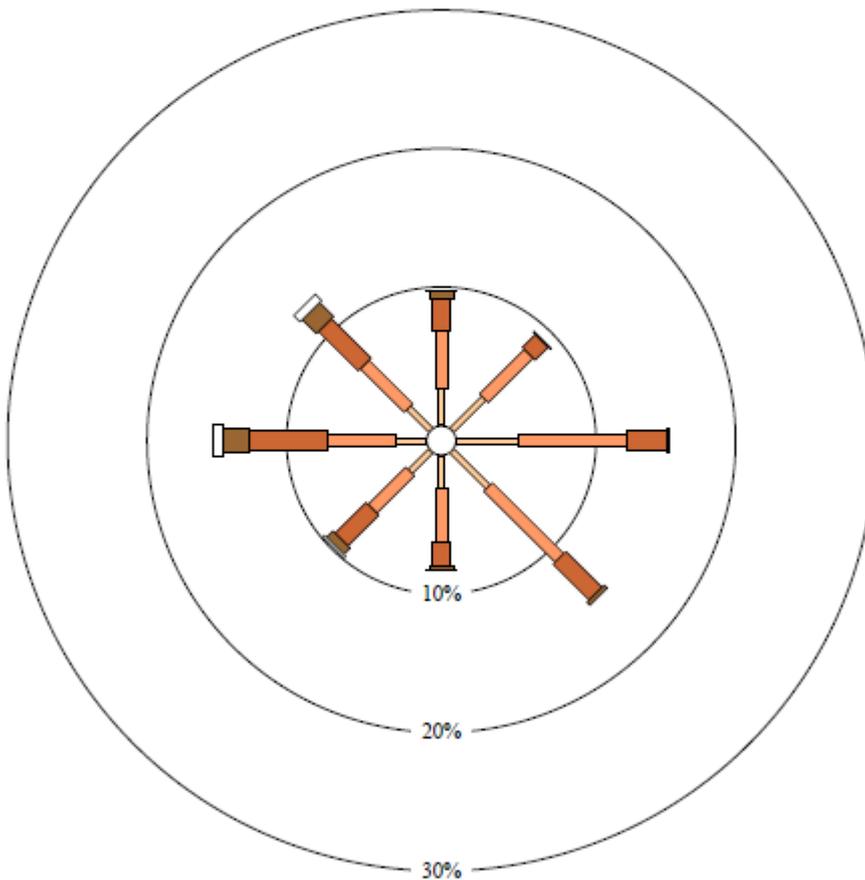
An asterisk (*) indicates that calm is less than 0.5%.

Other important info about this analysis is available in the accompanying notes.



3 pm
28853 Total Observations

Calm 5%



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