



Licence Number	L8966/2016/1
Licence Holder	Appala Holdings Pty Ltd
ACN	009 360 730
File Number:	DER2016/000629
Premises	Postans Glass Processing and Waste Sorting Facility 119 McLaughlan Road POSTANS WA 6167 Legal description – Part of Lot 2129 on Plan 173137 Certificate of Title Volume LR3121 Folio 701
Date of Report	30/01/2020

1. Definitions and interpretation

Definitions

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

Table 1: Definitions

Term	Definition
ACN	Australian Company Number
AHD	Australian Height Datum
Amendment Report	refers to this document
Applicant	Appala Holdings Pty Ltd
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 33 Cloisters Square PERTH WA 6850 info@dwer.wa.gov.au
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.
DWER	Department of Water and Environmental Regulation
EP Act	<i>Environmental Protection Act 1986</i> (WA)
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA)
Existing Licence	The Licence issued under Part V, Division 3 of the EP Act and in force prior to the commencement of and during this Review
Licence Holder	Appala Holdings Pty Ltd
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.

Term	Definition
Premises	refers to the premises to which this Amendment Report applies, as specified at the front of this Amendment Report.
Revised Licence	the amended Licence issued under Part V, Division 3 of the EP Act, with changes that correspond to the assessment outlined in this Amendment Report.
TDS	Total dissolved solids

2. Amendment Description

The following guidance statements have informed the assessment and decision outlined in this Amendment Report.

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guideline: Decision Making (June 2019)*
- *Guidance Statement: Risk Assessment (February 2017)*

2.1. Purpose and scope of assessment

Appala Holdings Pty Ltd (the Licence Holder) submitted a licence amendment application to the Department of Water and Environmental Regulation (DWER) on 28 October 2019. The application was to extend the duration of their Existing Licence (L8966/2016/1) and increase the prescribed premises boundary over an adjacent area and waste sorting shed formerly used by a neighbouring prescribed premises.

At the time, DWER notified the Licence Holder that it was unable to process the proposed change in the prescribed premises boundary, as the area currently fell within the boundary of an existing licenced premises (Licence L8962/2016/1 held by Farfield Holdings Pty Ltd). Licence L8962/2016/1 first required an amendment to remove the area before it could be included in the Appala Holdings' Licence. DWER committed to include the area in the Licence Holder's instrument through a department initiated amendment after this occurred.

On the 11 November 2019 DWER received an application from Farfield Holdings Pty Ltd to renew Licence L8962/2016/1 which included the proposed change to the premises boundary of the site. The renewal application for the Capital site has now been processed.

The scope of this assessment will be limited to the change in premises boundary and inclusion of the waste sorting shed only. The three sided concrete and colourbond waste sorting shed contains a;

- concrete hardstand;
- conveyor belt system;
- mechanical screen;
- manual picking station;
- air blower;
- ferrous metal magnet; and
- material storage area.

The Licence Holder intends to conduct sorting activities within the waste sorting shed that are currently undertaken outside, within the existing boundary of the Licence Holder's Premises. The Licence Holder also intends to operate an additional front end loader at the Premises.

3. Other approvals

The Licence Holder has provided the following information relating to other approvals as outlined in Table 2.

Table 2: Relevant approvals

Legislation	Number	Approval
<i>Planning and Development Act 2005</i>	26-50104-10	Development Approval

4. Licensing history

Table 3 provides the amendment history for L8966/2016/1.

Table 3: Licence history

Instrument	Issued	Amendment
W5970/2016/1	04/08/2017	Issued Works Approval
L8966/2016/1	11/12/2017	Issued Licence
L8966/2016/1	25/02/2019	Amendment Notice 1 – amendment to extend the Licence duration
L8966/2016/1	09/12/2019	Extension to Licence duration
L8966/2016/1	30/01/2020	This amendment.

5. Noise verification study

Condition 2.3.2 of the Existing Licence requires the Licence Holder to conduct a noise verification study during full operation of infrastructure at the Premises. The study was to confirm noise levels modelled from manufacturer supplied sound power levels in a cumulative noise assessment undertaken in March 2017. The cumulative assessment was submitted with the works approval and licence application for the Premises. The Licence Holder was required to conduct this verification study within six months of licence issue. Due to ramping up of production and commissioning issues, the Licence Holder was not undertaking full operations at the Premises until late 2018. Subsequently the noise verification assessment was not conducted until November 2018 and submitted to the department in January 2019.

The noise verification study built on a cumulative noise assessment previously undertaken at the Premises. The previous assessment considered the measured noise emissions from the adjacent Capital Recycling premises and the modelled cumulative effects of the Licence Holder's Premises and an associated green waste processing facility located on the eastern side of the Capital Recycling premises. The three premises have previously advised DWER in writing that they wish to be considered as one premises for the purposes of the Noise Regulations and do not wish to be afforded the protection offered with respect to the neighbouring premises.

Manufacturer specified sound power levels used in the previous cumulative assessment were confirmed through measurements at the Premises. The combined sound power of the glass

crusher and loader, considered the most significant noise generator, were measured at 114 dB(A), 1db lower than the manufacturer supplied levels used in the previous model. Using the measured sound power level for the glass crusher and loader, the predicted noise levels at various sensitive receptors shown in Table 4 below were re-modelled.

Table 4: Re-modelled and measured noise levels at sensitive receptors located in proximity of the Premises. (Source: *Environmental Noise Assessment Verification- Perth Bin Hire*)

Description	Predicted Noise Level L _{A10} dB(A)			
	Bush Forever **	Orelia R1-3 **	Orelia R4	Clementi Rd R5
Weekday Assigned Level	60	51	45	45
Perth Bin Hire operations, worst case winds – original assessment (March 2017)	52 (57)	28 – 35	32	31
Perth Bin Hire operations, worst case winds – predicted from 2018 measured sound power levels	46 (51)	34 - 38	33	30
Measured	51 (56) #	-	-	-

Note: ** Locations R1, R2, R3 are the residences on the edge of the Orelia residential area and nearest Thomas Road. These residences are within 100m of the road reserve and have an influencing factor of 6. Residences beyond 100m from the road reserve have an influencing factor of 2, but are also partially shielded by the first row of residences, as well as being slightly further from the proposed recycling facility.

(xx) denotes the noise level when adjusted by +5 dB(A) for tonal characteristic.

- measured level includes some background noise

Actual noise levels were measured at the closest receptor, Bush Forever site 269, in order to confirm the accuracy of the model. Measured noise levels were found to be within 1 db of the level predicted in the March 2017 assessment and 5 db higher than the levels predicted using the measured sound power. The measured and predicted noise levels were all in compliance with the daytime assigned levels of the four sensitive receptors, inclusive of background noise from traffic and a 5 db adjustment for tonality.

The Delegated Officer considers that:

1. Measured and re-modelled noise levels in the November 2018 verification study are below modelled levels provided in the licence application cumulative noise assessment (March 2017).
2. The study verifies that noise emissions from the Premises comply with the *Environmental Protection (Noise) Regulations 1997* and do not substantially differ from the levels modelled in the cumulative assessment.
3. The provided noise verification study satisfies Existing Licence condition 2.3.2.

6. Environmental siting

The Premises is located on the Swan Coastal Plain in the City of Kwinana, approximately 30 km south of the Perth CBD and 5 km inland from Cockburn Sound. The Premises slopes gently to the east and sits between 15 and 20 m AHD. Surrounding land uses comprise of:

- Public purpose, including sewage treatment and regional park directly north, east and south;
- The Alcoa tailings and evaporation dams to the west and north west;
- Residential properties to the south; and
- A strip of general and heavy industry between the Premises and Cockburn Sound.

6.1. Potential receptors

Table 5 below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 5: Receptors and distance from activity boundary

Human receptors	Description of receptor	Distance from prescribed premises
Sensitive receptors	Orelia residential area	810 m south of the Premises boundary.
Industrial receptors ¹	Adjacent industrial premises	175 m north and 120 m west of the Premises boundary.
Environmental receptors	Description of receptor	Distance from prescribed premises
Important Wetlands	Spectacles Swamp (North): conservation category basin sumpland.	770 m east and potentially hydraulically downgradient of the Premises during periods of high groundwater level.
Groundwater	Regional groundwater flow is described generally as west to north-westerly. Groundwater salinity is in the marginal range of 500-1000 mg/L TDS. The area is serviced by the reticulated water network, with beneficial use of groundwater being for non-potable purposes.	Depth to groundwater across the premises ranges from approximately 9 - 14.5 mbgl, with shallower depths experienced on the eastern boundary of the Premises.
Regional Park	Beeliam Regional Park	300 m east of the Premises boundary.
Bush Forever site	Bush Forever Site 269, associated with the Spectacles wetlands.	
Threatened and Priority Fauna	Potential presence of <i>Isoodon fusciventer</i> (Priority 4), <i>Oxyura australis</i> (Priority 4), <i>Calyptorhynchus latirostris</i> (Endangered), <i>Lerista lineata</i> (Priority 3) and various migratory bird species determined through survey and observational records within Bush Forever site 269 and associated with the Spectacles wetland.	
Threatened and Priority Ecological Communities	Banksia dominated woodland of the Swan Coastal Plain IBRA Region (BC Act Priority 3) / Banksia Woodlands of the Swan Coastal Plain (EPBC Act Endangered)	Remnant vegetation immediately surrounding the Premises.

Note 1: The industrial sites immediately adjacent to the north and east of the Premises are not considered receptors in the context of this assessment due to their operational association with the Licence Holder's Premises.



Figure 1: Overview and distance to surrounding receptors. The Premises boundary is shown in pink.

6.2. Potential pathways

The air/windborne pathway has been considered a potential pathway during the assessment. The meteorological conditions at the Premises have been presented in Table 6 below and this information has been considered in the risk assessment table in Section 7 **Error! Reference source not found.**

Table 6: Potential pathways

Environmental aspects	Description
Prevailing wind direction and strength	The Medina Research Centre 9194 weather station is located approximately 2.5 km southwest of the Premises and is considered an accurate representation of average climatic conditions for the area. Measurements from the station indicate that the prevailing wind direction at the Premises would likely be easterly in the morning and southwesterly in the afternoon. The predominant wind speed is between 10-19 km/hr during the morning and afternoon.

7. Risk assessment

Table 7 below describe the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. The table identifies whether the emissions present a material risk to public health or the environment, requiring regulatory controls.

Table 7: Risk assessment for proposed amendments during operation.

Risk Event				Consequence rating ¹	Likelihood rating ¹	Risk ¹	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
Manual and mechanical sorting of solid waste within a waste sorting shed	Dust	Air/windborne pathway causing health and amenity impacts to human receptors: <ul style="list-style-type: none"> Residential area located approximately 810 m to the south. Adjacent industrial premises. 	Existing Licence conditions	Minor – low level impact to amenity	Unlikely	Medium	The Delegated Officer considers it reasonable to assume the relocation of sorting activities to an enclosed shed would result in either no change or a reduced potential for dust or asbestos fibre emissions to occur from waste sorting activities. Regulatory controls in the Existing Licence are considered sufficient, however some will be modified to give effect to this amendment.	Condition 1.2.3: <i>Infrastructure requirements</i>
	Asbestos fibres	Air/windborne pathway causing impacts to transient receptors at Bush Forever Site 269.	Existing Licence conditions	Severe – ongoing medical treatment or loss of life	Rare	High		
	Noise	Air/windborne pathway causing amenity impacts to human receptors: <ul style="list-style-type: none"> Residential area located approximately 810m to the south. Adjacent industrial premises. Air/windborne pathway causing amenity impacts to transient receptors at Bush Forever Site 269.	Existing Licence conditions	Minor – low level impact to amenity	Unlikely	Medium	The Licence Holder has demonstrated through a noise verification assessment that noise emissions from the operating Premises are compliant with the requirements of the Noise Regulations. The Delegated Officer considers it reasonable to assume the relocation of sorting activities to an enclosed shed would result in either no change or a reduction in noise emissions from Premises. Regulatory controls in the Existing Licence are considered sufficient.	Condition 2.3.1: <i>Noise emissions</i>

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Department's Guidance Statement: Risk Assessments (February 2017)

8. Consultation

Table 8: Summary of consultation

Method	Comments received	DWER response
Applicant referred draft documents (24 January 2020)	The Licence Holder confirmed their registered business address and waived the remainder of the comment period.	N/A

9. Decision

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

9.1. Summary of amendments

Table 9 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 9: Licence amendments

Condition No.	Proposed amendments
1.2.3	The sorting shed and associated infrastructure have been included in Table 1.2.2.
2.3.1	Infrastructure associated with the sorting shed have been included in Table 2.3.1.
2.3.2	The condition has been removed as the noise verification study has been submitted.
3.1.1(a)	The condition has been removed as it contradicted sampling of ambient air for asbestos fibres which is undertaken by a method not specified in AS/NZS 3580.
3.3.1	Specification of a conversion factor of 1.3 has been removed, as the value is no longer contemporary. The value has been replaced with a statement that a relevant conversion factor must be used. A definition of conversion factor has been included in the Licence which specifies that the relevant conversion factor is to be sourced from Appendix B Table 2 of the Western Australian Government Gazette No. 97, 28 June 2019.
3.4.1	All references to a particular brand of dust monitoring equipment have been removed from Table 3.4.1. The specified method for PM ₁₀ monitoring has been changed to AS/NZS 3580 as the previous method was for a beta attenuation monitor. The sampling frequency has been changed to between September to May, targeting the drier seasons where dust emissions are more likely and conforming with dust monitoring undertaken by the other

	associated premises.
4.2.1	The web address listed for the AACR form has been updated.
Schedule 1	The premises map and site layout figures have been updated to reflect the amendment.

**A/MANAGER WASTE INDUSTRIES
REGULATORY SERVICES**

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

Appendix 1: Key documents

Document title	Availability
Licence amendment application and supporting documents (October 2019)	DWER records (A1835774)
Noise Verification Study (January 2019)	DWER records (A1861299)
Licence L8966/2016/1 – Postans Glass Processing and Waste Sorting Facility	accessed at www.dwer.wa.gov.au
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, November 2016. <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.	