



Licence Number	L8422/2010/2
Licence Holder	Edna May Operations Pty Ltd
ACN	136 365 001
File Number:	DER2017/000298
Premises	Edna May Gold Project Warrachuppin Road Westonia WA 6423 Legal description – M77/88, M77/110, M77/124, G77122 and L77/18
Date of Amendment	20/12/2018

Amendment

The Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) has amended the above Licence in accordance with section 59 of the *Environmental Protection Act 1986* (EP Act), as set out in this Amendment Notice. This Amendment Notice constitutes written notice of the amendment in accordance with section 59B(9) of the EP Act.

Tim Gentle

Manager Licensing – Resource Industries

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

Definitions and interpretation

Definitions

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

Table 1: Definitions

Term	Definition
KL	Kilolitres
Licence Holder	Edna May Operations Pty Ltd

Amendment Notice

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the Licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B(9) of the EP Act.

This notice is limited only to an amendment for Category 61. No changes to the aspects of the original licence relating to Categories 5, 6 or 64 have been requested by the Licence Holder.

The following guidance statements have informed the decision made on this amendment:

- *Guidance Statement: Decision Making* (February 2017)
- *Guidance Statement: Risk Assessment* (February 2017)

Amendment description

The Licence Holder has applied to amend licence L8422/2010/2 to allow for the construction of three new ponds to accept liquid waste, to increase the septage limit to 1255 KL/ annual period and to change the waste acceptance table (Table 1.2.2) to allow for waste to be accepted from the on-site septic tanks and tanks in the Town of Westonia.

The location of the three new liquid waste ponds will be directly adjacent to the existing ponds, which is located within the previous constructed evaporation ponds. In-situ permeability tests conducted within the area demarked for construction of the liquid waste ponds show the permeability around 10^{-10} m/sec, making the site suitable for the pond construction.

The proposed ponds design is shown in Figure 1 below. Once the three new ponds have been constructed, the current ponds will be decommissioned and filled in. The increase in throughput for category 61 1255 KL / annual period, reflects the capacity of the three proposed ponds combined with the evaporation levels and is shown in Figure 2 Below.

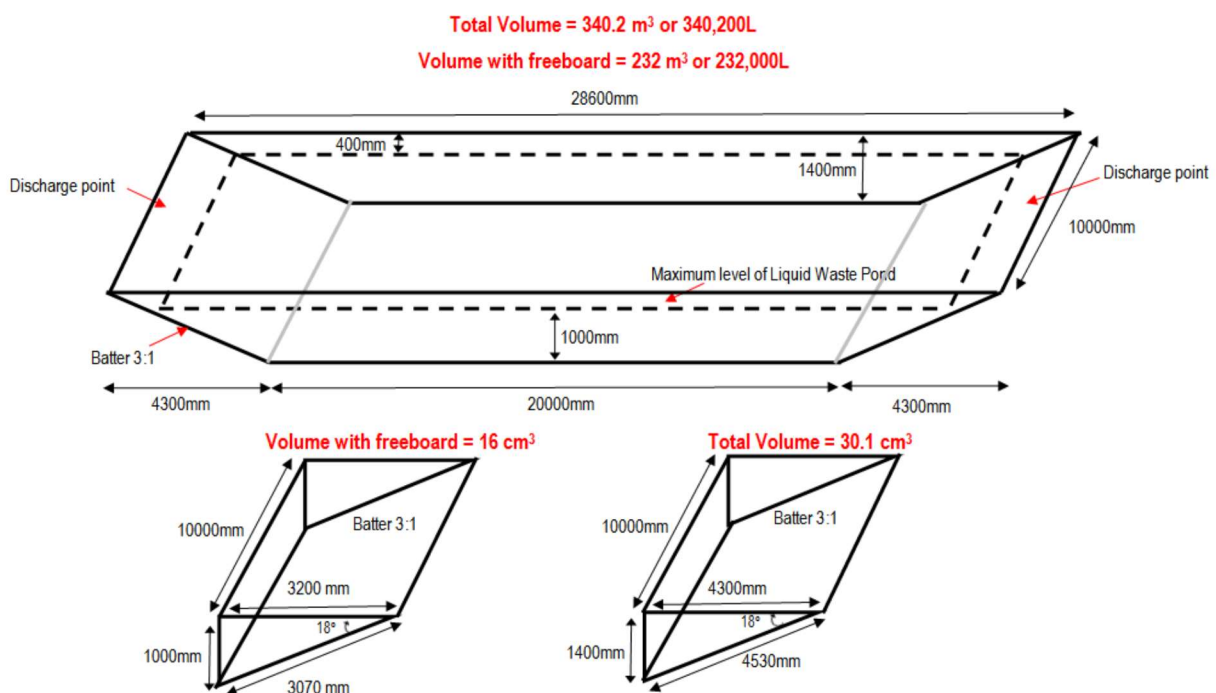


Figure 1: Proposed liquid waste pond design

Total evaporation loss from a Liquid Waste Pond over a year L	359,000
Total seepage loss from a Liquid Waste Pond over a year L	145,600
Total input of rainfall per year L	86,196
Total annual liquid loss in each pond (total annual capacity) L (Total evaporation + Total seepage - Total rainfall input)	418,404
Total annual capacity of all 3 ponds L	1,255,212
Total annual capacity of all 3 ponds KL	1255

Figure 2: Potential annual capacity of proposed liquid waste ponds

Table 2 below outlines the proposed changes to the Licence

Table 2: Proposed Licence changes

Category	Current throughput capacity	Proposed design capacity	Description of proposed amendment
61	200 KL	1255 KL	Increase of design capacity of the septage ponds to 1255 KL/annum

Amendment history

Table 3 provides the amendment history for L8422/2010/2.

Table 3: Licence amendments

Instrument	Issued	Amendment
W4546/2009/1	02/07/2009	Works Approval to construct category 5 and 6
W4546/2009/1	24/12/2009	Amendment to Works Approval to include additional conditions relating to the Operational Management Plan
L8422/2010/1	30/04/2010	Licence issued for category 5 and 6
W4718/2010/1	17/09/2010	Works Approval for category 64.
W4718/2010/1	22/10/2010	Amendment to Works Approval – change of address
L8422/2010/1	10/03/2011	Amendment to Licence to include category 64 (landfill) and associated conditions
L8422/2010/1	17/04/2011	Amendment to increase production or design capacity of mine dewatering from 1 900 000 to 3 200 000 tonnes per year
W4898/2011/1	17/04/2011	Works Approval for category 70 (Screening, etc. of material)
W5015/2011/1	03/11/2011	Works Approval for category 5 – changes to original proposal.
W5015/2011/1	02/02/2012	Amendment to Works Approval – update Licensee name
L8422/2010/2	02/05/2013	Licence re-issue
L8422/2010/2	10/03/2016	Amendment relating to liquid waste acceptance and format conversion.
L8422/2010/2	20/12/2018	Changes relating to acceptance to septage water.

Risk assessment

Tables 4 and 5 below describe the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. Both tables identify whether the emissions present a material risk to public health or the environment, requiring regulatory controls. Figure 3 below shows the site layout of the current and proposed ponds.



Figure 3: Evaporation ponds at Edna May Minesite

Table 4: Risk assessment for proposed amendments during construction

Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning	
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts					
Cat 61 Liquid waste facility	Construction of ponds infrastructure	Dust: associated with construction activities	Residence 700 metres west of the Premises	Air	Health and amenity impacts	Slight	Unlikely	Low	The Licence Holder has developed an 'Air Management Plan' which included fugitive dust monitoring via a <i>Dustrak II Aerosol Monitor 8530</i> and dust control measures onsite. The Delegated Officer considers these measures and Section 49 of the <i>Environmental Protection Act 1986</i> are sufficient to regulate dust emissions during operation.
		Noise: associated with construction activities							Noise emissions from the construction of the new ponds is not expected to be of concern. Construction of the ponds will take less than a week and noise emissions will be adequately managed under provisions of the <i>Environmental Protection (Noise) Regulations 1997</i> .

Table 5: Risk assessment for proposed amendments during operation

Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning	
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts					
Cat 61 Liquid waste facility	Operation of septage ponds	Odour: associated with effluent treatment and disposal	Residence 700 metres west of the Premises	Air	Health and amenity impacts	Slight	Unlikely	Low	The separation distance between the septage ponds and the nearest receptor (+700 metres) means the chance of odour is minimal. There has been no odour complaints in the past three years about the existing ponds, which are in the same location as the proposed ponds.
		Discharge: associated with potential leakage and overtopping of ponds	Surface and groundwater resources	Land	Eutrophication of groundwater resources	Minor	Rare	Low	In-situ tests of the pond area substrata shows a permeability of 10 ⁻¹⁰ m/sec. Weekly inspections of the ponds will be conducted to ensure a minimum 300mm freeboard is maintained and there is no spillage or erosion. The Delegated Officer considers any discharges will be adequately managed by the company's Environmental Department under the general provisions of the <i>Environmental Protection Regulations 1987</i> .

Decision

Licence Holder controls for the construction of the works are conditioned on the licence to ensure that the proposed liquid waste ponds are constructed as outlined in the Amendment Application form. Table 1.2.2 has been updated to reflect the new Quantity Limit of Septage waste allowed by the facility. Table 2.2.1 has been updated to allow for the facility to receive septage waste from on-site septic tanks and septic tanks from the Shire of Westonia.

Licence Holder's comments

The Licence Holder was provided with the draft Amendment Notice on 19/9/2018. Comments received from the Licence Holder have been considered by the Officer Delegated as shown in Appendix 2.

Amendment

- Table 1.2.2 of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below:

Table 1.2.2: Waste acceptance			
Waste	Quantity Limit	Disposal Reference Point	Specification ¹
Clean fill Inert Waste Type 1 Inert Waste Type 2 Putrescible Waste (including green waste) Special Waste Type 1 (Asbestos Waste) Special Waste Type 2 (Biomedical Waste) Scrap Metal Other recyclables	Combined total of up to 5,000 tonnes per annual period	E2 (Landfill and bioremediation facility)	None specified
Septage wastes (Sewage) – domestic wastes from apparatus for the treatment of sewage	200,000L <u>1255KL</u> per annual period	E3 (Liquid waste ponds)	
Waste from grease traps	15,000L per annual period		

- Table 2.2.1 of the Licence is amended by the insertion of the red text shown in underline below:

Table 2.2.1: Emission points to land		
Emission point reference	Description	Source, including any abatement
E1	Tailings storage facility	Process tailings
E2	Landfill and bioremediation facility	General mining operations
E3	Liquid waste ponds	Septage waste from the Licensee's village Waste Water Treatment Plant and Grease waste from the Licensee's village kitchen grease trap <u>and site septic tanks.</u> <u>Town of Westonia septic tanks.</u>
E4	Evaporation ponds	Mine dewater

Appendix 1: Key documents

	Document title	In text ref	Availability
1	Licence L8422/2010/2– Edna May Operations	L8422/2010/2	accessed at www.dwer.wa.gov.au
2	Document: <i>Attachment 3 - Licence Renewal Amendment - EMO Liquid Waste Ponds V2</i>	Application	DWER document (A1670870)
3	DER, November 2016. <i>Guidance Statement: Risk Assessments.</i> Department of Environment Regulation, Perth.	DER 2016b	accessed at www.dwer.wa.gov.au
4	DER, November 2016. <i>Guidance Statement: Decision Making.</i> Department of Environment Regulation, Perth.	DER 2016c	

Appendix 2: Summary of Licence Holder comments

The Licence Holder was provided with the draft Amendment Notice on 19/9/2018 for review and comment. The Licence Holder responded on 25/9/2018, waiving the remaining comment period. No comments were submitted on the draft Amendment Notice.