



Decision Document

Environmental Protection Act 1986, Part V

Licensee: **Waste Stream Management Pty Ltd**

Licence: **L6772/1997/13**

Registered office: 22 Railway Parade
Subiaco WA 6008

ACN: 069 513 346

Premises address: Waste Stream Management
Ratcliffe Road
Kwinana Beach
WA 6167
Being Part Lot 304 on Diagram 72808 and Lot 434 on Plan 220492 as depicted in Schedule 1.

Issue date: Thursday, 23 July 2015

Commencement date: Friday, 25 Saturday 2015

Expiry date: Sunday, 24 July 2016

Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue an amended licence. DER considers that in reaching this decision, it has taken into account all relevant considerations.

Decision Document prepared by:

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Decision Document authorised by:

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A/Manager Licensing



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1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.



2 Administrative summary

| Administrative details | | |
|--|---|---|
| Application type | Works Approval <input type="checkbox"/> New Licence <input checked="" type="checkbox"/> Licence amendment <input type="checkbox"/> Works Approval amendment <input type="checkbox"/> | |
| Activities that cause the premises to become prescribed premises | Category number(s) | Assessed design capacity |
| | 13 | 90,000 tonnes per annual period |
| | 62 | 90,000 tonnes per annual period |
| | 63 | 500,000 tonnes per annual period |
| | 61A | 100,000 tonnes per annual period |
| 70 | 50 000 tonnes per annual period | |
| Application verified | Date: 19/05/2015 | |
| Application fee paid | Date: 27/05/2015 | |
| Works Approval has been complied with | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> | |
| Compliance Certificate received | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> | |
| Commercial-in-confidence claim | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | |
| Commercial-in-confidence claim outcome | N/A | |
| Is the proposal a Major Resource Project? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | |
| Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/> |
| Is the proposal subject to Ministerial Conditions? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Ministerial statement No: EPA Report No: |
| Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Department of Water consulted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Is the Premises within an Environmental Protection Policy (EPP) Area | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | <i>Environmental Protection (Kwinana) (Atmospheric Waste) Policy 1999</i> . Swan Coastal Plain |
| Is the Premises subject to any EPP requirements? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | |



3 Executive summary of proposal and assessment

The Waste Stream Management facility (WSM), located at Part Lot 304 on Diagram 72808 and Lot 434 on Plan 220492 is approximately 29 ha in size and is located approximately 1.9 km from the Town site of Kwinana.

WSM is located within the Swan Coastal Plain and within the Spearwood Dune System on associated sands and limestone. The closest Environmentally Sensitive Area (ESA) to the WSM facility is Bush Forever Site 349, known as Leda and Adjacent Bushland, located south of the premises on the opposite side of Thomas Road. The nearest mapped wetland is the Mounsey Road Resource Enhancement Wetland (REW) located approximately 820m south of the premises. The depth to groundwater ranges from approximately 17.5m to 29m across the site and groundwater flow appears to be in a south-westerly direction across the site.

The main activities on site include Class I landfilling, crushing of building material, shredding of green waste, disposal by burial of asbestos, the treatment of acid sulphate soils (ASS) and screening of limestone.

The current licence allows the licensee to treat ASS according to the provisions of the Waste Stream Management Acid Sulphate Soil Treatment and Environmental Management document, August 2014. The document specifies the construction of an ASS treatment pad and leachate collection pond. The pad will be approximately 100 m long by 50 m wide and constructed with 300mm thick compacted limestone with perimeter bund. The pad will have a permeability of 1×10^{-9} m/s. The pad will be graded so that it drains to a HDPE lined leachate pond. The pond has a capacity of 20,000 Litres.

The Waste Stream Management Licence L6772/1997/12 is due to expire on 24 July 2015. As part of this reissue, DER has not re-assessed the acceptability or impacts of emissions and discharges from the Premises or re-visited any existing emission control levels. The changes to the licence include standard administrative changes and changes to reflect DER's revised licence template with Director General's instructions. A partial decision document has been completed for the reissue of this licence.

The current activities are described in Appendix A



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987*, DEC's Policy Statement - Limits and targets for prescribed premises (2006), and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

| DECISION TABLE | | | |
|-------------------------|-------------------------|--|----------------------------|
| Licence section | Condition number | Justification (including risk description & decision methodology where relevant) | Reference documents |
| Template changes | - | The licence has been updated from the previous licence to reflect changes to DER's licence template. Specifically the following changes have been made: <ul style="list-style-type: none">- All references to REFIRE have been removed. This project has been incorporated into DER's Strategy and Reform group and it is no longer appropriate to reference in licences.- Text referring to 'there are no specified conditions in this section' have been removed;- Sections where there are no conditions have not been retained for numbering purposes. Condition numbers may therefore have changed from the previous version of the licence;- Conditions that duplicate requirements of s72 have been removed.- Generic fugitive emission conditions have been removed. These aspects are controlled directly by the Environmental Protection act 1986. | |
| Improvement | L3.1.1 | Condition L3.1.1 has been added to the licence which requires the Licensee to submit a compliance document following the construction of the acid sulphate treatment facility and commissioning of the same. | |
| Information | L4.2.3 | Condition L4.2.3 has been added to the licence. The condition relates to the submission of original monitoring reports at the request of CEO. There is requirement of ambient groundwater monitoring in the licence under condition L2.3.1 for groundwater quality assessment. Therefore, the addition of this condition is justified. | N/A |
| Licence duration | N/A | The licence is issued for a period of one. year | N/A |



5 Advertisement and consultation table

| Date | Event | Comments received/Notes | How comments were taken into consideration |
|------------|---------------------------------|-------------------------|--|
| 8/06/2015 | Advertised in West Australian | No submissions received | N/A |
| 22/07/2015 | Proponent sent draft instrument | | DER was unable to provide the proponent with a draft licence to comment on prior to issue and the current licence expiring. The proponent has a right to appeal any condition imposed under this licence. |



6 Risk Assessment

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

Table 1: Emissions Risk Matrix

| Likelihood | Consequence | | | | |
|----------------|---------------|----------|----------|----------|---------|
| | Insignificant | Minor | Moderate | Major | Severe |
| Almost Certain | Moderate | High | High | Extreme | Extreme |
| Likely | Moderate | Moderate | High | High | Extreme |
| Possible | Low | Moderate | Moderate | High | Extreme |
| Unlikely | Low | Moderate | Moderate | Moderate | High |
| Rare | Low | Low | Moderate | Moderate | High |



Appendix A

Current activities on Site

Class I Inert Landfill

The inert landfilling on site occurs in the void created by a limestone excavation on Lot 434. Construction and demolition waste arrives at the WSM site where it is checked, accepted and weighed over a weighbridge. Trucks are then directed to an unloading area where the material is unloaded and then spread and compacted by dozers. Any non-conforming waste identified at this time is separated out for removal off-site. Water is also added as required to assist with compaction and dust suppression. When clean fill is accepted it is set aside to be used as cover on the tip face and batters. Waste is buried at regular intervals and as soon as practicable during operating hours.

Asbestos from building sites and fencing contractors is accepted, provided it is wrapped in high-density polyethylene (HDPE) sheeting as per the *Environment Protection (Controlled Waste) Regulations 2004* (the CW Regulations) and buried as soon as practical. Material that is not wrapped according to the CW Regulations is wrapped correctly before disposal. An extract "Disposal of Material Containing Asbestos" from the *Environment Protection (Controlled Waste) Regulations 2004* is also handed to the truck driver and the load is diverted to a watering down area and sprayed with water before wrapping.

Dust suppression is achieved through the use of a purpose built water cart and fixed sprinklers on roadways and batters.

Screening of material

WSM screens limestone at the premises sourced from the onsite quarry. The screening plant is mobile and moved to various areas of the lot depending on where extraction is being undertaken. The screener is manned by one operator when in use. Dust and noise will be managed in accordance with the "Waste Stream Management, Environmental and Operational Management Plan, Redcliffe Road, Medina WA, May 2010".

Crushing of building material

A hired crusher located on Lot 434 separates brick from concrete when volumes reach levels to run the crusher. Crushed building material is sold for off-site use as road base or drainage aggregate. Dust and noise will be managed in accordance with the "Waste Stream Management, Environmental and Operational Management Plan, Redcliffe Road, Medina WA, May 2010".

Solid waste depot

The premises has a solid waste depot for shredding green waste. It is intended that shredded green waste materials can produce products suitable for sale off-site to compost manufacturers. Dust and noise will be managed in accordance with the "Waste Stream Management, Environmental and Operational Management Plan, Redcliffe Road, Medina WA, May 2010".

Treatment of Acid Sulphate Soils (ASS)

Acid sulphate soil will be treated on the premises in accordance with the *Waste Stream Management Pty Ltd Acid Sulphate Soil Treatment and Environmental Management Document*, August 2014. The management plan has been approved by the Contaminated Sites Branch of DER.



Acid sulphate soil will be treated within a designated area as detailed in the *Waste Stream Management Pty Ltd Acid Sulphate Soil Treatment and Environmental Management Document, August 2014* as depicted in Schedule map. The designated area has been constructed with a minimum 300 mm thickness of compacted crushed limestone and bunded with a minimum 150mm high perimeter of compacted crushed limestone to contain potential leachate runoff within the treatment area and prevent surface water runoff from entering the treatment area. The treatment area is graded with a rainfall of 1:100 to ensure any leachate generated during wet season is collected in a geotextile lined sediment pond.

Leachate in the sediment pond is monitored prior to its discharge by irrigating landfill cover and dust suppression. . Leachate water will not be discharged from the sediment pond unless water quality is between pH 6.5 and 8.5.

The following information is to be collected prior to acceptance of ASS material for neutralisation on site:

- total quantity of material;
- source from which material originated;
- acidity status of material (field and/or laboratory results as appropriate);
- neutralisation status of any material received in a neutralised state; and
- quantity of neutralising agent applied for neutralised material.

Potential off site impacts from this premises are:

- noise from machinery on site;
- dust from vehicle movements, stockpiles, crushing and screening;
- groundwater contamination from materials on site; and
- contaminated stormwater runoff.