



Works Approval

Environmental Protection Act 1986, Part V

Works Approval Holder: Waroona Resources Pty Ltd

Works Approval Number: W5674/2014/1

Registered office: Waroona Resources Pty Ltd
C/- Leiway Accounting Services
Suite 18, 7 The Esplanade
MOUNT PLEASANT WA 6153

ACN: 169 962 421

Premises address: Premium Waste Management
Lot 15 Richards Road
WAROONA WA 6215
Being Lot 15 on Plan 59265 as depicted in Schedule 1.

Issue date: Monday, 14 July 2014

Commencement date: Monday, 14 July 2014

Expiry date: Saturday, 13 July 2019

The following category/s from the *Environmental Protection Regulations 1987* cause this Premises to be a prescribed premises for the purposes of the *Environmental Protection Act 1986*:

Category number	Category description	Category production or design capacity	Approved premises production or design capacity
63	Class 1 inert landfill site: premises on which waste (as defined by reference to the waste type set out in the document entitled 'Landfill Waste Classification and Waste Definitions 1996' published by the Chief Executive Officer and as amended from time to time) is accepted for burial.	500 tonnes or more per year	150 000 tonnes per annual period

Conditions

This Works Approval is subject to the conditions set out in the attached pages.

Date signed: 18 February 2016

.....
Caron Goodbourn
Officer delegated under section 20
of the *Environmental Protection Act 1986*



Works Approval Conditions

1 General

1.1 Interpretation

1.1.1 In the Works Approval, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 In the Works Approval, unless the contrary intention appears:

'Act' means the *Environmental Protection Act 1986*;

'annual period' means the inclusive period from 1 September until 31 August in the following year;

'CEO' means Chief Executive Officer of the Department of Environment Regulation;

'CEO' for the purpose of correspondence means;

Chief Executive Officer
Department Administering the Environmental Protection Act 1986
Locked Bag 33
CLOISTERS SQUARE WA 6850
Email: info@der.wa.gov.au;

'Premises' means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Works Approval;

'Schedule 1' means Schedule 1 of this Works Approval unless otherwise stated;

'Works Approval' means this Works Approval numbered W5674/2014/1 and issued under the *Act*;

'Works Approval Holder' means the person or organisation named as the Works Approval Holder on page 1 of the Works Approval;

1.2 General conditions

1.2.1 The Works Approval Holder shall construct the works in accordance with the documentation detailed in Table 1.2.1:

Table 1.2.1: Construction Requirements¹		
Document	Parts	Date of Document
Works Approval Application Form	All	1 April 2014
Works Approval Application Supporting Documentation: PWM Class I Landfill Facility Lot 15 Richards Road, Waroona	All, including Drawings and Appendices	3 April 2014

Note 1: Where the details and commitments of the documents listed in condition 1.2.1 are inconsistent with any other condition of this works approval, the conditions of this works approval shall prevail.



5 Information

5.1 Reporting

5.1.1 The Works Approval Holder shall submit a compliance document to the CEO, at the commencement of commissioning each landfill cell as shown in the Premises Map in Schedule 1.

5.1.2 The compliance document shall:

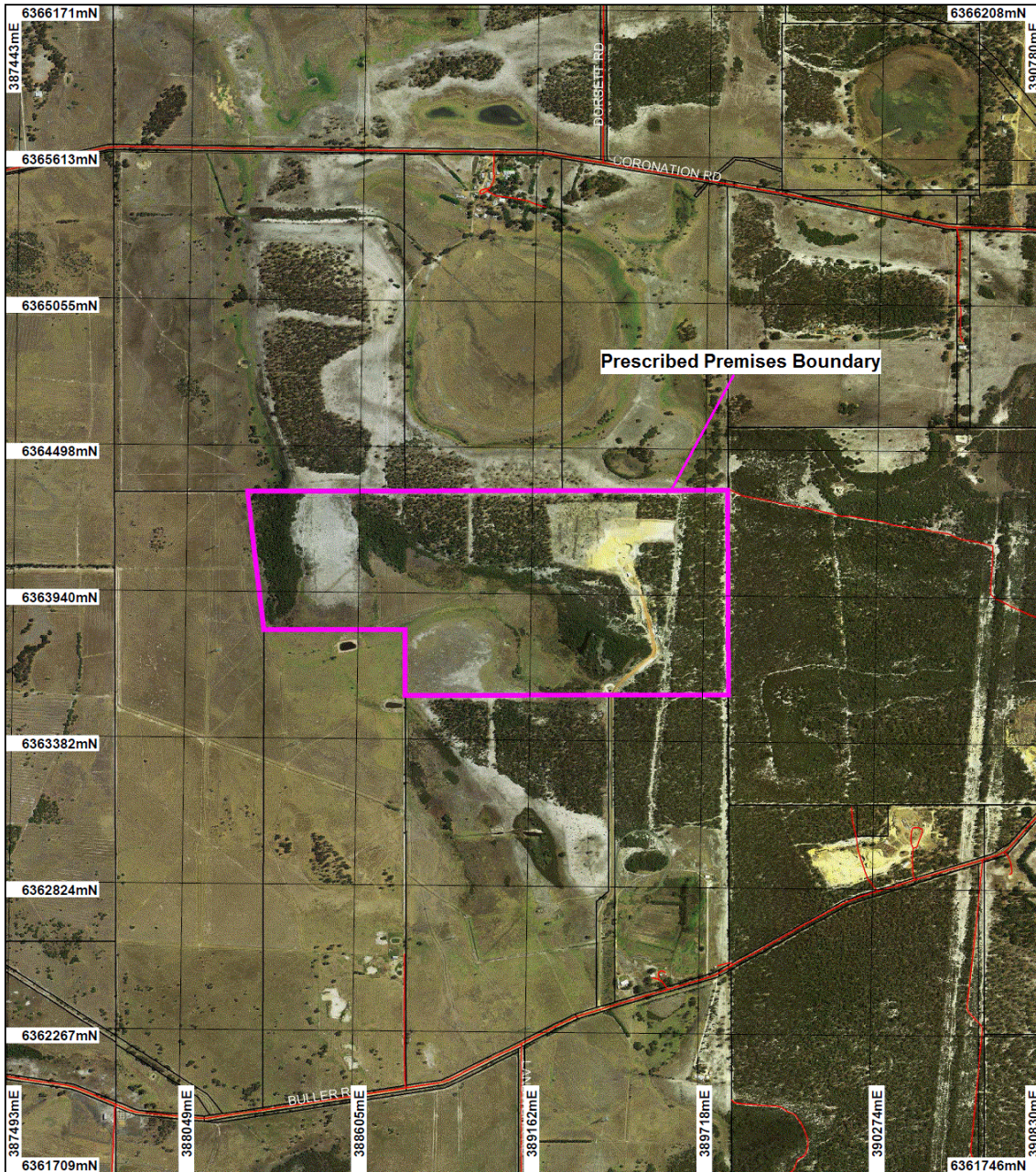
- (a) identify the landfill cell which is being commissioned;
- (b) certify that the landfill cell has been or is being developed in accordance with the conditions of the works approval and achieves a minimum 2 metres separation between the base of the excavation and the highest seasonal groundwater level;
and
- (c) be signed by a person authorised to represent the Works Approval Holder and contain the printed name and position of that person within the company.



Schedule 1: Maps

Premises map

The Premises is shown in the map below. The pink line depicts the Premises boundary.

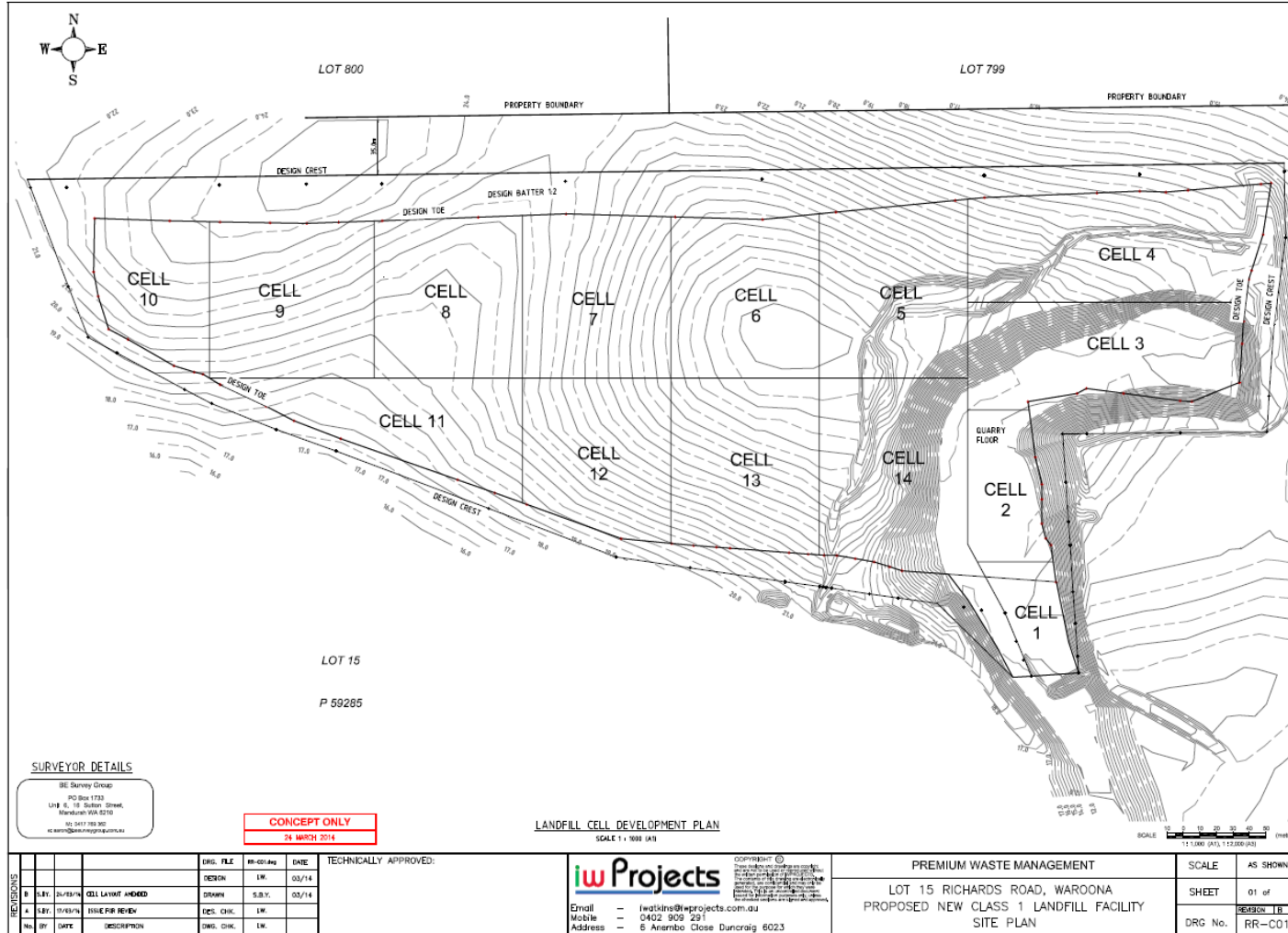


LEGEND Cadastral <input type="checkbox"/> Freehold <input type="checkbox"/> Crown Reserve <input type="checkbox"/> State Forest / Timber Reserve <input type="checkbox"/> Marine Park <input type="checkbox"/> Crown Lease (cont)		<input type="checkbox"/> Lease / Reserve <input type="checkbox"/> Lease on State Forest / Timber Reserve <input type="checkbox"/> Public Roads <input type="checkbox"/> Unallocated Crown Land <input type="checkbox"/> Water <input checked="" type="checkbox"/> Local Government Authorities	<input checked="" type="checkbox"/> Road Centrelines Perth Metropolitan South 15cm Orthomosaic - Landgate 2011	<div style="text-align: center;"> Scale 1:19670 (Approximate when reproduced at A4) </div> <p>Geocentric Datum Australia 1994 Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.</p>
<p>* Project Data. This data has not been quality assured. Please contact map author for details.</p>		 Government of Western Australia Department of Environment Regulation <small>WA Crown Copyright 2002</small>		<p>Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.</p> <p>Prepared by: CBell Prepared for: L8651/2012/1 Date: 26/11/2015 1:33:37 PM</p>



Cell development plan

Indicative cell locations are shown in the diagram below





Contents

Decision Document	1
Contents	2
1 Purpose of this Document	2
2 Administrative summary	2
3 Executive summary of proposal and assessment	3
4 Decision table	5
5 Advertisement and consultation table	7
6 Risk Assessment	8

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 type="checkbox"/> Licence amendment <input type="checkbox"/> Works Approval amendment <input checked="" type="checkbox"/>	
Activities that cause the premises to become prescribed premises	Category number(s)	Assessed design capacity
	63	150,000 Tonnes per annual period
Application verified	Date: 23/12/2015	
Application fee paid	Date: n/a	
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		
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 Peel Inlet - Harvey Estuary Policy 1992</i>
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<i>The EPP Peel Inlet sets water quality objectives for the entire Peel Inlet and Harvey Estuary. Subsidiary management documents make suggestions as to on-ground nutrient targets based on modelling. As long as this premises continues to receive only completely inert wastes for burial, it is not considered to be undertaking activities which discharge nutrients into the catchment.</i>

3 Executive summary of proposal and assessment

Premium Waste Management (PWM) is currently licenced (L8651/2012/1) with DER to operate a Class I landfill facility on Lot 15 Richards Road, Waroona. The original facility was constructed under Works Approval W4935/2011/1 which was issued on 18 July 2011, with an expiry date of 17 July 2014. In March 2012, the Works Approval was subsequently amended; however, the expiry date remained unchanged. With the imminent expiry of the current Works Approval, PWM requires a further Works Approval for the ongoing development of its Class I landfill operation.

PWM commenced operating in 2012 as an inert landfill utilising the void progressively created by a sand quarrying operation. The sand quarry remains active and as further voids are created, future landfill cells will be subject to an application for works approval. The operation has developed standard operating methodologies for receiving, sorting and subsequently landfill the incoming waste as well as the progressive development of landfill cells as and when required. PWM does not propose or anticipate making any substantial changes to its method of operation; hence, PWM are proposing a staged works approval to allow for the construction of new cells as they are required.

The construction of cells 1 to 2 has been completed under Works Approval W4935/2011/1. This Works Approval (W5674/2014/1) will allow for the construction of cells 3 to 14 by staged compliance as shown in schedule 1 of the works approval. PWM originally estimated that the landfill would accept approximately 50,000 cubic metres of waste per year in the first few years with the annual throughput increasing over time to approximately 180,000 cubic metres. The current approved capacity for the burial of inert waste on the premises is 150,000 tonnes per annual period.

There are a number of Environmentally Sensitive Areas within close proximity to the proposed premises, the closest being a wetland (sump land) area within Lot 15. Whilst the proposal is located on the same property, given the location on Lot 15 of the landfilling activities, the proposal is not considered likely to impact on the lake through landfilling activities. IWP have used groundwater monitoring results to determine the depth to groundwater contours across the site and will ensure a 2m separation distance is maintained between the base of all the cells and the highest groundwater level.



Lot 15 is located within the Peel-Harvey Catchment on the Guildford (sand) formation of the Swan Coastal Plain (Refer to Figure 1). Lot 15 is located approximately 10 km west of the town of Waroona and 500m North West of the Shire of Waroona's Buller Road Class II putrescible landfill (DER Licence L6756/1996/10). The nearest dwelling to the site is approximately 1.2 km to the north. The site is also within the *Environmental Protection (Peel Inlet-Harvey Estuary) Policy 1992* area.

Clearing of native vegetation will be required, and the proponent will be conducting this activity in accordance with their DER clearing permit, CPS 1525/2.

As assessment of emissions from this site identified that the main issue is the potential for leachate to contaminate the underlying groundwater. The original works approval application did propose to line the landfill cells with a 500 mm layer of clay, however on advice from DER's hydrogeologist it was determined that lining the cells may lead to pooling of water within the cells and may increase the risk of groundwater contamination and so was not progressed.

This assessment has shown that the risk of groundwater contamination is considered low as the site is only licensed to accept inert wastes. To monitor this potential risk, Premium Waste Management monitor groundwater bores around the site including a control bore. As per licence L8651/2012 the separation distance from the base of the void to the highest seasonal water table will be at least 2m.

Amendment application

This Decision Document is for an amendment to the works approval which was applied for by the works approval holder in December 2015. It was identified in December when deposition of waste started occurring into Cell 4 that conditions 5.1.1 and 5.1.2 for the submission of a compliance document were not able to be complied with due to the cell not being completely excavated, and no works being applicable for preparation of the cell.

As detailed in the original works approval application, cell development is progressive with no cell being completely excavated prior to the landfilling, to allow sand quarry and landfilling operations to occur concurrently and minimise land disturbance and clearing.

All changes to the works approval are detailed in the Decision Table below along with their justification.



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* 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			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Interpretation	-	The Interpretation section of the works approval has been amended as follows: <ul style="list-style-type: none"> - An update to the 'CEO' definition for the purpose of correspondence to reflect DER's centralised address; - Removal of all definitions related to the storage and handling of dangerous goods. As detailed in the General conditions section below, the conditions relating to these definitions have been deleted, therefore the definitions are no longer required; - Conditions 1.1.3 – 1.1.4 have been deleted from the works approval, as they define references to standards, guidelines and/or code of practice. The works approval contains no references to standards, guidelines and/or codes of practice, therefore the conditions are not applicable. 	
General conditions	-	Construction Condition 1.2.2 from the previous version of the works approval (relating to the storage of environmentally hazardous materials) has been deleted from the works approval. This condition is considered redundant because it relates to a 'Secondary activity' under DER's Licensing and works approvals process and therefore is not necessarily subject to works approval conditions. In addition, the works approval holder has committed in their works approval application to there being no hydrocarbon or chemical storage on site.	Guidance statement: Licensing and works approvals process (DER 2015); Works Approval Application Supporting Documentation: PWM Class I Landfill Facility Lot 15 Richards Road, Waroona (IW Projects Pty Ltd, 3 April 2014)
Information	L5.1.1 – 5.1.2	Construction	Works Approval



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>Condition 5.1.1 and 5.1.2 have been amended to better reflect the intent of the original works approval application and what was assessed, that is, to progressively develop cells such that cells are not completely excavated prior to landfilling and therefore land disturbance is minimised.</p> <p>Condition 5.1.1 has been changed from requiring the submission of a compliance document for the 'construction' of each cell prior to commissioning, to requiring a compliance document <i>at the commencement of</i> commissioning each landfill cell. This will serve as a notification to DER that a new cell has been opened. The progressive filling of sand excavations with inert waste does not involve any engineered lining system for the cells and therefore there is no "construction" or "works" which require full completion and certification prior to use.</p> <p>Condition 5.1.2 has had wording amended to reflect the intent of condition 5.1.1 above, and also to ensure some more specific information requirements are addressed in the compliance document including confirmation that the 2m separation to groundwater is achieved. The need to maintain a separation distance of at least 2 metres between the base of the excavation and the groundwater level was a key commitment made in the works approval application, and in the absence of a compliance document certifying each cells completion it is considered appropriate that certification of the depth of the partially excavated cell is provided.</p>	<p>Application Supporting Documentation: PWM Class I Landfill Facility Lot 15 Richards Road, Waroona (IW Projects Pty Ltd, 3 April 2014)</p>



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
15/02/2016	Proponent sent a copy of draft instrument	<p>Proponent submitted 21 day waiver form back within 2 days.</p> <p>Proponent noted that the approved production or design capacity for the premises has changed since the works approval was issued (as per the amended licence dated December 2015).</p>	<p>The premises production or design capacity for landfilling has been updated to 150,000 tpa in accordance with the current licence for the premises.</p> <p>Some minor administrative changes have been made in the Executive Summary of this Decision Document to give effect to this.</p>



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