



Decision Document

Environmental Protection Act 1986, Part V

Proponent: Agnew Gold Mining Company Pty Ltd

Licence: L4611/1987/11

Registered office: Level 5, 50 Colin Street
WEST PERTH WA 6005

ACN: 098 385 883

Premises address: Agnew Gold Mine
Mining tenements M36/27, M36/32, M36/53, M36/55, M36/65, M36/150,
M36/174, M36/248, M36/314, M36/450 and L36/174
LEINSTER WA 6437
As depicted in Schedule 1 of the licence.

Issue date: Thursday, 17 October 2013

Commencement date: Friday, 18 October 2013

Expiry date: Monday, 17 October 2022

Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue a licence amendment. DER considers that in reaching this decision, it has taken into account all relevant considerations and legal requirements and that the Licence and its conditions will ensure that an appropriate level of environmental protection is provided.

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Senior Licensing Officer

Decision Document authorised by: Tim Gentle
Manager Licensing - Resources Industries



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1 Purpose of this Document

This Decision Document explains how DER has assessed and determined the application for a licence amendment 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 checked="" type="checkbox"/> Works Approval amendment <input type="checkbox"/>								
Activities that cause the premises to become prescribed premises	<table border="1"> <thead> <tr> <th>Category number(s)</th> <th>Assessed design capacity</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>1 300 000 tonnes per year</td> </tr> <tr> <td>6</td> <td>1 200 000 tonnes per year</td> </tr> <tr> <td>89</td> <td>4 000 tonnes per year</td> </tr> </tbody> </table>	Category number(s)	Assessed design capacity	5	1 300 000 tonnes per year	6	1 200 000 tonnes per year	89	4 000 tonnes per year
	Category number(s)	Assessed design capacity							
	5	1 300 000 tonnes per year							
6	1 200 000 tonnes per year								
89	4 000 tonnes per year								
Application verified	Date: 09/12/2015								
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	N/A								
Is the proposal a Major Resource Project?	Yes <input checked="" type="checkbox"/> No <input 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: N/A EPA Report No: N/A
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 type="checkbox"/> No <input checked="" type="checkbox"/> If Yes include details of which EPP(s) here.		
Is the premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes, include details here, eg Site is subject to SO ₂ requirements of Kwinana EPP.		

3 Executive summary of proposal

Premises description and licence summary

Agnew Gold Mining Company Pty Ltd (Agnew Gold) is wholly owned by Goldfields Limited; an international producer of gold with operating mines in Australia, Ghana, Peru and South Africa. Agnew Gold has operated its Agnew Gold Mine (AGM) under this licence since October 2013.

AGM is located approximately 26km south-west of Leinster, in Western Australia. AGM consists of the Genesis, New Holland and Waroonga underground mine operations with groundwater abstracted and pumped to the surface for discharge within the premises boundary. AGM discharges settled water from the Waroonga and New Holland underground to the Hidden Secret Pit (via settlement ponds). Song Vang open pit dewatering is directed to settling ponds prior to use for dust suppression and in the site office. Any extra dewater is pumped to the Hidden Secret Pit via settlement ponds. The operators of the nearby Vivien Pit, also discharge their mine dewater into Hidden Secret Pit.

Processing Plant:

Agnew's EMU process plant uses a Carbon in Leach gold methodology to separate gold from primary ore. Ore is milled and mixed with chemicals and water to form slurry which is passed through a leach and absorption circuit.

TSF operations:

Tailings (processing wastes) are pumped along a bunded pipeline corridor to Redeemer In-pit Tailings Storage Facility (TSF). The tailings are discharged in a manner to maximise solids consolidation and process water return. To ensure the TSF maintains compliance with the International Cyanide Management Code the tailings have a concentration of less than 50 parts per million (ppm) when discharged.



Dewatering Operations:

Dewatering occurs from the Waroonga, Genesis and New Holland underground operations, with water abstracted and pumped to the surface for use onsite. Dewater is pumped to Hidden Secret Pit via settlement ponds. A third party owns Vivien Pit, which discharges dewater into Hidden Secret Pit.

Groundwater Resources Management:

Two borefields are used as a water source – Fairyland (on neighbouring Premises Lawlers Gold Mine) and New Woman. Borefield water is pumped to site via pipelines or trucked. Water is also used from Hidden Secret, Daisy Queen (located within the neighbouring Premises Lawlers Gold Mine) and Song Vang Pits. Water is used in the processing plant, dust suppression, drinking water and in site offices.

Waste Management:

A biomax microbial waste water treatment facility operates at Waroonga, with treated water discharged onto the nearby waste rock landform. In Waroonga and New Holland Underground, chemical toilets are used and emptied on a regular basis by a licensed offsite contractor for disposal. Septic tanks are used at New Holland and EMU plant area and are emptied if required.

Agnew has three landfill locations:

- an inert waste (Type 1 and 2) landfill on top of New Holland Waste Rock Landform;
- a combined putrescible and inert waste (Type 1 and 2) landfill in Waroonga landfill; and
- a special wastes (Type 1 and 2) landfill at Redeemer Waste Rock Landform (asbestos and biomedical containers).

May 2016 Amendment

This licence amendment is proponent initiated to add mining tenements from adjacent Lawlers Gold Mine Licence (L5110/1988/10), which subsequently effects requiring amendments to licence conditions relevant to those tenements removed. The amendment of tenements has also resulted in the revision and replacement of schedule 1 maps and figures. This amendment also provides the opportunity to address redundant conditions and align this licence with the new licence format.



4 Decision table

All applications are assessed under the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and the risk matrix attached to this Decision Document in Section 6 and DER's Industry Regulation Emissions and Discharges Assessment Framework. Where other references have been used in making the decision they are detailed in the decision table.

DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Tenement amendment and requested amendments	N/A	<p>Tenements M36/174 and M36/314, have been inserted to this licence as requested in the amendment application.</p> <p>This amendment updates former condition W8(a) and Table 2 and includes an assessment for the expansion of the existing landfills covered under the section discharge to land and monitoring.</p> <p>The maps in Schedule 1 of the Licence have been replaced to reflect the changes in the Premises boundary. Schedule 2 Form ET1 has been removed and substituted by existing form N1.</p>	Application documentation
Interpretation and Preamble	L1.1.3, L1.1.4.	The preamble to existing licence will be incorporated into the process descriptions and the categories and throughputs will now appear on the front page of the amended licence. The definitions of the existing licence have been changed to reflect correct definitions, included new licence definitions plus the correct contact details for this Department especially the CEO.	N/A
General conditions	L4.3.1, Table 4.3.1	<p>Former Condition G1(a), G1(b), and G1(c) of the previous licence, which specified that the Licence limit exceedance reporting have been removed and are replaced by amended licence condition 4.2.1 and Table 4.2.1.</p> <p>The previous licence included conditions W7(a) to W7(d) which related to specified storage and clean-up requirements for environmentally hazardous chemicals and storage of materials have been removed from the licence as they are unclear and not enforceable. It is the Licensee's responsibility that environmentally hazardous materials are stored appropriately in a manner</p>	<i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>which prevents discharge to the environment. Any discharges to the environment may be subject to the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</p> <p>Former condition W2 which relates to separation and diversion of stormwater from potential contamination sources is also not clear and potentially unenforceable so has been removed from the licence. Unauthorised stormwater discharges are also captured by the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</p>	
Premises operation	L1.2.1, Table 1.2.1	<p>L1.2.1 lists the authorised containment infrastructure for the Premises. L1.2.1 replaces previous licence condition W1.</p> <p>Refer to Appendix A for DER's assessment of risks and decision making associated with TSF operations.</p>	<p><i>Environmental Protection Act 1986</i></p> <p>DER Guidance Statement: <i>Licences and Works Approvals process</i> (September 2015)</p>
	L1.2.2 L1.2.3	<p>Former Condition W4 requiring maintenance of a freeboard for water storages and dams has been replaced by condition L1.2.2. Former Conditions W5(a), W5(b), W6(c) and W6(d) requiring inspections of key containment infrastructure and pipelines have been replaced by condition L1.2.3.</p> <p>Refer also to Appendix A for DER's assessment of risks and decision making associated with TSF operations.</p>	
	L1.2.4	<p>Abnormal operation - Pipeline Failure</p> <p><u>Emission Description</u> <i>Emission:</i> Mine dewatering, tailings or tailings supernatant discharged to the environment due to a pipeline failure. <i>Impact:</i> Mine dewater, tailings and tailings supernatant are liquors or slurries (combination of solids and liquors) with elevated metals and metalloid concentrations, brackish salinity and alkaline pH. Tailings liquors also contain trace cyanide concentrations. These liquors have the potential to cause localised soil contamination and adverse impact on vegetation</p>	<p><i>Environmental Protection Act 1986</i></p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><i>Controls:</i> Tailings delivery and water return pipelines are situated within bunded drains that contain catchment pits situated at low points along the pipeline route for the containment of spills. In the event of a pipeline failure, the drains will be able to hold the spill within the sumps where it can be managed and recovered. A telemetry system with automatic cut-off sensors has been installed as part of the pipeline infrastructure which alerts operators to pipeline leaks and failures.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Risk Rating:</i> Low</p> <p><u>Regulatory Controls</u> Condition 1.2.4 requires the Licensee to ensure pipelines are either bunded to contain spills and/or have provisions for automatic cut-outs in the event of failure. This condition replaces previous conditions W6(a) and W6(b).</p> <p><u>Residual Risk</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Rare <i>Risk Rating:</i> Low</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
	L1.2.5 – L1.2.7	<p>L1.2.5 – L1.2.7 replace previous licence condition S1. Recent amendments to the <i>Environmental Protection (Controlled Waste) Regulations 2004</i> include new waste codes for controlled wastes. Table 1.2.3 'Management of waste' has been amended to reflect the Controlled Waste changes and column titled 'Waste Code' has been inserted with Sewage waste type code 'K210' being included in this licence.</p> <p>Progressive development and operation of landfill trenches is authorised under the condition L1.2.5, providing it is conducted in accord with Table 1.2.3.</p>	<i>Environmental Protection (Rural Landfill) Regulations 2002</i>
Emissions general	L2.1.1	This is a standard explanatory condition for Licensee response in regard to limits set in the Licence. It replaces previous licence condition G1(c) in part.	<i>Environmental Protection Act 1986</i>
Point source emissions to groundwater	L2.2.1 L3.2.1 L3.3.1	<p>Normal Operation – Dewatering from one pit to another pit.</p> <p><u>Emission Description</u> <i>Emission:</i> Supernatant liquor from mine dewatering discharge from one pit into an adjacent receiving pit, an emission to groundwater. <i>Impact:</i> Deposition of mine dewater is likely to cause a concentration of salts due to evaporation in the pit, increasing salinity of the water source over time and raising local groundwater levels due to increased water level height of the receival pit. <i>Controls:</i> The Licensee currently monitors the quality of mine dewatering discharge as this was previously included on adjacent Premises Licence L5110/1988/10. The previous condition required quarterly monitoring of the dewater quality. It is estimated that any impacts would be low risk due to the dewater being similar composition to the receiving environment.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Unlikely</p>	<i>Environmental Protection Act 1986</i>



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Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><i>Risk Rating: Moderate</i></p> <p><u>Regulatory Controls</u> L3.2.1 requires regular monitoring of the dewater quality and volumes being discharged from an external premises (Vivien Pit) and also internally from within Agnew Operations to the Hidden Secret Pit. The frequency has been amended to six monthly from quarterly frequency on the previous licence due to the low risk presented by dewatering and lack of environmental receptors.</p> <p>Condition L1.2.4 covers the operation of the infrastructure pipeline and leak detection addresses prevention and management of pipeline leaks. Refer to Premises Operation for further detail.</p> <p><u>Residual Risk</u> <i>Consequence: Minor</i> <i>Likelihood: Rare</i> <i>Risk Rating: Low</i></p>	
Fugitive Emissions	N/A	Former Licence conditions A1 and A2 that covered fugitive dust emissions have been removed as DER considers that these conditions are not clearly enforceable.	<i>Environmental Protection Act 1986</i>
Noise	N/A	Noise generated from the Agnew operation originates from the crusher, milling circuit, haulage and mobile equipment associated with the processing plant. However, given the nearest sensitive receptor is located approximately 30km from the mine site (township of Leinster), the impact of any noise emissions is likely to be minimal. No specified conditions relating to noise are included in the licence and will be managed under the provisions of the <i>Environmental Protection (Noise) Regulations 1997</i> .	<i>Environmental Protection (Noise) Regulations 1997</i> <i>Environmental Protection Act 1986</i>
Monitoring	L3.1.1, L3.2.1	Former condition W3 has been replaced by requirements in condition L3.1.1.	<i>Environmental Protection Act 1986</i>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
general		Former conditions W8(b) and W8(c) are replaced by condition L3.1.1 and identifies the standards that spot testing, laboratory analysis and monitoring is required to be performed by the Licensee and remains unchanged.	
Monitoring of Point Source Emissions to Groundwater	L3.2.1 and Table 3.2.1	Former surface water monitoring requirements in previous licence condition W8(a), Table 2 have been incorporated into new condition L3.2.1 and Table 3.2.1. The reviewed condition requires only monitoring of the dewatering discharge point, modified to the Hidden Secret Pit Outlet to account for safety concerns regarding the monitoring site access.	N/A
Monitoring of inputs and outputs	L3.3.1 and Table 3.3.1	With the addition of New Holland tenements, Hidden Secret Pit is now part of the Agnew Gold Mine Premises. The application to amend requires the inclusion of 'Mine dewatering discharged from Vivien pit to Hidden Secret Pit' and requires recording of cumulative volumes via condition L3.3.1. For consistency recording of dewatering volumes from sources within the Agnew Premises has also been added to the condition.	<i>Environmental Protection Act 1986</i>
Ambient environmental quality monitoring	L3.4.1 and Table 3.4.1 L3.4.2, L3.4.3, L3.4.4	<p>The groundwater monitoring requirements listed in former condition W8(a), Table 2 have been replaced by condition L3.4.1 and Table 3.4.1. Damaged and/or dry monitoring bores EC474, EC478, EC479, EWB63, EMSC1245, EMSC1246, EMSC1247, EMSC1248, EMSC1249 and REDIPMW4 have been removed from the Licence.</p> <p>Thallium has been added to the list of parameters for analysis in Table 3.4.1. Information provided by Smith (2007) suggests that thallium could be a contaminant of concern in leachate from ore processing and in groundwater due to the potential for this element to be mobile in groundwater under a wide range of geochemical conditions. Thallium is also potentially more toxic to humans and many environmental receptors than mercury, cadmium and lead and is commonly found in elevated concentrations in drainage from mine sites (Peter and Viraraghavan, 2005).</p> <p>Former Condition W9 placed groundwater quality limits in the vicinity of the TSF. These limits have been included in L3.4.1, with the exception of a limit in regard to increasing salinity. Data</p>	<p><i>Environmental Protection Act 1986</i></p> <p>Applicant submission documentation</p> <p>Smith, K.S., 2007. <u>Strategies to predict metal mobility in surficial mining environments.</u> <i>Geological Society of America Reviews in Engineering Geology, Vol XVII,</i></p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>submitted by the Licensee as part of the application demonstrated that the ambient groundwater salinity would be managed to not exceed the 10 000mg/L limit for total dissolved solids (TDS) and that if there was variation in trends during the deposition to the Redeemer In-pit TSF, the net impact would still not exceed the TDS limit and would be managed through the life of the In-pit TSF. DER deems retention of the TDS limit to be sufficient to manage the impact to groundwater quality posed by seepage.</p> <p>In the event that exceedances from W9 were recorded, former condition W10 required the development and implementation of a groundwater recovery plan. This requirement is now captured in conditions L3.4.2 – L3.4.4.</p> <p>Refer also to Appendix A for DER's assessment and decision making in regard to TSF operation.</p>	<p>25-45</p> <p>Peter, A.L. and Viraraghavan, T., 2005. <u>Thallium: a review of public health and environmental concerns.</u> <i>Environment International</i>, 31, 493-501</p>
Information	L4.1.1 to L4.1.3, L4.2.1, L4.2.2 and Table 4.2.1 L4.3.1 and Table 4.3.1.	<p>Former licence conditions G2 and G3 requiring the submission of an Annual Environmental Report and Annual Audit Compliance reports have been replaced with new conditions 4.1.2, 4.2.1 and Table 4.2.1.</p> <p>Former conditions G1(a), G1(b), G1(c), W6(e) and W7(d) are covered by condition L4.3.1.</p>	<i>Environmental Protection Act 1986</i>
Licence Duration	N/A	The Licence expiry date has been extended to 17 October 2022 in line with the 29 April 2016 extension to licence expiry dates by CEO notice.	DER's Guidance Statement, <i>Licence duration</i> (Revised May 2015)



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
20/05/2016	Proponent sent a copy of draft instrument	Corrections to the premises description, amendment to the capacity under category 6, correction to bores in Table 3.4.1. Correction to application of limits to TSF2 groundwater monitoring bores. Replacement of landfill figure.	All comments adopted except for removal of pH and WAD cyanide limits to non-operational TSF2 monitoring bores. Actions in conditions 3.4.2 – 3.4.4 should also be taken in response to changes in groundwater quality if detected in TSF2 bores. Given historical TDS results for TSF2 bores, the limit has not been applied to TSF2 bores.



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

Premises Operation

Normal Operation – Tailings Storage Facility (TSF)

Emission Description

Emission: Tailings held in the TSF as a waste product from the gold processing include cyanide and elevated metals/metalloid concentrations. Seepage from the TSF into the surrounding groundwater occurs over time as tailings are deposited into the facility. The pH and salinity of receiving groundwater can also be affected by seepage.

Impact: Contamination of groundwater and surrounding soils. Groundwater mounding due to seepage can also result in inundation of the root zone of vegetation and potential vegetation death.

Controls: Adequate design of the TSF with management measures including regular monitoring of groundwater potentially impacted by seepage, regular inspections of TSF infrastructure.

Risk Assessment

Consequence: Moderate

Likelihood: Possible

Risk Rating: Moderate

Regulatory Controls

Licence condition 1.2.1 ensures that tailings are only deposited into the specified containment infrastructure.

Condition L1.2.3 ensures that required inspections of the TSF are taken; it also requires a visual assessment of pipeline infrastructure.

Condition L3.4.1 requires ambient monitoring of groundwater quality in the area of the TSF and provides limits for groundwater quality in monitoring bores.

Should groundwater quality not meet the limits in L3.4.1, a groundwater recovery plan is required according to conditions L3.4.2 – L3.4.4.

These conditions provide adequate protection.

Residual Risk

Consequence: Moderate

Likelihood: Unlikely

Risk Rating: Moderate

Emergency Operation – Tailings Storage Facility (TSF)

Emission Description

Emission: Overtopping of the Redeemer In-pit TSF, releasing tailings to land during a storm event or due to operator error.

Impact: Tailings contain elevated metals, metalloids and cyanide. A release of tailings can result in localised soil contamination. Spilled tailings liquor and solids have the potential to damage and destroy vegetation if released to undisturbed areas. Large releases can result in health impacts if released to areas where personnel are located.

Controls: The Licensee has committed to the following TSF infrastructure and management practices; minimum freeboard of 300mm on the internal embankment of the TSF at all times, groundwater monitoring around the TSF to monitor standing water levels (SWL) and groundwater quality, daily visual inspections of the TSF (external TSF walls, surface ponding and tailings deposition). The final



expected height for the Redeemer In-pit TSF is at 472 m RL, 2 m below the surrounding surface height.

Risk Assessment

Consequence: Moderate

Likelihood: Rare, more than 2 m of freeboard is available for the Redeemer In-pit TSF. TSF2 is not operation.

Risk Rating: Moderate

Regulatory Controls

L1.2.1 specifies the authorised containment infrastructure whilst L1.2.3 identifies the inspection frequency for that containment infrastructure. A minimum freeboard for all containment infrastructure has been specified in condition 1.2.2 (replacing previous condition W4) which ensures that capacity for a 1 in 100 year, 72 hour frequency rainfall event is available in the In-pit TSF at all times.

Residual Risk

Consequence: Moderate

Likelihood: Rare

Risk Rating: Moderate



Appendix B

Normal Operation – Waste facilities

Emission Description

Emission: Asbestos fibres and putrescible waste leachate released into environment.

Impact: Contamination of surrounding land impacting water resources and/or reduced local air quality. Health impacts to humans including asbestosis.

Controls: The proponent has dug a cell trench within the defined landfill cell in the Premises for the placement and containment of asbestos and asbestos containing material.

This asbestos cell is separate from the general landfilling activities and is clearly identifiable.

Asbestos waste is covered and left undisturbed to reduce the risk of asbestos fines being released.

All other landfill wastes are covered during the life of the landfill.

Risk Assessment

Consequence: Moderate

Likelihood: Unlikely

Risk Rating: Moderate

Regulatory Controls

Licence condition 1.25 identifies the waste produced at the premises and identifies the waste types, waste code (Controlled Waste Regulation), and process limits for the waste processed within the Premises.

The condition specifies:

- a separation limit to ensure a 3 metre vertical separation distance between the base of the landfill and the highest groundwater level;
- within designated areas indicated in the licence schedule;
- Placed in a defined trench with a restricted length of 70 metres and width of 30 metres;
- Accumulative volumes of waste produced shall not exceed 4 000 tonnes per year;
- Asbestos waste will be separated into a designated area greater than 2 metres from the landfill and will remain undisturbed;
- Sewerage waste to be disposed offsite to an appropriate facility couriered by a licensed contractor.

L1.2.6 specifies the cover material requirements and the timeframe the cover material shall be applied.

Condition L1.2.7 requires that wind-blown waste be contained and that any waste outside the landfill area be returned to the landfill on at least a monthly basis.

Residual Risk

Consequence: Moderate

Likelihood: Unlikely

Risk Rating: Moderate