

Assessment report

**Sustainable Planning Act 2009
Environmental Protection Act 1994**

Assessment of a development application involving a prescribed environmentally relevant activity (ERA) received from 1 July 2013

This assessment report is for:

- a development application made under the Sustainable Planning Act 2009 (SPA) for a material change of use to carry out an ERA, received by the assessment manager from 1 July 2013
- the associated application for environment authority (EA) under the Environmental Protection Act 1994 (EP Act)

For these applications, one of the following situations will apply:

- the Department of Environment and Heritage Protection (the Department) is acting as a concurrence agency under the interim delegation from the Department of State Development, Infrastructure and Planning (DSDIP) and the development application is also taken to be an EA application under s. 115 of the EP Act OR
- the Department is both a technical agency providing advice about the development application to DSDIP and the administering authority for the EA application under the EP Act.

This report includes the assessment which must be carried out under the State Development Assessment Provisions (SDAP) for the development application as well as the assessment requirements under Part 2 of the Environmental Protection Regulation 2008 (EP Reg) for the associated EA application.

PROJECT NAME:	
APPLICANT (DA): MMG Century Limited	
PRINCIPAL APPLICANT (EA) IF DIFFERENT: as above	
JOINT APPLICANTS (EA) IF DIFFERENT: not applicable	
AGENT/ SERVICE ADDRESS: Claire Gronow, Ashgrove Environmental.	
ERA DESCRIPTION: ERA56 - Regulated waste storage; and, ERA60 - Waste disposal	
LOCATION DESCRIPTION: Lot 6 on CP907593	
MyDAS REF: SDA-1114-015649	AM REF:
ECOTRACK PROJECT NO: 174596	ECOTRACK DA APPN NO: SRCR00971014
ECOTRACK EA APPN NO: EPPR02651114	

R

1) Brief summary of operation

MMG Century Limited operates a large scale mining operation located approximately 250km North West of Mount Isa within the Southern Gulf Catchment. Activities undertaken at the mine include the extraction of ore via open cut mining operations to produce zinc and lead concentrate. Mine facilities includes infrastructure utilised for the management, storage and disposal of general and regulated wastes generated from activities undertaken at the mine site and associated onsite mine village, including a waste transfer station. Onsite processing of ore is supported by an extensive tailings storage facility (TSF) for generated wastes, and retrieved concentrate is transported to MMG Century's Karumba port facility for dewatering and shipment.

MMG Century generates waste streams at its Century Mine site. The company also generates waste in maintaining its concentrate pipeline, from its port facility in Karumba, and also at its Dugald River mining project located north of Cloncurry in the Southern Gulf Catchment. MMG Century has identified potential synergies and advantages in transporting a number of wastes generated from its external operations to its Century Mine project site for storage, treatment and/or disposal. In relation to waste management the following advantages were highlighted in relation to this proposal:

- The Century Mine (Lawn Hill) site has facilities which may be used to treat certain wastes, such as hydrocarbon contaminated wastes and spent aerosol cans, to separate potentially hazardous components from components that be stockpiled for recycling.
- The staging and stockpiling of potentially recyclable materials at the Century Mine (Lawn Hill) site provides an opportunity to increase the viability of recycling materials by minimising transport costs
- The Century Mine (Lawn Hill) has a suitable facility for disposal of wastes contaminated with heavy metals that cannot be treated and recycled; noting in particular, that more suitable facilities are not present in the Gulf or North-Western Queensland regions.

Wastes that would be transported to Century Mine (Lawn Hill) from external waste generating sites specified are tabulated below:

Waste description	Waste source annual quantity			Proposed waste destination
	Karumba Port Facility	Concentrate Pipeline	Dugald River Mine	
Grease.	Up to 500 cubic metres	Less than 10 cubic metres		Interim storage at the waste transfer station along with similar waste streams from Century Mine (Lawn Hill); transported offsite for disposal
Hydrocarbon contaminated waste	Up to 500 cubic metres		Up to 2000 cubic metres	Interim storage and handling at the waste transfer station along with similar waste streams from Century Mine (Lawn Hill); separation for scrap, reprocessing and/or disposal off-site
Batteries	Approx. 5 tonnes		Approx. 5 tonnes	Interim storage at the waste transfer station along with similar waste streams from Century Mine (Lawn Hill); transported off-site for recycling

R

Assessment of a development application involving a prescribed environmentally relevant activity (ERA) received from 1 July 2013

Paints and thinners	Typically less than 5 tonnes	Less than 5 cubic metres	Typically less than 5 tonnes	Interim storage and handling at the waste transfer station along with similar waste streams from Century Mine (Lawn Hill); separation for scrap and/or disposal off-site
Soils and sludge contaminated with lead and zinc		1000 to 2000 tonnes, depending on maintenance schedules		Disposal on-site: placed directly within the Century Mine (Lawn Hill) TSF
Sewage and water treatment plant sludge			Approx. 50 to 100 tonnes	Disposal on-site: placed directly into pre-prepared trenches within the Century Mine (Lawn Hill) TSF and covered as soon as practical after placement
spent components impregnated with lead and other heavy metals (including used filter cloths and rubberised components)	Approx. 500 tonnes	Less than 10 cubic metres		Disposal on-site: material buried in wooden boxes in a dedicated disposal area located within existing TSF and covered with waste rock or tailings

Storage and disposal of wastes generated from non-associated activities outside of the existing Century Mine (Lawn Hill) mining lease requires separate development approval (material change of use) relative to underlying land tenure, and an environmental authority to conduct the proposed environmentally relevant activities.

Identified environmentally relevant activities associated with the proposal include:

- ERA56
 - o Regulated waste storage
 - o Receiving and storing regulated waste
- ERA60(1)(a)
 - o Waste disposal
 - o Waste disposal facility (any combination of regulated waste, general waste and limited regulated waste — and <5t untreated clinical wastes if in a scheduled area): >100,000-200,000t/yr

The land described as Lot 6 on CP907593 is state land which is subject to a commercial term lease held by MMG Century Limited. Lot 6 on CP907593 is recorded on the contaminated land register. Overlying mining lease tenures (ML90045 and ML90058) are also held by MMG Century Limited in relation to the Century Mine (Lawn Hill) mining project. An environmental authority (EA) EPML00888813 is presently held by MMG Century Limited in relation to activities conducted on the mining lease tenures.

R

2) Development assessment under Module 4 of the SDAP (v1.5) for a material change of use to carry out an ERA

*This section applies if the development application was properly made by the assessment manager from 27 October 2014 onwards.
Underlined terms are defined in Section 4.3 Glossary of terms in the SDAP.*

Table 4.1.1: Environmentally relevant activity applicable criteria for activity	Relevant provisions of code
All environmentally relevant activities	Table 4.1.2—PO1–PO6
ERA 16 (extractive and screening activities) other than riverine quarry extraction under the Environmental Protection Regulation 2008, schedule 2, section 16 in a <u>strategic environmental area</u>	Table 4.1.2—PO1–PO6 Table 4.1.3—PO1
ERA 16 (extractive and screening activities) under the Environmental Protection Regulation 2008, schedule 2, section 16 that is riverine quarry extraction in a <u>strategic environmental area</u>	Table 4.1.2—PO1–PO6 Table 4.1.3—PO2–PO5
Intensive animal industry	Table 4.1.2—PO1–PO6 Table 4.1.4—PO1–PO6

In accordance with module 4 (Environmentally relevant activities) of the State Development Assessment Provisions (SDAP Version 1.5), the relevant provisions of code are specified in Table 4.1.1 against the following ERA descriptor: *All environmentally relevant activities*. The relevant provisions of code for assessment of the ERA component of this application are specified in Table 4.1.2 (Performance outcomes PO1 to PO6).

Table 4.1.2 : All environmentally relevant activities

Performance outcomes	Acceptable outcomes	How the proposal meets the performance outcome**
Site suitability		
<p>PO1 The choice of the site at which the activity is to be carried out minimises <u>serious environmental harm</u> on areas of high conservation value and special significance, and <u>sensitive land uses</u> at adjacent places.</p>	<p>AO1.1 Both of the following apply: (1) areas of high conservation value and special significance likely to be affected by the activity are identified and evaluated, and any adverse effects on these areas are minimised, including any edge effects on the areas (2) the activity does not have an adverse effect beyond the site. OR AO1.2 Both of the following apply: (1) Areas of high conservation value and special significance likely to be affected by the proposal are identified and evaluated and any adverse effects on the areas are minimised, including any edge effects on the areas (2) critical design requirements will prevent emissions having an irreversible or widespread impact on adjacent areas.</p>	<p>AO1.1 is achieved There are no areas of high conservation value or special significance within or immediately adjacent to Lawn Hill Mine. There are no sensitive land uses adjacent to Lawn Hill Mine. There is an accommodation village within Lawn Hill Mine; however, it is located distant from both the waste transfer station (4 km) and TSF (5 km).</p> <p>Waste storage and/or disposal options are associated with existing infrastructure located on land occupied by Century Mine (Lawn Hill). MMG Century will ensure wastes are managed in association with existing general and regulated waste streams generated at the mine project site.</p> <p>Both the waste transfer station and TSF are located within the existing mine project footprint and are designed and managed to prevent adverse environmental impacts occurring beyond the site.</p>

Location of activity on the site		
<p>PO2 The location for the activity on the site protects all <u>environmental values</u> relevant to adjacent <u>sensitive land uses</u>.</p>	<p>A02.1 The location of the activity means there will be no adverse effect on any <u>environmental values</u>. OR A02.2 Both of the following apply: (1) The activity and components of the activity are located on the site in a way that prevents or minimises adverse effects on the use of adjacent land and allows for effective management of the environmental impacts of the activity. (2) Areas used for storing environmentally hazardous materials in bulk are located to take into consideration the likelihood of flooding.</p>	<p>A02.2 is achieved The location of the activity will not affect environmental values relevant to adjacent sensitive land uses.</p> <p>The proposed regulated waste storage and disposal activity will not change the level of impact on environmental values. There are no new works required, and the wastes to be stored and disposed of are consistent with wastes already generated, stored and disposed of at Lawn Hill Mine.</p> <p>The application relates to handling and disposal of wastes on land presently occupied by a large scale mining operation. The rural land is not accessible to the public and is remote from any residential area and other sensitive land uses. The waste will be stored at an existing waste transfer station and/or placed in an existing tailings storage facility. Both structures have been designed and constructed considerate of flooding impacts.</p> <p>The TSF is identified as a regulated structure under existing environmental authority EMPL00888813 held by MMG Century and an inspection and performance assessment of the structure is required annually.</p>

<p>PO3 The activity avoids adverse impacts on matters of state environmental significance or, where this is not reasonably possible, impacts are minimised and, where this is not reasonably possible, an <u>environmental offset</u> is provided for any <u>significant residual impacts to matters of state environmental matters</u> that are <u>prescribed environmental matters</u>.</p>	<p>AO3.1 <u>Matters of state environmental significance</u> likely to be affected by the activity are identified and evaluated, and any adverse effects on the <u>matters of state environmental significance</u> are avoided or, where this cannot be reasonably achieved, impacts are minimised, and where this cannot be reasonably achieved, an <u>environmental offset</u> is provided for any <u>significant residual impacts to matters of state environmental significance</u> that are <u>prescribed environmental matters</u>.</p> <p>Editor's note: Applications for development should identify anticipated losses, and outline what actions are proposed to be undertaken to offset the loss in accordance with the relevant Queensland Environmental Offset Policy.</p>	<p>A03.1 is achieved</p> <p>There are no areas of state environmental significance anticipated to be directly or indirectly affected by the proposed storage and disposal of regulated waste at Lawn Hill Mine.</p> <p>The proposal seeks to avoid any adverse environmental impacts will utilise existing established facilities at MMG Century's Century Mine (Lawn Hill) project site.</p>
<p>PO4 Development avoids or minimises and offsets any adverse impacts on riparian areas and ecological corridors located in a <u>strategic environmental area</u>.</p>	<p>AO4.1 Development is set back from a waterway by at least 200 metres.</p> <p>AND</p> <p>AO4.2 Development minimises adverse impacts on fish passage during works and the carrying out of the activity.</p> <p>AND</p> <p>AO4.3 Clearing of riparian vegetation is minimised or an environmental offset is provided.</p> <p>AND</p> <p>AO4.3 Natural regeneration of native plant species is facilitated in cleared riparian areas.</p>	<p>The proposed activities would be located within a prescribed strategic environmental area (SEA) – Gulf Rivers SEA. However, the proposal is to utilise existing facilities present on an existing large scale mine site for waste storage and/or disposal.</p> <p>The performance objective PO4 is achieved as the proposed development avoids riparian areas or ecological corridors located in a strategic environmental area.</p>

Critical design requirements		
<p>PO5 The design of the facility at which the activity is to be carried out permits the activity to be carried out in accordance with <u>best practice environmental management</u>.</p>	<p>AO5.1 The activity does not involve the storage, production, treatment or release of hazardous contaminants, or involve a regulated structure. OR AO5.2 Development ensures that— (1) All storage provided for hazardous contaminants includes secondary containment to prevent or minimise releases to the environment from spillage or leaks. (2) Regulated structures must comply with the Manual for assessing consequence categories and hydraulic performance of structures, Department of Environment and Heritage Protection, 2013. (3) Containers are provided for the storage of hazardous contaminants and are secured to prevent the removal of the containers from the site by a flood event. (4) The design of the facility— (a) prevents or minimises the production of hazardous contaminants and waste, or (b) contains and treats hazardous contaminants, rather than releasing them.</p>	<p>AO5.2 is achieved. The development proposal will be carried out in a manner consistent with the intention of AO5.2 utilising existing facilities and structures presently authorised under existing Environmental Authority EPML00888813 held by MMG Century Limited in relation to its Century Mine (Lawn Hill) project and associated activities. The requirements of AO5.2 have been considered as follows: (1) secondary containment structures are in place at the transfer station where storage of regulated waste has been proposed (2) the TSF is identified as a regulated structure under existing environmental authority (EA) EMPL00888813 held by MMG Century and is required to comply with the manual in accordance with existing EA conditions. (3) The waste transfer station and TSF are located above flood levels as shown on the Queensland Reconstruction Authority Floodplain Maps Design considerations for aspects of the proposed activity relating to storage and containment of hazardous contaminants accord with those outlined under AO5.2. (4) Facilities and structures are suitably designed and managed to ensure intended waste streams accord with the intended outcomes specified.</p>

<p>PO6 Development avoids or minimises any adverse impacts from pollutants on environmental values and water quality objectives for receiving waters (surface and groundwater) on site or leaving a site located in a <u>strategic environmental area</u>.</p>	<p>AO6.1 Development demonstrates current best practice environmental management to meet relevant environmental values and water quality objectives of the Environmental Protection (Water) Policy or relevant to the ERA to be carried out on the site.</p> <p>OR</p> <p>AO6.2 All stormwater, wastewater, discharges and overflows leaving the site are:</p> <p>(1) treated to the quality of the receiving waters prior to discharge, or</p> <p>(2) reclaimed or re-used such that there is no export of pollutants to receiving waters.</p>	<p>There is no release of contaminants to waters directly proposed. It is however noted that disposal of waste within an engineered structure such as the TSF has known inherent risks which include potential for structural failure, releases and seepages to occur.</p> <p>The TSF intended for waste disposal is connected to an associated evaporation dam designed to contain liquids and operate with nil discharge. The engineered structure is subject to annual monitoring and audit requirements.</p> <p>The transfer station has been constructed to include primary and secondary containment structures, and stormwater is managed onsite to ensure that contact with contaminated material is prevented.</p> <p>Existing activities are actively managed to ensure that adverse impacts are preferentially avoided, minimised or mitigated on the mining lease, and no impacts to external environmental values occur. The proposed storage and disposal activities represent only a minor increase to contaminants quantities which are presently managed on site.</p>
---	---	--

****The extent to which the application achieves the performance outcome must be determined. The applicant can do this by meeting the acceptable outcomes or by proposing appropriate alternative measures in order to meet the performance outcome.**

R

3) Development assessment—Other considerations

Are you recommending that the DA be refused?	☐ Yes— EA must also be refused ☒ No
Have all conditions related to Module 4 of the SDAP been placed on the DA, not the EA?	☐ Yes ☒ No- no requirements for the DA.
Where EHP is a technical agency for the development application (scenario 3 in s115 practice note)	
Has the approved template been used to give technical advice to SARA about the development application?	☐ Yes <p><i>The approved templates for providing technical advice are available through MyDAS or the EHP SARA SharePoint site - DSDIP resources:</i></p> <p>http://portal:6004/ehp/DA/sara/SARA%20templates/Forms/AllItems.aspx</p> ☒ Not applicable
Has the technical advice template been attached for review, with all relevant sections completed? The technical advice template contains sections related to: <ul style="list-style-type: none"> • Considerations and assessment • Any recommendations including conditions, reasons for inclusion, any condition timing, partial approvals, preliminary approvals and advice • Findings of material questions of fact • Evidence or other material on which the findings are based • Any approved plans and specifications <p><u>Please note</u> a final version (preferably signed by the relevant EHP approving officer) of the technical advice must be retained internally as a record.</p>	☐ Yes <p><i>DSDIP Practice Note 1 'Using the SARA assessment templates' can be found on the EHP SARA SharePoint site - SARA DSDIP resources:</i></p> <p>http://portal:6004/ehp/DA/sara/SARA%20templates/Forms/AllItems.aspx</p> <p><i>Technical advice examples can be found on the same site under EHP Resources</i></p> <p>http://portal:6004/ehp/DA/sara/EHP%20Templates/Forms/AllItems.aspx</p> ☒ Not applicable

Where EHP is a concurrence agency under delegation from DSDIP (scenario 1 or 2 in s115 practice note)

To determine when EHP acts as a concurrence agency, refer to the "SARA Practice Note—Prescribed ERAs under s. 115 of the EP Act"

<http://portal.6004/ehp/DA/sara/EHP%20Templates/Forms/AllItems.aspx?RootFolder=%2Fehp%2FDA%2Fsara%2FEHP%20Templates%2FS115%20documents%20and%20templates&View=%7BCB353CF6%2D23D2%2D41C3%2DA65C%2DE4FF84D24321%7D&>

Has the correct, EHP branded SPA template been used to provide a concurrence response?

☐ Yes

The EHP branded SPA notices (to use as a concurrence agency under delegation) are available through the EHP SARA SharePoint site - EHP resources, s. 115 documents and templates:

<http://portal.6004/ehp/DA/sara/EHP%20Templates/Forms/AllItems.aspx>

☒ Not applicable

RTI DL RELEASED EHP

4) EA Assessment—Environmental values and associated environmental risks

These must be considered as per s. 51(2)(b) of the EP Reg.

- List ALL **environmental risks, proposed discharges or emissions** associated with the activity and highlight the level of risk (cumulative/widespread/irreversible).
- The level of risk should have been determined by the applicant.
- A good tool is the *Guidelines on risk assessment techniques* produced by Standards Australia.
- The Department also has a risk assessment matrix considering likelihood and consequence in the risk assessment procedure guide.

AIR

The transfer station and TSF facilities are located at the remote MMG's Century Mine (Lawn Hill) project site, with cattle grazing being the primary adjacent land use in the area.

The *Environmental Protection (Air) Policy 2008* (section 7) identifies the following environmental values for the air environment:

- (a) the qualities of the air environment that are conducive to protecting the health and biodiversity of ecosystems; and
- (b) the qualities of the air environment that are conducive to human health and wellbeing; and
- (c) the qualities of the air environment that are conducive to protecting the aesthetics of the environment, including the appearance of buildings, structures and other property; and
- (d) the qualities of the air environment that are conducive to protecting agricultural use of the environment.

Consultants for MMG Century indicate that the waste storage and disposal activities proposed will not result in increased air emissions.

In relation to proposed waste storage, the existing transfer station provides facilities for segregation and storage of recyclable wastes, including a specialised degassing facility used for degassing aerosol cans. None of the wastes proposed for storage and/or disposal at the project location differ significantly to waste presently generated at the project site. Management of waste received from off-site locations will be integrated with MMG Century's current waste management processes. In relation to waste disposal, materials deposited to the TSF facility will be covered as soon as practical after being deposited.

The Century Mine (Lawn Hill) site is remote from populated areas and, considering that Century Mine (Lawn Hill) is an existing large scale mining operation, the potential air impacts from handling and disposing of the relatively small additional waste streams proposed and related on-site dust/combustion emissions

R

generated when carting material, is unlikely to represent a significant impact on environmental values at or adjacent to the project site.

Existing environmental authority (EA) EPML00888813 associated with activities presently undertaken on the mining project site incorporates conditions in relation to dust nuisance, odour nuisance and point source emissions and these conditions would extend to the new activities proposed.

WATER

The Environmental Protection (Water) Policy 2009 (section 7) identifies the following environmental values of waters to be enhanced or protected under the policy, which are most relevant to the proposed activity include:

- (2)(c) for slightly disturbed waters—the biological integrity of an aquatic ecosystem that has effectively unmodified biological indicators, but slightly modified physical, chemical or other indicators;
- (2)(g) for waters that may be used for agricultural purposes—the suitability of the water for agricultural purposes;
- (2)(k) the cultural and spiritual values of the water.

The consultant for MMG Century has identified potential affects to surface water and groundwater as key environmental value considerations; however, notes that risk of environmental harm to values from the proposed additional waste storage and disposal activities as being negligible.

The transfer station is roofed to minimise rain ingress and incorporates primary and secondary containment structures. Stormwater is managed onsite to ensure that contact with contaminated material is prevented and runoff is collected in a sediment dam, which discharges to ephemeral North Mitton Creek, and subject to existing water discharge requirements under MMG Century's existing environmental authority (EA) EPML00888813, to ensure releases are subject to review and are compliant with set contaminant limits.

The TSF is connected to an associated evaporation dam designed to contain liquids and operate with nil discharge. The evaporation dam is located on Coglan Creek, and a clean water diversion has been constructed by MMG Century to divert and return clean run-off from the catchment above the structure back into Coglan Creek below the structure. Water from Coglan Creek flows via tributaries into the Nicholson River and eventually into the Gulf of Carpentaria some 200 km downstream. While Coglan Creek contains some elevated concentrations of contaminants in the vicinity of the evaporation dam, due to small quantities of contaminated seepage and expression from the structure, these seepages are presently being investigated by MMG Century and measures to address the contemporary issue are under MMG's consideration presently.

It is relevant that the project site is located within a dry landscape in remote north-west highlands of Queensland and all drainage features at the site are ephemeral. The consultant has identified that there are no human settlements drawing water from streams downstream of the Century Mine (Lawn Hill) project area; however, suggests that when flowing water from streams would be used for stock and domestic supply by landholders along the watercourse.

R

MMG Century is the only significant groundwater users in the area. MMG accesses groundwater resources remote from the TSF to supply potable water to its mine village, and also uses water from mine dewatering to augment water requirements for ore processing activities.

Under existing environmental authority EPML00888813 monitoring of surface and ground water quality is monitored to ensure water quality is maintained. A receiving environment monitoring program (REMP) has been implemented as a conditioned requirement under MMG Centuries exiting EA and annual reporting requirements to the department form a component of the REMP requirements.

It is unlikely that the introduction of relatively small quantities of wastes from off-site locations will result in an increased level of harm at Century Mine (Lawn Hill) or adversely affect MMG Century Limited's ability to operate in compliance with the water related conditions specified in its existing environmental authority. Additional environmental risks to waters associated with the proposed activity are considered minimal/nominal.

NOISE

The *Environmental Protection (Noise) Policy 2008* (section 7) identifies the following environmental values for the acoustic environment:

- (a) the qualities of the acoustic environment that are conducive to protecting the health and biodiversity of ecosystems; and
- (b) the qualities of the acoustic environment that are conducive to human health and wellbeing, including by ensuring a suitable acoustic environment for individuals to do any of the following - (i) sleep; (ii) study or learn; (iii) be involved in recreation, including relaxation and conversation; and (c) the qualities of the acoustic environment that are conducive to protecting the amenity of the community.

The application relates to development on remote land presently occupied by the Century Mine (Lawn Hill) project. The land occupied by the mine is not accessible to the public and is remote from any residential area. There are no noise sensitive placed in immediate proximity to the proposed activity. In addition, the levels of noise generated by existing activities conducted at the site are unlikely to be significantly increased as a result of the proposed activity. Environmental risks associated with the proposal in relation to noise are likely to be inconsequential.

WASTE

Wastes proposed to be introduced to Century Mine (Lawn Hill) are not novel or significantly different to waste already handled and/or disposed of at the site. The proposed storage and disposal of regulated wastes from the external sources (Karumba Port Facility, Concentrate Pipeline and Dugald River Mine) is not anticipated to have an adverse impact additional to impacts already present on the Century Mine (Lawn Hill) site. The existing transfer station and TSF facilities located at Century Mine (Lawn Hill) have storage and disposal capacity and are suitably designed and operated for the types of wastes involved.

The storage proposal is consistent with a number waste and resource management hierarchy tiers which precede the ultimate disposal option and would allow MMG Century to:

- Utilise its existing transfer station infrastructure for waste handling and storage

R

- Integrate off-site waste streams with existing on-site waste streams
- Accumulate waste quantities to a level that is commercially viable for reuse or recycle

The waste disposal proposal is acceptable under the waste and resource management hierarchy if there is no viable alternative and is promoted on the basis that MMG Century intends to fully integrate the additional activity with its present operations, noting that the TSF:

- Has surplus capacity for disposal of wastes as proposed (surveyed capacity: 47 million cubic metres / 70.5 million tonnes; estimated end of life utilisation: 45.3 million cubic metres / 68 million tonnes)
- In conjunction with the evaporation dam, operates as a closed system which means there is limited potential for environmental harm to occur as a result of disposal of waste types and quantities proposed.

All waste transportation operations will be undertaken by waste transport contractors authorised under the EP Act to transport wastes and MMG will ensure only waste it is authorised to accept is received and that authorised waste transport certificates are completed on receipt of regulated wastes. MMG Century has also indicated that, as a matter of due diligence, it intends to keep records of all incoming wastes, including date of receipt, source, quantity and waste transporter details.

Waste disposal requirements identified in the proposal are identified as follows: disposal of **soils and sludge** contaminated with lead and zinc associated with the Concentrate Pipeline (1000 to 2000 tonnes p.a. - depending on maintenance schedules); **sewage and water treatment plant sludge** associated with the Dugald River Mine Project (Approx. 50 to 100 tonnes p.a.); **spent components** impregnated with lead and other heavy metals (including used filter cloths and rubberised components) associated with the Concentrate Pipeline and Karumba Port Facility (approx. 500 tonnes p.a)

As noted the above wastes are not considerably different to wastes already authorised for disposal under condition G9 of the existing EA, which include (selected for comparison purposes):

- Concentrate spillage and associated regulated wastes originating from activities located on ML90045 and ML90058, the pipeline to Karumba or the Karumba dewatering facility
- sewage treatment plant effluent and sludge originating from activities located on ML 90045 and ML 90058
- regulated wastes generated at the Port Site dewatering facility including activated carbon, filter cloths, and contaminated materials and soils
- Any other waste for which written agreement for disposal has been obtained from the administering authority.

Supporting material provided has identified that the additional wastes will not affect ongoing management and rehabilitation of the TSF and evaporation dam, and maintains that the quantity of such wastes is very small in comparison to the quantity of tailings, and contains similar contaminants. In addition, the

R

supporting material states the wastes will be buried in the tailings mass and will not affect the ability to place the cover layers on the TSF as part of rehabilitation.

If activities are conducted and managed appropriately and in accordance with existing or similar conditions, any additional or cumulative risks associated with the proposed activity would be nominal.

LAND

No additional impacts to land are expected to occur with respect to the proposed disposal of waste at Century Mine (Lawn Hill) within the TSF. The land, identified as Lot 6 on CP907593, is state land which is currently subject to a commercial term lease held by MMG Century Limited to accommodate the current mining project (refer also *Century Zinc Project Act 1997*). Lot 6 on CP907593 is recorded on the contaminated land register. Overlying mining lease tenures (ML90045 and ML90058) are also held by MMG Century Limited. The land is subject to existing rehabilitation requirements.

5) EA Assessment—Environmental objectives assessment

An environmental objectives assessment must be completed as per section 51(2)(a) of the EP Reg.

- This information must be provided by the applicant as part of the EA application.
- Officers can also use sources such as Ecomaps, the business and industry portal and the environmental protection policies

Environmental objective	How does the application meet the environmental objective or performance outcome? <i>Refer to Schedule 5, Part 3, Table 1 for the relevant performance outcomes.</i>	Other EPP considerations where relevant <i>(Management hierarchy, environmental values, quality objectives, management intent)</i>
AIR		
The activity will be operated in a way that protects the environmental values of air.	Performance outcome 2 is appropriate to the activity: <i>(a) fugitive emissions of contaminants from storage, handling and processing of materials and transporting materials within the site are prevented or minimised;</i> <i>(b) contingency measures will prevent or minimise adverse effects on the environment from unplanned emissions and shut down and start up emissions of contaminants to air;</i>	The release of contaminants to air is not proposed; and, measures will be implemented to on-site to ensure impacts to air do not occur.

R

Assessment of a development application involving a prescribed environmentally relevant activity (ERA) received from 1 July 2013

Environmental objective	How does the application meet the environmental objective or performance outcome? <i>Refer to Schedule 5, Part 3, Table 1 for the relevant performance outcomes.</i>	Other EPP considerations where relevant <i>(Management hierarchy, environmental values, quality objectives, management intent)</i>
	<i>(c) releases of contaminants to the atmosphere for dispersion will be managed to prevent or minimise adverse effects on environmental values.</i>	
WATER		
The activity will be operated in a way that protects environmental values of waters.	<p>Performance outcome1 cannot be met so all of performance 2 is applicable to the activity:</p> <p><i>(a) the storage and handling of contaminants will include effective means of secondary containment to prevent or minimise releases to the environment from spillage or leaks;</i></p> <p>The transfer station includes secondary containment structures.</p> <p><i>(b) contingency measures will prevent or minimise adverse effects on the environment due to unplanned releases or discharges of contaminants to water;</i></p> <p>While there is no proposal to release contaminants to water; however, existing contingency measures are employed by MMG Century in managing for unplanned releases at the Century Mine (Lawn Hill) mine. Existing measures and procedures are also relevant to the proposed activity which would be integrated with existing processes.</p> <p><i>(c) the activity will be managed so that stormwater contaminated by the activity that may cause an adverse effect on an environmental value will not leave the site without prior treatment;</i></p> <p>Stormwater will be managed in accordance with MMG</p>	The release of contaminants to waters is not proposed.

R

Environmental objective	How does the application meet the environmental objective or performance outcome? <i>Refer to Schedule 5, Part 3, Table 1 for the relevant performance outcomes.</i>	Other EPP considerations where relevant <i>(Management hierarchy, environmental values, quality objectives, management intent)</i>
	<p>Century's existing Water Management Plan for the site; no direct release of contaminated stormwater to the environmental is proposed.</p> <p><i>(d) the disturbance of any acid sulfate soil, or potential acid sulphate soil, will be managed to prevent or minimise adverse effects on environmental values;</i></p> <p>No ground disturbance that may affect acid sulfate soils is proposed</p> <p><i>(e) acid producing rock will be managed to ensure that the production and release of acidic waste is prevented or minimised, including impacts during operation and after the environmental authority has been surrendered;</i></p> <p>The proposed activity does not involve management of acid producing rocks</p> <p><i>(f) any discharge to water or a watercourse or wetland will be managed so that there will be no adverse effects due to the altering of existing flow regimes for water or a watercourse or wetland;</i></p> <p>There is no proposal for discharges to occur; however existing EA EPML0088813 has firm requirement in relation to releases should such an event occur.</p> <p><i>(g) for a petroleum activity, the activity will be managed in a way that is consistent with the coal seam gas water management policy, including the prioritisation hierarchy for managing and using coal seam gas water and the prioritisation hierarchy for managing saline waste;</i></p>	

R

Environmental objective	How does the application meet the environmental objective or performance outcome? <i>Refer to Schedule 5, Part 3, Table 1 for the relevant performance outcomes.</i>	Other EPP considerations where relevant (<i>Management hierarchy, environmental values, quality objectives, management intent</i>)
	The activity is not a petroleum activity <i>(h) the activity will be managed so that adverse effects on environmental values are prevented or minimised.</i> The activities are proposed to be integrated into existing waste management activities occurring on at the mine site and no significant adverse effect on environmental values is anticipated from the proposed activity	
WETLANDS		
The activity will be operated in a way that protects the environmental values of wetlands.	Performance outcome1 is appropriate to the activity: <i>There will be no potential or actual adverse effect on a wetland as part of carrying out the activity.</i>	There is no applicable EPP.
GROUNDWATER		
The activity will be operated in a way that protects the environmental values of groundwater and any associated surface ecological systems.	Performance outcomes1 and 2 are both appropriate to the activity: <i>1. Both of the following apply— (a) there will be no direct or indirect release of contaminants to groundwater from the operation of the activity; (b) there will be no actual or potential adverse effect on groundwater from the operation of the activity.</i> <i>2 The activity will be managed to prevent or minimise adverse effects on groundwater or any associated surface ecological systems.</i> The activities proposed are not anticipated to	The release of contaminants to waters is not proposed.

Assessment of a development application involving a prescribed environmentally relevant activity (ERA) received from 1 July 2013

Environmental objective	How does the application meet the environmental objective or performance outcome? <i>Refer to Schedule 5, Part 3, Table 1 for the relevant performance outcomes.</i>	Other EPP considerations where relevant <i>(Management hierarchy, environmental values, quality objectives, management intent)</i>
	adversely affect groundwater; however, will be managed to prevent or minimise any potential adverse effects on groundwater or any associated surface ecological systems, should a risk to such systems be identified.	
NOISE		
The activity will be operated in a way that protects the environmental values of the acoustic environment.	Performance outcome 1 is appropriate to the activity: <i>Sound from the activity is not audible at a sensitive receptor</i>	No additional consideration.
WASTE		
Any waste generated, transported, or received as part of carrying out the activity is managed in a way that protects all environmental values.	Performance outcome 1 is appropriate to the activity: <i>Both of the following apply—</i> <p><i>(a) waste generated, transported or received is managed in accordance with the waste and resource management hierarchy in the Waste Reduction and Recycling Act 2011;</i></p> <p>Waste received is proposed to be managed consistent the waste and resource management hierarchy. Waste proposed for storage at the transfer station will be managed in accordance with (d), (e) and (f) of the hierarchy, before being sent off site once suitable quantities are held. Consistent with (g) of the hierarchy, where there is no viable alternative waste will be disposed of in the TSF if authorised, or transported for off-site suitable disposal</p> <p><i>(b) if waste is disposed of, it is disposed of in a way that prevents or minimises adverse effects on environmental values.</i></p> <p>Waste for disposal is intended to be place within the existing tailings storage facility and buried to ensure that it is appropriately contained and does not</p>	There is no applicable EPP.

Assessment of a development application involving a prescribed environmentally relevant activity (ERA) received from 1 July 2013

Environmental objective	How does the application meet the environmental objective or performance outcome? <i>Refer to Schedule 5, Part 3, Table 1 for the relevant performance outcomes.</i>	Other EPP considerations where relevant <i>(Management hierarchy, environmental values, quality objectives, management intent)</i>
	adversely affect any environmental values.	
LAND		
The activity is operated in a way that protects the environmental values of land including soils, subsoils, landforms and associated flora and fauna.	<p>Performance outcome 2 is appropriate to the activity:</p> <p><i>2 All of the following—</i></p> <p><i>(a) activities that disturb land, soils, subsoils, landforms and associated flora and fauna will be managed in a way that prevents or minimises adverse effects on the environmental values of land;</i></p> <p>Waste disposal from the proposed activities will only occur within the confines of the existing TSF structure at Century Mine (Lawn Hill).</p> <p><i>(b) areas disturbed will be rehabilitated or restored to achieve sites that are—</i></p> <p><i>(i) safe to humans and wildlife; and</i></p> <p><i>(ii) non-polluting; and</i></p> <p><i>(iii) stable; and</i></p> <p><i>(iv) able to sustain an appropriate land use after rehabilitation or restoration;</i></p> <p>The disposal is not expected to impact on ultimate rehabilitation of TSF area. There are existing rehabilitation obligations for the site in respect to mining activity disturbance and contaminated land.</p> <p><i>(c) the activity will be managed to prevent or minimise adverse effects on the environmental values of land due to unplanned releases or discharges, including spills and leaks of contaminants;</i></p> <p>The transfer station is serviced by a secondary containment structure and the TSF (including associated evaporation dam) is managed as a regulated structure, subject to annual audit and performance assessment. Existing management will integrate the proposed activities and include</p>	There is no applicable EPP.

R

Environmental objective	How does the application meet the environmental objective or performance outcome? <i>Refer to Schedule 5, Part 3, Table 1 for the relevant performance outcomes.</i>	Other EPP considerations where relevant <i>(Management hierarchy, environmental values, quality objectives, management intent)</i>
	<p>measures intended to protect the environment from harm.</p> <p><i>(d) the application of water or waste to the land is sustainable and is managed to prevent or minimise adverse effects on the composition or structure of soils and subsoils.</i></p> <p>No release to land or waters outside of the TSF footprint is proposed in connection with the activity. The TSF is an engineered structure particularly designed to contain mineral waste generated from mineral processing, and is suitable for disposal of wastes outlined in the proposal.</p>	

6) EA Assessment—Standard Criteria

The standard criteria must be considered when deciding the EA application as per s. 176 of the EP Act.

Have you considered the Standard Criteria (below) for the environmental authority application? ☒ Yes

standard criteria means—

(a) the following principles of environmental policy as set out in the Intergovernmental Agreement on the Environment—

- (i) the precautionary principle;*
- (ii) intergenerational equity;*
- (iii) conservation of biological diversity and ecological integrity; and*

Consideration: The proposed storage and disposal of limited quantities of regulated waste from associated off site operations and the Century Mine (Lawn Hill) project site does not constitute a significant development proposal. The reasonably small scale of the proposal and intended integration with waste management activities which are already occurring suggests that the development proposal does not represent a significant risk to environmental values present on or adjacent to the site.

R

(b) any Commonwealth or State government plans, standards, agreements or requirements about environmental protection or ecologically sustainable development; and

Considered: No additional requirements identifies

(c) [note: There is no Standard Criteria (c); the previous requirement to consider the *Wild Rivers Act 2005* - which has been repealed - has been removed]

(d) any relevant environmental impact study, assessment or report; and

Considered: The following report which accompanied the application was considered as part of the assessment process:

Grownow, C., June 2014, *Environmental and planning assessment of storage and disposal of regulated waste at Lawn Hill Mine: Material change of use to: Industry (Storage and disposal of regulated waste from outside the MMG Lawn Hill mining lease area: Report to MMG Century Ltd*, Revision 0, Ashgrove Environmental, Ashgrove, Qld.

(e) the character, resilience and values of the receiving environment; and

Considered: The application presented to the department is considerate of the environmental values of the environment in which the activity is proposed and is not expected to significantly increase risks to the receiving environment. It is particularly noted that no disposal of waste is proposed outside the footprint of the existing TSF facility, and that disposal of waste types within the TSF are not expected to impact on the structural integrity of the facility or longer term rehabilitation objectives.

(f) all submissions made by the applicant and submitters; and

Considered: Application documentation and submitted supporting materials were considered. No additional submissions were received.

(g) the best practice environmental management for activities under any relevant instrument, or proposed instrument, as follows—

- (i) an environmental authority;
- (ii) a transitional environmental program;
- (iii) an environmental protection order;
- (iv) a disposal permit;
- (v) a development approval; and

R

Considered: Current activities regulated by MMG Centuries existing environmental authority EPML00888813 have been considered. The disposal options and associated measures for managing impacts to the environment are considered appropriate for the nominal increase in waste to be managed at the mine site, noting that the proposal is for received waste to be integrated into existing waste management streams, and that the proposal makes use of facilities which are already in existence.

(h) the financial implications of the requirements under an instrument, or proposed instrument, mentioned in paragraph (g) as they would relate to the type of activity or industry carried out, or proposed to be carried out, under the instrument; and

Considered: Requirements and obligations to be imposed under the environmental authority are not expected to create a financial impost to MMG Century Limited and are considered reasonable and appropriate for the proposed activity.

(i) the public interest; and

Considered: The public interest is unlikely to be adversely affected by the proposed activity.

(j) any relevant site management plan; and

Considered: There is no relevant site management plan for the proposal; however, some of the management aspects and requirements associated with the proposal are already permitted with respect to mine generated waste. It is expected that handling and disposal of regulated waste will not occur contrary to the existing environmental authority EPML00888813, which conditions existing activities undertaken at the Century Mine (Lawn Hill) project site.

(k) any relevant integrated environmental management system or proposed integrated environmental management system; and

Considered: There is no integrated environmental management system required in connection with the proposal; however, it is noted that MMG Century intends to integrate the management of additional waste into current waste streams already present on-site. In this respect documentary requirements under MMG Century's existing environmental authority EPML00888813 will also capture the new activity which is proposed. Examples of captured aspects associated with the new proposal include existing EA requirement pertaining to:

- o Surface and groundwater monitoring

Assessment of a development application involving a prescribed environmentally relevant activity (ERA) received from 1 July 2013

- The receiving water monitoring program (REMP).
- The Water Management Plan
- Required annual audits and assessments associated with operating regulated structures
- Conditions associated with onsite water storages
- Waste management and authorisations
- Rehabilitation and other land related requirements

(f) any other matter prescribed under a regulation.

Considered: The application has been assessed -

- against the applicable state code(s) in the State Development Assessment Provisions (SDAP) as prescribed under the *Sustainable Planning Regulation 2009*; and
- compliant with the regulatory requirements prescribed in chapter 4 of the *Environmental Protection Regulation 2008*

Additional summary:

MMG Century is proposing to accept regulated waste at the Century Mine (Lawn Hill) for storage and disposal. The wastes proposed for receipt are generated off site from associated activities (MMG Century's Karumba Port Facility and the Concentrate Pipeline) and from a separate MMG mining project (Dugald River Mine). The proposed activity relates to acceptance of wastes generated off-site which are not significantly different to those generated on-site.

7) EA Assessment—Other considerations

Is the applicant a registered suitable operator?	☒ Yes ☐ No – EA must be refused
Have all EA conditions imposed under ss. 52 & 53 been placed on the EA, not the development approval?	☒ Yes ☐ Not applicable

8) EA assessment—Consultations

The proposal has been discussion with the applicant and draft conditions will be supplied for perusal and comment once finalised.

R

9) EA assessment—Conditioning

The conditions must reflect the outcomes identified in table 1 of Schedule 5 in the EP Act, and should not prescribe how the outcomes are to be achieved unless the risk of environmental harm warrants it. Officers **MUST** use the conditions approved by the Department (for example, from the EA conditions library) unless the outcome that the applicant must achieve is not included in the guidance material. You **must** consider conditioning for the following where appropriate:

Conditions to be considered as per section 52 of the EP Reg:	Included in EA?	Conditions library used?	Alternate condition (not in library)	Reason
Conditions to implement a system for managing risk	☒ Yes ☐ Not necessary	☒ Yes ☐ Not necessary	Not required.	Condition G4: EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7] is to be adopted.
Conditions prescribing how any high risks identified must be managed, including measures for avoiding or minimising the release of contaminants. This may be appropriate when the contaminant of concern poses a high environmental risk (for example, persistent organic pollutants), the technology being employed is new and not well understood or the receiving environmental values warrant prescriptive conditions to reduce the risk. Conditions may include how contaminants are stored, handled and disposed of.	☐ Yes ☒ Not necessary	☐ Yes ☒ Not necessary	Not required.	The proposed activity involves the storage and disposal of regulated waste. A requirement for prescriptive conditions has not been identified; however, a condition authorising disposal of nominated regulated waste within the TSF will be included.
Conditions requiring buffers to sensitive receptors to ensure the environmental values are protected. For example, riparian buffers.	☐ Yes ☒ Not necessary	☐ Yes ☒ Not necessary	Not required.	The need to impose a buffer to distance the proposed activity from sensitive receptors has not been identified as an EA

Conditions to be considered as per section 52 of the EP Reg:	Included in EA?	Conditions library used?	Alternate condition (not in library)	Reason
<i>Please note: Where a condition requiring a buffer from a sensitive receptor has been imposed on the development approval (P02 of the SDAP) the same condition on the EA is not necessary.</i>				requirement
<p>Conditions about the quality, quantity and way in which contaminants are permitted to be released to the environment including any specific requirements which limit/reduce the initial attenuation or mixing zone (e.g. specific dilution required for releases to waters) or prescribe that contaminants must be treated before release (e.g. prescribing a level of treatment of by-pass flows from an STP).</p> <p>The purpose of these conditions is to ensure the on-going protection of environmental values.</p>	☐ Yes ☒ Not necessary	☐ Yes ☒ Not necessary	Not required.	<p>The activities do not propose releases of contaminants to the environment.</p> <p>Complimentary monitoring requirements and associated conditions exist on a separate EA issued to the applicant for mining related activities undertaken at the location. Wholesale duplication of conditions is not considered warranted for the types and quantities of additional wastes proposed to be received.</p>
Conditions ensuring a minimum degree of dispersion happens when a contaminant is released	☐ Yes ☒ Not necessary	☐ Yes ☒ Not necessary	Not required.	The activity proposed does not involve the generation or release of contaminants to the environment.
Conditions to protect environmental values and meet quality objectives under any relevant environmental protection policies (EPPs)	☒ Yes ☐ Not	☒ Yes ☐ Not	Not required.	Model operating conditions – EHP Guideline: Common conditions – prescribed

Assessment of a development application involving a prescribed environmentally relevant activity (ERA) received from 1 July 2013

Conditions to be considered as per section 52 of the EP Reg:	Included in EA?	Conditions library used?	Alternate condition (not in library)	Reason
	necessary	necessary		environmental relevant activities [EM1096, version 7] are proposed.
Conditions about recycling, storing transferring or disposing of waste in a particular way	☒ Yes ☐ Not necessary	☒ Yes ☐ Not necessary	Not required.	<p>Select model conditions from EHP guidelines are proposed for inclusion.</p> <p>An additional non-standard condition authorising disposal of particular regulated wastes within the TSF is also proposed (refer attachment 1).</p>
Conditions stating the rehabilitation outcomes required.	☒ Yes ☐ Not necessary	☒ Yes ☐ Not necessary	Not required.	Condition L2: EHP Guideline: Model operating conditions—ERA 60—Waste disposal [EM1211, version 1] is proposed.
Any conditions required to reduce the risk of not achieving the environmental objectives when considering high risk activities.	☐ Yes ☒ Not necessary	☐ Yes ☒ Not necessary	Not required.	The proposed activity is not considered high risk.
Other conditions that may be considered:	Included in EA?	Conditions library used?	Alternate condition (not in library)	Reason

R

Assessment of a development application involving a prescribed environmentally relevant activity (ERA) received from 1 July 2013

Conditions about the frequency and parameters of monitoring any releases, including any receiving environment monitoring program when appropriate. <i>(refer to section 53 of the EP Reg for further details on what you must consider)</i>	☐ Yes ☒ Not necessary	☐ Yes ☒ Not necessary	Not required.	There are no proposed releases to the environment.
Conditions imposed by the Coordinator General (only relevant if the project is declared a coordinated project under s. 26 of the <i>State Development and Public Works Organisation Act 1971</i> . <i>(refer to section 205 and 208 of the EP Act for further details)</i>	☐ Yes ☒ Not necessary	☐ Yes ☒ Not necessary	Not required.	The proposal has not been declared a coordinated project under the <i>State Development and Public Works Organisation Act 1971</i> .
Conditions relating to remediating environmental harm because of the ERA <i>(refer to section 207 of the EP Act)</i>	☒ Yes ☐ Not necessary	☒ Yes ☐ Not necessary	Not required.	Condition L2: EHP Guideline: Model operating conditions—ERA 60—Waste disposal [EM1211, version 1] is proposed to requiring rehabilitation. Regulatory tools available under the <i>Environmental Protection Act 1994</i> may also be applied independent of EA conditions to ensure compliance with the general environmental duty (GED) should a need arise.
Conditions relating to access to land of which the ERA is being carried out	☐ Yes ☒ Not	☐ Yes ☒ Not	Not required.	This has not been identified as being required.

Assessment of a development application involving a prescribed environmentally relevant activity (ERA) received from 1 July 2013

(refer to section 207 of the EP Act)	necessary	necessary		
Conditions requiring a statement of compliance about a document or works relating to the ERA. (refer to section 207 of the EP Act)	☐ Yes ☒ Not necessary	☐ Yes ☒ Not necessary	Not required.	Condition G4: EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7] - requiring that the activity be undertaken in accordance with written procedures - is proposed.
Conditions requiring financial assurance (refer to section 292 of the EP Act)	☐ Yes ☒ Not necessary	☐ Yes ☒ Not necessary	Not required.	Financial assurance is held under existing EA EPML00888813; an addition FA requirement for the ERAs which would be authorised under this EA has not been identified.

The enforceability of any new conditions must be checked BEFORE approval by the delegate can be obtained.

10) EA assessment—Further relevant information

R

11) Recommendation for the development application

It is recommended that the development application be:

☒ **Approved**

☐ **Refused** – provide statement of reasons

☐ **N/A**

12) Recommendation for the EA application

It is recommended that the EA application be:

☒ **Approved**

☐ **Refused** – provide statement of reasons

☐ **N/A**

Assessing Officer: Robert Pettit

Position: Senior Conservation Officer (Assessment), Minerals

Signed:

49-Sch4 - Personal Information

Date:

22-01-2015

RTI DL RELEASE - EHP

13) Review and endorsement

Insert any comments relevant for the delegates consideration:

Sarah Offner	49-Sch4 - Personal Information	22/01/2015
Manager/Supervisor	Signed	Date

14) Approval

I approve the recommendation based on the reasons stated in this report.

Dean Sharpe	49-Sch4 - Personal Information	22/1/15
Delegate	Signed	Date

Attachment 1

Summary:

20 Conditions have been identified for inclusion in an environmental authority for the proposed ERA56 and ERA60(1)(a) activities

- 19 (or 95%) are standard conditions promoted in EHP Guidelines
- The additional condition is a site specific condition authorising disposal of specified regulated waste within the TSF.

Conditions derived from:

- EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7]
- EHP Guideline: Model operating conditions—ERA 60—Waste disposal [EM1211, version 1]

#	Condition	Justification
General		
G1	Any breach of a condition of this environmental authority must be reported to the administering authority as soon as practicable within 24 hours of becoming aware of the breach. Records must be kept including full details of the breach and any subsequent actions taken.	Condition G1: EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7]
G2	All reasonable and practicable measures must be taken to prevent or minimise environmental harm caused by the activities.	Condition G3: EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7]
G3	The activity must be undertaken in accordance with written procedures that: a) identify potential risks to the environment from the activity during routine operations and emergencies; and b) establish and maintain control measures that minimise the potential for environmental harm; and c) ensure plant, equipment and measures are maintained in a proper and effective condition; and d) ensure plant, equipment and measures are operated in a proper and effective manner; and e) ensure that staff are trained and aware of their obligations under the <i>Environmental Protection Act 1994</i> ; and f) ensure that reviews of environmental performance are undertaken at least annually.	Condition G4: EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7]

G4	All records must be kept for a period of at least five years and provided to the administering authority upon request.	Condition G5: EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7]
G5	Chemicals and fuels in containers of greater than 15 litres must be stored within a secondary containment system.	Condition G6: EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7]
G6	When required by the administering authority, monitoring must be undertaken in the manner prescribed by the administering authority to investigate a complaint of environmental nuisance arising from the activity. The monitoring results must be provided within 10 business days to the administering authority upon its request.	Condition G9: EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7]
G7	All analyses required under this environmental authority must be carried out by a laboratory that has NATA certification, or an equivalent certification, for such analyses.	Condition G7: EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7]
Air		
A1	Odours or airborne contaminants must not cause environmental nuisance to any sensitive place or commercial place.	Condition A1: EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7]
A2	Contaminants must not be released to air from any point source.	Condition A2: EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7]

Noise		
N1	Noise generated by the activity must not cause environmental nuisance to any sensitive place or commercial place.	Condition N1: EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7]
Water		
WT1	Contaminants must not be released to any waters.	Condition WT1: EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7]
WT2	Contaminants must not be released to groundwater or at a location where they are likely to release to groundwater.	Condition WT2: EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7]
WT3	All batteries, liquid chemicals, fuels, and other liquid substances with potential to cause environmental harm must be stored within a secondary containment system that is impervious to the materials stored within it, and must be managed to prevent the release of contaminants to waters or land.	Condition WT7: EHP Guideline: Model operating conditions—ERA 60—Waste disposal [EM1211, version 1]
Land		
L1	Other than as permitted within this environmental authority, contaminants must not be released to land.	Condition L1: EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7]
L2	Land that has been disturbed for activities conducted under this environmental authority must be rehabilitated in a manner such that: 1. suitable species of vegetation for the location are established and sustained for earthen surfaces 2. potential for erosion is minimised 3. the quality of water, including seepage, released from the site does not cause environmental harm 4. potential for environmental nuisance caused by dust is minimised 5. the water quality of any residual water body does not have potential to cause environmental harm 6. the final landform is stable and protects public safety 7. the contaminant concentrations within the final capping layer are appropriate for the final land use and in accordance with the 'National Environmental Protection (Assessment of Soil Contamination) Measure 1999.'	Condition L2: EHP Guideline: Model operating conditions—ERA 60—Waste disposal [EM1211, version 1]

Waste		
WS1	All waste generated in carrying out the activity must be reused, recycled or removed to a facility that can lawfully accept the waste.	Condition W1: EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7]
WS2	Incompatible wastes must not be mixed in the same container or waste storage area.	Condition W2: EHP Guideline: Common conditions – prescribed environmental relevant activities [EM1096, version 7]
WS3	<p>Regulated waste authorised for disposal under this environmental authority will only be disposed of within the Tailings Storage Facility, marked as 'Tailings Storage Facility' on schedule A – Figure 1.</p> <p>The regulated waste authorised consists of:</p> <ul style="list-style-type: none"> a) Sewage and water treatment plant sludge originating from authorised activities conducted at MMG Australia Limited's Dugald River Mine Project under environmental authority EPML00731213. b) Spent components impregnated with lead and other heavy metals, including used filter cloths and rubberised components, originating from authorised activities conducted at MMG Century Limited's Port facility in Karumba under environmental authority EPPR0518513. c) Spent components impregnated with lead and other heavy metals and soils and sludge contaminated with lead and zinc that is associated with maintenance activities undertaken on MMG Century Limited's concentrate pipeline to Century's Port facility in Karumba d) Any other waste for which written agreement for disposal has been obtained from the administering authority 	Non-standard condition to authorise disposal of regulated waste in the MMG Century Limited's TSF. The condition has been worded in a similar format to an existing condition contained in MMG Century's existing EA EPML00888813.
WS4	<p>Tailings must be managed in accordance with procedures contained within a current plan of operations. These procedures must include provisions for:</p> <ul style="list-style-type: none"> a) containment of tailings b) the management of seepage and leachates both during operation and the foreseeable future c) the control of fugitive emissions to air d) a program of progressive sampling and characterisation to identify acid producing potential and metal concentrations of tailings e) maintaining records of the relative locations of any other waste stored within the tailings f) rehabilitation strategy g) monitoring of rehabilitation, research and/or trials to verify the requirements and methods for decommissioning and final rehabilitation of tailings, including the prevention and management of acid mine drainage, erosion minimisation and establishment of vegetation cover. 	<p>Condition C4: EHP Guideline: Model mining conditions [EM944, version 4]</p> <p>Nb. While a plan of operations is not required particularly for this environmental authority, MMG Century are required to have one in relation to authorised mining activities, including management of the TSF.</p>

WS5	Deposited waste must be covered as soon as practicable to limit stormwater infiltration, prevent exposure of waste and prevent issues arising from vectors and pest species.	Condition W3: EHP Guideline: Model operating conditions—ERA 60—Waste disposal [EM1211, version 1]
-----	--	---

RTI DL RELEASE - EHP

R