CEMENT CONCRETE & AGGREGATES AUSTRALIA

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Via email: REC.Consultation@dmirs.wa.gov.au

SUBJECT: DRAFT GUIDELINE FOR PREPARING MINE CLOSURE PLANS

Dear Tyler

Cement Concrete & Aggregates Australia (CCAA) welcomes the opportunity to provide comments to the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) on the Draft Guideline for Preparing Mine Closure Plans.

CCAA is the peak body for the heavy construction materials industry in Australia. Our members operate cement manufacturing and distribution facilities, concrete batching plants, hard rock quarries and sand and gravel extraction operations throughout the nation. CCAA membership produce the majority of Australia's cement, concrete & aggregates, and ranges from large global companies to SMEs and family operated businesses.

CCAA welcomes efforts to streamline administrative processes and reduce unnecessary red tape.

CCAA **supports** the principles of the draft Guideline for Preparing Mine Closure Plans (MCP) as outlined in Page 4 of the document, that planning for mine closure should be an integral part of mine development and operations planning and that closure planning is a progressive process and that mine closure plans are evolving documents, with detail increasing as the mine moves towards closure.

CCAA makes the following comments to improve the documents clarity, purpose, application to BRM operations and efficiency of process:

- General - The overly prescriptive nature of the requirements throughout the document do not reflect the principles as outlined in Page 4. Many of these prescriptions and issues are relevant to large, complex, long life mining operations but are not relevant to the generally lower risk and smaller Basic Raw Material (BRM) operations. E.g. asbestos and radioactive elements are not applicable to BRM operations.

  Basic Raw Materials quarries consist of sand, limestone, gravel, gypsum, limesand, river gravels, clay and hard rock. There are very large number of such quarries across Western Australia, mostly on private land which do not fall under the *Mining Act 1978*. Those quarries however produce vast quantities of essential construction materials for the community and as raw feed for concrete production.

  Apart from large hard rock quarries which generally do not occur on mining tenements, Basic Raw Material quarries are generally small either in total area of shallow depth of excavation.

Many quarries on Crown Land are only 2 – 5 metres deep. They are regulated by DWER Water Quality Protection Note 15, Basic Raw Materials which generally do not permit excavation below the water table, with separations of between 0.5 to 3 metres depending on the sensitivity of the environment in which the pits operate.

The operations dig natural materials and use those with minimal processing and therefore have the lowest environmental risk of any mines.

Basic Raw Materials are recognised as a separate entity and risk within the *Mining Act 1978* and are only caught by the Act wen located on Crown Land. The JORC Code also recognises the special low risk and more consistent properties of Basic Raw Materials by their reduced reporting and assessment requirements.

The generally lower risk of BRM operations is well recognised by Government. DWER has produced Water Quality Protection Note 15 Basic Raw Materials (WQPN 15) which is used as the criteria to assess quarry development applications and has approved many Basic Raw Materials pits located in Priority Water Catchment Areas such as the Gnangara Mound.

As there is minimal processing and excavation is restricted to above the water table the key environmental risk is from fuel and servicing hydrocarbons. DWER and WQPN15 permits Basic Raw Material extraction within Priority 1 Water Catchments as research outlined in WQPN15 demonstrates that hydrocarbon risk in such catchments is low.

Further, as can be seen in the summary below, many of the examples or requirements listed in the Closure Plan Guidelines are not appropriate.

- Many Basic Raw Material pits are not drilled because it is not necessary. The product is simply tested to meet certain geotechnical specification. Areas of the pit that are below specification are simply not excavated.
- With the general lack of drilling the requirements for block diagrams and detailed 3D pit designs are not appropriate and normally not required.
- Excavation normally progressively moves across the land surface with progressive opening and closure of land so that at any one time there is only a relatively small amount of ground open. This provides a ready assessable closure and revegetation compliance through the life of the pit.
- Many Basic Raw Materials pits on Crown Land are usually only 2 – 5 metres deep.
- With their low environmental risks many Basic Raw Materials pits are supported by Government Planning to be repurposed to future industrial or even urban and other uses.
- Excavations leave shallow voids that are normally contoured to replicate the local geomorphology.
- There are no large-scale dumps retained at closure as overburden and topsoil is placed over faces or used as backfill and re-contouring of the pit and hence there is no requirement for dump stability modelling.

The suggested examples for detailed hydrological assessments, water analyses asbestos and radiation assessments, oxidative mineral changes, sulphide and acidic conditions assessments, are not appropriate, not required or necessary.

The Guidelines as currently written do not achieve the aim of streamlining the MCP process for Basic Raw Materials but rather the experience of CCAA members indicates an increased, unnecessary workload for both proponents and DEMIRS.

The updated Guidelines should be developed to minimise the administrative burden for all parties. An opportunity is provided by reducing the requirements based on risk for Basic Raw Materials.

CCAA recommends the solution to the problem is best served by an additional Appendix to the MCP Guide that provides a summary of the requirements expected for Basic Raw Material operations. The checklist is a succinct document. CCAA welcomes the opportunity to provide such a checklist to guide both proponents and DEMIRS officers to the appropriate level of assessment and documentation.

The summary of BRM requirements has been prepared by very experienced CCAA members and is provided in Appendix 1.

Including examples from low-risk operations in each section would also greatly assist a common understanding of compliance and demonstrate to proponents and DEMIRS staff that other approaches are available for low-risk operations. These examples can be taken from existing mine closure plans for low-risk operations such as mining for sand in the Gnangara Pine Plantations, limesand operations at Lancelin or Dongara, limestone mining at Nowergup/Carabooda and gypsum mining on small salt lakes such as Lake Hillman and Lake Cowcowing.

- General – The low-risk nature of many basic raw material operations should be recognised in the document and by the DEMIRS Assessment Officers not requiring evidence to support clearly non applicable issues to BRM operations. The onus should be on the operator to outline all the applicable risks, providing proof via appropriate monitoring and reporting that are then checked by an active DEMIRS compliance team during the site's operation. This avoids the operator providing complex, detailed reports for a time well into the future when situations may change. Such a dynamic future should be recognised by DEMIRS.

- General – DEMIRS Assessment Officers should be properly trained in the new Guidelines to increase consistency of assessment outcomes. CCAA members are willing to host site visits to increase DEMIRS officer's industry understanding.

- General – CCAA supports the same risk criteria assessments, completion criteria, objectives being used for Mining Proposals, Mine Development Plans etc which ensures consistency across all phases of an operation.

- Section 5 Post Mining Land Use – Throughout the Guide, mine closure seems to be focused on environmental outcomes and rehabilitation, which for most mine sites is acceptable. For some quarries, particularly in the metropolitan and peri-urban areas, an open-minded approach needs to be employed and the term 're-purpose' rather than rehabilitation is a better description where the final end land use may be to residential or commercial development. This re-purpose perspective needs to be equally considered by DEMIRS in determining final end land use.

- Section 6 Closure Risk Assessment - CCAA **supports** the same risk assessment framework is used for both the Mine Development and Closure Proposal and the Mine Closure Plan.

- Section 7 Closure Outcomes and Completion Criteria – CCAA **supports** the completion criteria to follow the S.M.A.R.T principle and that they be used to quantify when mining lease ownership can be relinquished.

- Section 12 Reviewed Mine Closure Plans - The timing to review MCPs and submit for approval by DEMIRS should be dependent on the life, risk profile and the current stage of the operation. For example, for a 20 year mine life, only broad information is required in years 1 – 15, with updated MCPs provided every 5 – 10 years with greater detail provided in MCPs submitted in years 15 – 20. This is consistent with the principles outlined in Page 4 of the Guide.

  In situations where there has been no or minimal material changes to the proposed end land use and rehabilitation, providing a revised MCP is unnecessarily onerous for all parties. At most, an addendum to the MCP outlining any changes would be sufficient in these circumstances.

  Expanding on this principle, instead of total revisions of MCPs an addendum to the MCP could be the standard approach for all BRM activities that are not complex. Upon review of an addendum DEMIRS could then determine any need for a full revision, as per Appendix 1. CCAA can assist in developing an addendum template.

As has been mentioned previously to DEMIRS, CCAA members are willing to host site visits to DEMIRS officers to a range of sand and hard rock quarries to help them better understand our industry. This could be incorporated into the Department's induction process. There is nothing like being on site to understand issues and a richer conversation is always held when looking at the operation compared to sitting around a boardroom table or reading reports.

Western Australia's regulatory environment needs to be internationally competitive to continue to attract capital to invest into the state to ensure a sustainable and competitive heavy construction materials industry. This in turn facilitates Western Australia's productivity, housing affordability and lower infrastructure costs.

For further information please contact Roger Buckley, State Director Western Australia on Mobile: 0417 401797 or Email: roger.buckley@ccaa.com.au.

Yours sincerely

MICHAEL KILGARIFF
Chief Executive Officer

APPENDIX 1 – CCAA SUBMISSION

Proposed Appendix to the Guideline for Preparing Mine Closure Plan – May 2024

Closure Guidelines for Basic Raw Materials Operations

Objectives

The objective of this appendix is to ensure that Basic Raw Materials closure planning complies with the Statutory requirements and DEMIRS' expectations for the closure of Basic Raw Materials Operations and recognises the relatively lower environmental risk of such operations.

At the same time the information required is to ensure that Operators demonstrate that:

- Mining operation is being managed to meet DEMIRS' objective for rehabilitation and closure and disturbances are rehabilitated and closed in a manner to make them physically safe to humans and animals, geo-technically stable, geo-chemically non-polluting/non-contaminating, and capable of sustaining an agreed post-mining land use without unacceptable liability to the State.
- Mine closure plans submitted to DEMIRS meet the requirements set out in the Mining Act and Regulations.
- Mine closure plans received are of a high quality and provide sufficient detail on relevant factors.
- Requests for further information are minimised.
- There is transparency around the rehabilitation and closure.

Scope

The Closure Guideline for Basic Raw Materials relates to mine closure plans submitted pursuant to section 103AT of the (amended) Mining Act which defines a mine closure plan as a planning and reporting document for:

- Decommissioning of a mine
- Rehabilitation of the land
- Closure outcomes
- Any other prescribed information
- Summary of the differences between Basic Raw Material Extraction and Mineral Extraction

Basic Raw Materials

Basic Raw Materials are the construction materials for society and consist of sand, limestone, gravel, gypsum, limesand, river gravels, clay and hard rock. Because they use the raw materials in the natural state combined with some physical crushing and screening and no chemical product alteration or refining their extraction and processing present a relatively lower risk to the environment.

Basic Raw Materials are excluded from the *Mining Act 1978* as they are defined under the Act as not a mineral except where they occur or are extracted from Crown Land.

The vast majority of Basic Raw Material operations are conducted on private land where approvals are provided under the *Planning and Development Act 2005* and the *Local Government Act 1995*

through the Local Authority and environmental agencies. In some situations, such as under Region Planning Schemes, the Western Australian Planning Commission will also require approval.

The needs and staged use of Basic Raw Materials is recognised in planning policies such as *State Planning Policies 2.4 Basic Raw Materials, and 2.5 Rural Planning* as well as Regional, Local and other planning policies and schemes.

Most Basic Raw Material extraction occurs on private land where there are well defined planning and control mechanisms under the planning framework.

As such Mining Proposal and Mine Closure Plans under the *Mining Act 1978* are only applicable where Basic Raw Materials are extracted from Crown Land. It is logical to align the requirements for extraction of Basic Raw Materials on Crown Land with the requirements under the planning framework.

Basic Raw Materials are well recognised as low-risk excavation by Government with the following examples:

- The *Mining Act 1978* separates Basic Raw Materials from Mineral Extraction,
- The *JORC Code 2012* provides for reduced reporting and assessment requirements,
- DWER has issued *Water Quality Protection Note (WPQN) 15 Basic Raw Materials Extraction,*
- WAPC has produced *State Planning Policy 2.4, Planning for Basic Raw Materials* and *Planning for Basic Raw Materials guidelines.*

Basic Raw Materials differ from mineral mining projects in that they have the following general characteristics:

- They materials are natural weathered surface and regolith products.
- They are often not drilled but rely on surface observations, test holes and limited sampling for identification.
- Sampling is normally only limited to physical tests.
- They do not contain deleterious materials such as asbestos, radioactivity, sulfides, heavy metals or acidic conditions.
- Do not require chemical alteration of the products.
- Use minimal chemical substances with the highest environmental risk from fuels and lubricants used onsite.
- Are shallow surface pits and quarries.
- Only hard rock quarries are deep and may operate below the water table, with extraction of other commodities mostly restricted to above the water table.
- Have high levels of pit stability on closure.
- Are permitted to operate in Priority Water Catchments.
- Only use explosives for hard rock extraction.
- Do not produce waste dumps.
- Are short lived.
- Progressively move across the land surface and are generally progressively rehabilitated.
- Have small areas of ground disturbance at any one time.
- The excavation face and physical processing does not have a fixed location within the site but may migrate with the staged development of the site.

Closure Guidelines for Basic Raw Material Operations

The Mine Closure Table of Contents is listed below with comments on the proposed level of requirement for Basic Raw Material operations.

As Basic Raw Material extraction on freehold land is dealt with under planning policies and approvals, the guidance in Table 1 seeks to harmonize Basic Raw Material requirements on mining leases with the risks, procedures, management, guidelines and requirements on freehold land, aligning the two approval systems on this aspect.

The level of information should be reflective of the stage of mine development (i.e. planning and design/approvals, construction, operations, decommissioning, post-closure maintenance and monitoring).

Basic Raw Material operations normally progress across the resource and are likely to have all stages of mining, including final closure and monitoring occurring simultaneously and therefore the closure planning is likely to require all closure activities to be described from an early stage. On the other hand for some large-scale hard rock quarries it may be appropriate for the detail in the closure planning to increase with time as final closure approaches.

Table 1 - Contents of Mine Closure Plan for Basic Raw Materials

Item	Content	Discussion	References – Additional information
1	Description of the Mining Operation	The description should include similar requirements to the Closure Guidelines.	
2	Identification of Closure Obligations and Commitments	A Legal Obligations Register is to be provided as per the Closure Guidelines and may need to consider future Government planning policies when located near settlements or infrastructure.	
3	Baseline Data, Analysis and Implications for Closure.	An assessment of the baseline data should be similar to the Closure Guidelines but will only need to consider factors relevant to the proposal. All environmental factors need to be considered but only those relevant to the operations are to be reported on. Any technical studies should include descriptions relevant to closure and any predicted long term environmental situations if applicable. **Physical Attributes** Local physical conditions of geology, topography and hydrology will need to be considered but seismicity and geotechnical data are not normally required. Generally geotechnical discussions will relate to the stability of final slopes, landforms and soil erosion. **Soils Waste Characterisation** Soil overburden and other materials are normally natural with no deleterious components. Analysis of items that may be applicable to or arise from a mining operation and are not present, such as acidic, contaminated drainage, waste dumps, sulfides, waste dumps, radiation, heavy metals will not be required. Normally the only contamination risk is from fuel usage and servicing. **Water Resource** See DWER WQPN 15 for the level of detail required. Local drainages, resources, ecological values are to be considered to show how the completed surface relates to the natural hydrological features. Detailed hydrological studies are not normally required.	DWER Water Quality Protection Note 15. WAPC Planning for Basic Raw Materials guidelines 2021. *Contaminated Sites Act 2003.*

Item	Content	Discussion	References – Additional information
		As there is generally low risk, detailed water analyses are not normally required apart from annual water testing for sediment, dissolved solids and hydrocarbons as may be appropriate. Where proposals maintain a separation to the water table in line with WPQN 15 commitments to maintain that separation and a knowledge of the depth to the water table is required. Unless agreed with DWER, exposure of the water table is not normally appropriate. There will be situations where pooling of surface water in ponds or basins is appropriate in deeper pits or for better environmental outcomes. **Final Land Surface** Block Diagrams will not be required where overburden is used to backfill voids and restore landform and no large waste dumps are to remain. Slope stability should comply with DEMIRS Guidelines or at a reduced angle. Concept section lines and or concept contours of the proposed final land surface are expected. **Biological** Similar discussions and requirements of flora, fauna, ecological communities National Parks and Reserves etc are likely to be required consistent with the Closure Guidelines. Stygofauna and troglofaunal are not likely to be impacted for most Basic Raw Material pits. Seed and species to be used in revegetation should be outlined. **Heritage** Similar treatment to the Closure Guidelines, proportionate to the potential impacts. **Social Setting** Similar treatment to the Closure Guidelines, proportionate to the potential impacts. For example, a limesand operation will have much lower potential impact near settlements than a large hard rock quarry. Future planning considerations may be required	
	Materials Characterisation	Normally there will be no adverse materials that will need to be considered such as acidic, contaminated drainage, waste dumps, sulfides, waste dumps, radiation, heavy metals will not be required.	DWER Water Quality Protection Note 15. *Contaminated Sites Act 2003.*
	Contaminated Sites	Normally the only risk of contamination is from fuel usage and servicing. See DWER WQPN 15 for guidance, a consideration of the separations to the water table and risks from hydrocarbon spills.	DWER Water Quality Protection Note 15. *Contaminated Sites Act 2003.*
4	Stakeholder Engagement	Similar requirements to the Closure Guidelines.	
5	Post Mining Land Use	Planning considerations may need to be included where planning policies cover or are near the resource.	DWER Water Quality Protection Note 15. WAPC Basic Raw Materials Guidelines 2018.
6	Closure Risk Assessment	Similar requirements to the Closure Guidelines, but only for the items relevant to Basic Raw Material closure risk.	

Item	Content	Discussion	References – Additional information
7	Closure Outcomes and Completion Criteria	Similar requirements to the Closure Guidelines, but only for the items relevant to Basic Raw Material closure risk.	
8	Closure Implementation	Similar requirements to the Closure Guidelines.	
9	Closure Monitoring and Maintenance	Similar requirements to the Closure Guidelines.	
10	Closure Cost Estimation	Similar requirements to the Closure Guidelines.	
11	Management of Information and Data	Similar requirements to the Closure Guidelines.	
12	Reviewed Mine Closure Plans	Similar requirements to the Closure Guidelines.	