

Extractive Minerals PEPR contents checklist

Important notes about this draft checklist:

- This is a draft checklist and is subject to change.
- This draft checklist reflects the requirements of the new Act, Regulations and Terms of Reference (TOR) that will come into force on 1 Jan 2021.
- Yellow highlights below indicate changes from current Legislation and Ministerial Determination MD002.
- **Not all changes** are highlighted in yellow below. There are minor editorial and formatting changes that are not highlighted.
- The applicant should ensure they are across all changes.
- Please contact DEM Mining Assessments if you have any questions.

This list provides a tick box that makes it easy to ensure you have included all required sections of the PEPR.

Provide information in the sections of the PEPR if they apply to the proposed mining operation. Clearly state if the section is not applicable to the mining operation.

This checklist should not be used as a standalone tool and must be used in conjunction with the Terms of Reference and Guideline to ensure that the details of all regulatory requirements are understood and met.

Framework	Requirement	Included in PEPR?
Guideline	Basic information on the mine	
	EML/MPL number(s)	
	Name/s of the tenement holder, mine operator and on-site contact person (phone and email)	
	Name of the mining operation	
	Date PEPR prepared and version control number	
	Table of contents	
	Version control sheet	
	Summary of PEPR content changes (PEPR reviews only)	
TOR002	Form of the PEPR	
	An electronic version of the PEPR must be submitted online through the relevant government website, or if approved by the Director of Mines or an authorised officer, submitted via email, post or courier and should be marked 'Attention: Mining Assessments';	
	Each page, plan or other separate sheet must include the tenement number(s), date of the PEPR preparation and sequential page numbering; and	
	The electronic version must be submitted in one single Acrobat PDF file or if requested by the Director of Mines or an authorised officer, Microsoft Word compatible files must be submitted;	
	A reviewed PEPR submitted to the Minister for approval under section 70C of the <i>Mining Act</i> 1971, must in accordance with regulation 63(1)(e) include a description or summary of all content changes made to the submitted PEPR.	
r. 84	Requirement for declaration of accuracy	
	Signed statement by the tenement holder, that the person has taken reasonable steps to review the information and to ensure its accuracy.	
TOR002 - 1	Description of the environment	
	A PEPR must include any new baseline environmental data relevant to the control strategies or criteria set out in clause 4 of TOR002, since the previous description of the environment or criteria was provided (in a proposal, approved PEPR or change to operations proposal).	

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	Where changes to the environment are identified, a PEPR must provide an updated description of the environment to describe the changes.	
s. 70B (2)(a)	Description of the quarry operations	
	Each of the elements of the quarry operations must be described <u>only to the extent that they apply to the quarry operation.</u>	
TOR002 – 2.1	General description and maps/plans of operations	
	A summary description and maps of all elements of the quarrying operation must be included.	
TOR002 – 2.2	Resource and products	
TOR002 – 2.2.1	Resource	
	Provide a statement of the extractive minerals proposed to be extracted, recovered and sold.	
	Provide a statement of the current estimated resource or reserve (or both), including: <ul style="list-style-type: none"> • details of the basis of this estimate; and • a declaration that the resource or reserve (or both) has been appropriately identified and estimated. 	
TOR002 – 2.2.2	Production rate and products	
	State the end use and products for all extractive minerals proposed to be sold.	
	Provide estimates of the: <ul style="list-style-type: none"> • annual production rate (product and overburden); • life of the quarry; and • material movement over life of quarry (product and overburden). 	
TOR002 – 2.3	Quarrying Activities	
TOR002 – 2.3.1	Type or types of quarry operation to be carried out	
	Provide: <ul style="list-style-type: none"> • a summary and map (as per 7.1.1.1) of the site layout; • a description of the proposed quarrying method; and • dimensions and depth of proposed pit(s). 	
TOR002 – 2.3.2	Sequence of quarrying and progressive rehabilitation	
	Describe and show on a map (as per 7.1.1.2): <ul style="list-style-type: none"> • staging and description of each progressive quarrying stage; • milestones that will instigate progressive rehabilitation; and • staging and description of each progressive rehabilitation stage including: <ul style="list-style-type: none"> ○ use of overburden; ○ battering of mining faces and other earthworks; ○ topsoil management; and ○ revegetation. 	
TOR002 – 2.3.3	Stockpiles	
TOR002 – 2.3.3.1	Topsoil and subsoil stockpiles	
	Describe and show on a map (as per 7.1.1.1): <ul style="list-style-type: none"> • location, size, shape and height of product of topsoil/subsoil stockpiles. 	
TOR002 – 2.3.3.2	Product Stockpile	
	Describe and show on a map (as per 7.1.1.1): <ul style="list-style-type: none"> • location and height of product of product stockpiles. 	
TOR002 – 2.3.4	Use of explosives	
	If explosives are used, describe: <ul style="list-style-type: none"> • estimated frequency of blasting; and • whether explosives will be stored onsite. 	
TOR002 – 2.3.5	Modes and hours of operation	
	State if the quarry operation will be operated on a continuous (24 hour, 7 days a week), regular periodical or campaign basis.	
	If the quarry operation is to be operated on a regular periodical basis or campaign basis, specify: <ul style="list-style-type: none"> • period(s) (daily, weekly and public holidays) to be worked • start and finish hours the site is to be worked per period. 	
TOR002 – 2.4	Crushing, processing and product transport	
TOR002 – 2.4.1	Fixed plant	
	Describe the specifications of fixed plant including but not limited to: <ul style="list-style-type: none"> • area, size, and location of fixed plant and associated structures 	

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	<ul style="list-style-type: none"> including as applicable concrete batching plant, wheel wash facilities, silos, fuel tanks, water tanks, chemical storage proposed to be used for processing the extractive minerals on site; 	
	a description of rock or sand processing; in particular crushing, washing, drying, screening and separation; and	
	the type(s) of processing/value adding used on the raw material and conducted onsite including but not limited to concrete, bitumen, separation and drying.	
TOR002 – 2.4.2	Hours of operation Describe the hours of crushing, processing and product transport activities.	
TOR002 – 2.4.3	Processing wastes If processing wastes are to be generated provide a description of: <ul style="list-style-type: none"> management of any proposed chemical additives contained within waste to prevent environmental harm; management and disposal of processing wastes; construction and geotechnical design of proposed storage facilities; and construction details/design of evaporation ponds and proposed use of waste material. 	
TOR002 – 2.4.4	Industrial and domestic wastes A description of management of any of the following industrial and domestic wastes must be provided: <ul style="list-style-type: none"> putrescible waste; oil; other onsite waste disposal or recycling; e.g. workshop waste, tyres, drums, oil filters; offsite disposal; and a description of the type, area and layout of sewage systems installed at the site. 	
TOR002 – 2.5	Supporting surface infrastructure	
TOR002 – 2.5.1	Access and roads Describe: <ul style="list-style-type: none"> access route to the site and show on a map (as per 7.1.1.3); indicate if any new roads are to be constructed, or if existing roads or intersections (public and private) are to be upgraded; and transport system(s) used to and from the site and the estimated number of vehicle movements per day. 	
TOR002 – 2.5.2	Accommodation and offices <ul style="list-style-type: none"> Describe onsite personnel accommodation and offices, including but not limited to: number, area, size, type of construction and location of accommodation, office, meals or laboratory buildings, caravans or camp, and associated structures (e.g. car parks, water tanks, etc.) to be used on site; and if temporary or permanent. 	
TOR002 – 2.5.3	Public services and utilities used by the operation Describe: <ul style="list-style-type: none"> sources of services or utilities that are, or are to be supplied to the proposed site, such as power, water, telecommunications etc.; if new connections to services and utilities are required, the proposed routes for connection; and the effects to any existing services or utilities that have been or may be affected by the mining operations. 	
TOR002 – 2.5.4	Visual screening Describe the type of screening, including existing or proposed vegetation (i.e. species and density of plantings) and show on a map (as per 7.1.1.1 or 7.1.1.2)	
TOR002 – 2.5.5	Fuel and chemical storage For all fuels and chemicals stored on site show the proposed location of storage on a map (as per 7.1.1.1) and provide detail on: <ul style="list-style-type: none"> types of bulk chemicals and the volumes of each; and proposed bunding and containment for all chemical and fuel storage vessels. 	
TOR002 – 2.5.6	Site security Describe infrastructure and measures that will be adopted to prevent unauthorised access by the public, including, but not limited to: <ul style="list-style-type: none"> fencing; and 	

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	<ul style="list-style-type: none"> signage. 	
TOR002 – 2.5.7	Erosion, Sediment and Silt Control	
	Describe and show on a map (as per 7.1.1.1):	
	<ul style="list-style-type: none"> location and design of sediment management structures; management and disposal of silt; strategies to control runoff on disturbed areas and rehabilitated areas; and storage, diversion and release of clean water. 	
TOR002 – 2.6	Vegetation clearance	
	If clearance of native vegetation is to occur, a Native Vegetation Management Plan (NVMP) prepared by an accredited consultant must be included with the PEPR.	
	The NVMP must:	
	<ul style="list-style-type: none"> describe the vegetation type to be cleared and include a map (as per 7.1.1.2) showing the proposed clearance area; and state the quantum of significant environmental benefit (SEB) to be gained in exchange for the clearance and describe how the SEB will be provided. 	
	Where native vegetation clearance is planned and in the case where an on ground offset by the operator is to be used to demonstrate the Significant Environmental Benefit (SEB), the statement of criteria must demonstrate the successful implementation of the on ground offset through the native vegetation management plan.	
TOR002 – 2.7	Site Water Management	
	Provide an estimate of the quantity of water to be used and the source of that water. If processing water is to be used, provide a water balance including:	
	<ul style="list-style-type: none"> approximate water volumes required for processing; and a summary of all water inputs and outputs. 	
	Provide a description of all process water ponds, including:	
	<ul style="list-style-type: none"> size, capacity, layout and location of ponds; design and construction methods; and minimum freeboard to be maintained. 	
TOR002 – 2.8	Description of quarry site at completion	
	Provide a map (as per 7.1.1.4), cross-section (as per 7.2.1.2) and a description of the quarry site as it will be at completion after all rehabilitation and closure activities have been completed, including:	
	<ul style="list-style-type: none"> potential land use options; landforms; proposed vegetation covers (including native vegetation that will not be disturbed due to proposed quarrying operations); any quarrying infrastructure that may remain on site and become the responsibility of the landowner; location, description and management of waste disposal areas; location of reshaped and rehabilitated areas, proposed surface contours and revegetation; and location of surface water infrastructure including ponds and diversions. 	
	Provide a description of the proposed mechanism for transferring responsibility for any potential residual liability (i.e. ongoing maintenance or monitoring) subsequent to surrender of the tenement.	
r. 64 (1) & (2) & TOR002 – 3	Consultation	
TOR002 - 3	A description of:	
	<ul style="list-style-type: none"> the process undertaken for identifying stakeholders with an interest in, or stakeholders likely to be directly affected by the quarry operation; the process undertaken for the delivery of information to, gathering of feedback from, and responding to those identified stakeholders; if any individual or group of similar affected persons were not able to be consulted, the steps taken to consult with them. 	
TOR002 - 3		
r. 64 (1) & (2)	The results of the consultation undertaken with those identified stakeholders, including:	
	<ul style="list-style-type: none"> the persons consulted; any concerns / issues raised; and the response and steps (if any) taken or proposed to address those concerns. 	
TOR002 – 4	Environmental outcomes, strategies, criteria and monitoring	

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s. 70B(2)(b) & r. 63(1) & r. 63(3) TOR002 – 4.1	Environmental outcomes	
s. 70B(2)(b)(i)	Set out environmental outcomes (including mine completion outcomes) in accordance with section 70B(2)(b)(i) of the Act, or as required by the lease/licence.	
	For each environmental outcome include:	
r. 63(1)(b)	Control and management strategies	
r. 63(1)(b)	<ul style="list-style-type: none"> set out control and management strategies proposed to be adopted to achieve the environmental outcomes 	
TOR002 – 4.2	<ul style="list-style-type: none"> Demonstrate that the control and management strategies are commensurate with the impacts, achieve compliance with other applicable statutory requirements and promote progressive rehabilitation; 	
r. 63(3)(c)	<ul style="list-style-type: none"> Describe any significant degree of uncertainty in accordance with regulation 63(3)(c) pertaining to the likely effectiveness of control and management strategies, including (but not limited to) lack of site specific information, limitations on modelling and quality of data; 	
TOR002 – 4.2	<ul style="list-style-type: none"> Describe any assumptions connected with the identified uncertainty; and 	
r. 63(3)(d)	<ul style="list-style-type: none"> So far as is relevant, identify the sensitivity to change of any assumption that has been made in accordance with regulation 63(3)(d) and assess the likelihood of an outcome not being achieved if an assumption is later found to be incorrect. 	
s. 70B(2)(b)(ii) & r. 63(1)(c)	Measurement criteria	
s. 70B(2)(b)(ii)	Set out a statement of criteria to be adopted to measure each environmental outcome (including completion outcomes).	
r. 63(1)(c)	Measurement criteria must include all details listed in regulation 63(1)(c); <ul style="list-style-type: none"> i. what is to be measured and the form of the measurements that are to be used; and ii. the locations where relevant measurements are to be taken, or how such locations are to be determined; and iii. what is proposed to be taken to constitute the achievement of the relevant outcomes (with consideration being given to any inherent errors of measurement); and iv. the frequency of any measurement or monitoring; and v. any background or control data that is to be used, or how any such data is to be acquired. 	
TOR002 – 4.3	The criteria must include details about: <ul style="list-style-type: none"> responsibility (who will measure); record keeping; and frequency of reporting to management and any external parties. 	
TOR002 – 4.3	Where groundwater modelling is to be relied upon to demonstrate achievement of groundwater completion outcomes, the statement of criteria must include a process must be provided for validation of predictive modelling, including a description of the model and assumptions used.	
TOR002 – 4.3	Where native vegetation clearance is planned and in the case where an on ground offset by the operator is to be used to demonstrate the Significant Environmental Benefit (SEB), the statement of criteria must demonstrate the successful implementation of the on ground offset through the native vegetation management plan.	
r. 63(4)	The measurement criteria must, insofar as is reasonably practicable and appropriate, be expressed in quantitative terms (rather than qualitative terms).	
r. 63(1)(d)	Leading Indicator Criteria	
r. 63(1)(d)	Set out leading indicator statement of criteria where required by the lease/licence or where there is a high level of reliance on control strategies to achieve an environmental outcome (including completion outcomes).	
r. 63(4)	The leading indicator criteria must, insofar as is reasonably practicable and appropriate, be expressed in quantitative terms (rather than qualitative terms).	
s. 70B(2)(c)	Operator capability	
s. 70B(2)(c)	Provide information about the ability of the tenement holder (and any other person who may be acting on behalf of the tenement holder) to achieve the environmental outcomes set out in the PEPR.	
TOR002 – 5	Provide relevant evidence demonstrating that the tenement holder (and any other person who may be acting on behalf of the tenement holder as an operator) has	

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	appropriate experience, processes and procedures in place to be able to achieve the environmental outcomes.	
s. 70B(2)(d)	Lease and licence conditions	
TOR002 - 6	Where the lease or licence includes specific conditions or requirements that are not environmental outcomes, in accordance with regulation 63(1)(e) a PEPR must include a section that demonstrates where the respective conditions or requirements have been addressed in the PEPR (if relevant) or demonstrates how otherwise they have or will be complied with.	
TOR002 - 7	Maps and plans	
	All maps and plans must confirm to the following standards: <ul style="list-style-type: none"> state and show the relevant datum (Australian Height Datum (AHD) is preferred); metric units; title, north arrow, scale bar, text and legend; date prepared and author; be of appropriate resolution and scale for represented information; and be legible in both the hardcopy and electronic versions of the submission. 	
	All cross-sections must conform to the following standards: <ul style="list-style-type: none"> state and show the relevant datum (Australian Height Datum (AHD) is preferred); metric units; title, scale bar, text and legend; date prepared and author; be of appropriate resolution and scale for represented information; and be legible in both the hardcopy and electronic versions of the submission. 	
TOR002 – 7.1.1	Maps required for Description of the Quarrying Operations	
TOR002 – 7.1.1.1	Site Layout Map showing all components of the quarry operation including (but not limited to): <ul style="list-style-type: none"> Tenement boundaries; location of sediment management infrastructure; if relevant location of process water dams; location of haul roads; if relevant location of fixed plant; location of mobile plant for stage 1 of mining; location and extent of topsoil/subsoil and product stockpiles. 	
TOR002 – 7.1.1.2	Sequence of Quarrying and Progressive Rehabilitation Map showing: <ul style="list-style-type: none"> Tenement boundaries; staging of each progressive mining stage; proposed native vegetation clearance; and staging of each progressive rehabilitation stage. 	
TOR002 – 7.1.1.3	Access Route Map showing: <ul style="list-style-type: none"> access route for heavy vehicles; exit route for heavy vehicles; and new roads to be constructed if relevant. 	
TOR002 – 7.1.1.4	Mine Completion Map showing: <ul style="list-style-type: none"> final landforms (including rehabilitated and non-disturbed areas); and proposed topographical contours of the entire site (including rehabilitated and non-disturbed areas). 	
TOR002 – 7.2.1	Cross-sections required for Description of Quarrying Operations	
TOR002 – 7.2.1.1	Quarry Operation Cross-Section(s) showing: <ul style="list-style-type: none"> Proposed pit depth; and Proposed pit dimensions (length and width). 	
TOR002 – 7.2.1.2	Quarry Completion Cross Section(s) showing: <ul style="list-style-type: none"> Pre quarrying natural surface; and Proposed final rehabilitated surface. 	