

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*

Part 8 of the *Environmental Planning and Assessment Regulation 2021*

Application Number	SSD-42917792
Project Name	Cowal Gold Operations Open Pit Continuation Project involving: • continued open cut and underground mining operations; • expansion of the existing open cut pit with cutback to the east and south; • development of three new adjacent open cut pits; • expansion of the existing integrated waste landform; • expansion and re-development of the lake protection bund system; • expansion of the waste rock emplacement; • realignment of a portion of the existing water supply pipeline and electricity transmission line, development of new water storage dams and relocation of existing water infrastructure; • continued processing of ore at a rate of up to 9.8 million tonnes per annum; • extension of the mine life until 2042; and • progressively rehabilitating the site.
Location	Approximately 38 km northeast of West Wyalong, in the Bland Shire local government area
Applicant	Evolution Mining (Cowal) Pty Limited
Date of Issue	10 June 2022
General Requirements	The Environmental Impact Statement (EIS) must meet the minimum form and content requirements as prescribed by Part 8 of the <i>Environmental Planning and Assessment Regulation 2021</i> (the Regulation) and must have regard to the Department's <i>State Significant Development Guidelines</i>. Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development. In particular, the EIS must include, but not necessarily be limited to, the following: • a stand-alone executive summary; • a full description of the development, including: - regional geology including a supporting map, the resource to be extracted, demonstrating efficient resource recovery within

environmental constraints;

- details of the ore and waste rock, including mineralogy and deleterious elements and evidence of geological and grade (or quality) continuity of mineralisation in the deposit;
 - the mine layout and scheduling;
 - average and maximum annual extraction and production rates;
 - details of construction, operation and decommissioning, including any proposed staging of the development or refurbishing of infrastructure over time;
 - all components, infrastructure, materials, any plant and equipment and activities (including any infrastructure that would be required for the development, but the subject of a separate approvals process); and
 - the likely interactions between the development and any other existing, approved or proposed mining related development in the vicinity of the site, in particular the integration of the development with the existing approved open cut mine, mine infrastructure area, waste rock and integrated waste landform, and the approved underground mine.
- site plans and maps at an adequate scale showing:
 - the location of the development components;
 - existing infrastructure, land use, and environmental features in the vicinity of the development (including any other existing, approved or proposed infrastructure in the region); and
 - key environmental constraints that have been considered in the design of the development;
 - a waste (including waste rock and tailings) management strategy;
 - a water management strategy;
 - a rehabilitation strategy, including details of the progressive rehabilitation of the site during and following construction and decommissioning;
 - a strategic justification of the development focusing on site selection and the suitability of the proposed site;
 - details of the approvals that must be obtained before the development may commence;
 - an assessment of the likely impacts of the development on the environment, focusing on the specific issues identified below, including:
 - a description of the existing environment likely to be affected by the development, using sufficient baseline data;
 - an assessment of the likely impacts of all stages of the development, including likely interactions between the development and any other existing, approved or proposed developments in the vicinity, including any cumulative impacts, taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice;
 - a description of the measures that would be implemented to avoid, mitigate and/or offset residual impacts of the development, including incident management procedures, and the likely effectiveness of these measures, and an assessment of:
 - whether these measures are consistent with industry best practice, and represent the full range of reasonable and feasible mitigation measures that could be implemented;
 - the likely effectiveness of these measures, including performance

	measures where relevant; and ○ whether contingency plans would be necessary to manage any residual risks; and - a description of the measures that would be implemented to monitor and report on the environmental performance of the development if it is approved; • a consolidated summary of all the proposed environmental management and monitoring measures; • consideration of the development against all relevant environmental planning instruments; • an evaluation of the development as a whole, having regard to: - the requirements in Section 4.15 of the <i>Environmental Planning and Assessment Act 1979</i>, including ecologically sustainable development; - the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses and significant mineral resources; - the strategic need and justification for the development, having regard to the relevant NSW and national policies and guidelines; - feasible alternatives to the development (and its key components), including the consequences of not carrying out the development; and - the biophysical, economic and social costs and benefits of the development; • an estimate of jobs that will be created during the construction and operational phases of the proposed infrastructure; and The EIS must also be accompanied by a report from a qualified quantity surveyor providing: • a detailed calculation of the capital investment value (CIV) of the proposal including details of all assumptions and components from which the CIV calculation is derived. The report must be prepared on company letterhead and indicate applicable GST component of the CIV; • certification that the information provided is accurate at the date of preparation
Key issues	The EIS must address the following specific issues with the level of assessment of likely impacts proportionate to the significance of, or degree, of impact on, the issue, within the context of the development location and the surrounding environment and having regard to applicable NSW Government policies and guidelines. • Subsidence – including an assessment of the likely interaction of the open cut pit extensions with the approved underground mine; • Land and Soils – including: - an assessment of the likely impacts of the development on the soils and land capability of the site and surrounds, and a description of the mitigation and management measures to prevent, control or minimise impacts of the development; - an assessment of the likely impacts of the development on agriculture, including an Agricultural Impact Statement; - the likely impact of the development on landforms (topography), including the long-term geotechnical stability of any new landforms on site; and

- the compatibility of the development with other land uses in the vicinity of the development in accordance with the requirements of Part 2.3 of *State Environmental Planning Policy (Resources and Energy) 2021*;
- consideration of potential land contamination consistent with the requirements of *State Environmental Planning Policy (Resilience and Hazards) 2021* (Chapter 4 – Remediation of Land)

- **Water** – including:

- description of all works/activities that may intercept, extract, use, divert or receive surface water and/or groundwater. This includes the description of any development, activities or structures that will intercept, interfere with or remove groundwater, both temporary and permanent;
- details of all water take for the life of the development. This is to include water taken directly and indirectly, and the relevant water source where water entitlements are required to account for the water take. If the water is to be taken from an alternative source confirmation should be provided by the supplier that the appropriate volumes can be obtained;
- details of Water Access Licences (WALs) held to account for any take of water where required, or demonstration that WALs can be obtained prior to take of water occurring. This should include an assessment of the current market depth where water entitlement is required to be purchased. Any exemptions or exclusions to requiring approvals or licenses under the *Water Management Act 2000* should be detailed;
- an assessment of groundwater conditions that provides an understanding of groundwater level across the site under a range of wet and dry conditions;
- assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, groundwater dependent ecosystems, and ground water levels; including measures proposed to reduce and mitigate these impacts, having regard to the *Aquifer Interference Policy*;
- assessment of impacts of the development on the lake hydrology, geomorphic stability and water quality, and associated impacts on aquatic ecology of Lake Cowal;
- a detailed and consolidated site water balance, including a description of site water demands, water disposal methods (inclusive of volume and frequency of any water discharges), water supply and transfer infrastructure and water storage structures, and measures to minimise water use;
- a description of the measures proposed, including monitoring activities and methodologies, to ensure the development can operate in accordance with the requirements of any relevant WSP or water source embargo;
- a detailed description of the proposed water management system (including sewage), water monitoring program and other measures to mitigate surface and groundwater impacts;
- a description of construction erosion and sediment controls, how the impacts of the development on areas of erosion, salinity or acid-sulphate risk or erodible soils types would be managed and any contingency requirements to address residual impacts;
- identification and impact assessment of all works located on waterfront

land including consideration of the *Guidelines for Controlled Activities on Waterfront Land* (NRAR 2018); and

- an assessment of any likely flooding impacts of the development;

- **Noise and Blasting / Vibration** – including:

- an assessment of the likely noise impacts of the development in accordance with the *Noise Policy for Industry*, and the *Voluntary Land Acquisition and Mitigation Policy* (2018);
- if a claim is made for specific construction noise criteria for certain activities, then this claim must be justified and accompanied by an assessment of the likely construction noise impacts of these activities in accordance with the *Interim Construction Noise Guideline*;
- an assessment of the likely road noise impacts of the development in accordance with the *NSW Road Noise Policy*; and
- an assessment of the likely blasting impacts of the development on people, animals, buildings and infrastructure, and significant natural features, having regard to the relevant ANZECC guidelines;

- **Air Quality** – including:

- an assessment of the likely air quality impacts of the development, including cumulative impacts from nearby developments, in accordance with the *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW* (2016) (or its latest version), and having regard to the NSW Government's *Voluntary Land Acquisition and Mitigation Policy*;
- ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations Act 1997* and the *Protection of the Environment Operations (Clean Air) Regulation 2010*;
- an assessment of the likely greenhouse gas impacts of the development including measures to minimise emissions; and
- a description of the measures that would be implemented to monitor and report on air emissions (including fugitive dust and greenhouse gases) of the development;

- **Biodiversity** – including:

- an assessment of the likely biodiversity impacts of the development in accordance with the *Biodiversity Assessment Method* (BAM), and documented in a Biodiversity Development Assessment Report (BDAR);
- a strategy to offset any residual impacts of the development in accordance with the offset rules under the *Biodiversity Offsets Scheme*, including details of any potential biodiversity stewardship sites for retiring biodiversity credits, including consideration of inter-relationship between aquatic biodiversity offsets for loss of Key Fish Habitat and offsets required under the BAM;
- an aquatic ecological assessment that addresses all direct and indirect impacts of the development on Key Fish Habitat and associated flora and fauna including threatened species, populations, and communities during construction and operation

- **Heritage** – including:

- an assessment of the potential impacts of the development on Aboriginal heritage (cultural values and archaeological), including adequate consultation with relevant Aboriginal stakeholders having regard to the *Aboriginal Cultural Heritage Consultation Requirements for*

Proponents (DECCW 2010) and documented in an Aboriginal Cultural Heritage Assessment Report (ACHAR) including the significance of cultural heritage values for Aboriginal people who have a cultural association with the land;

- results of any surface surveys (and test excavations, if required) undertaken by a qualified archaeologist to inform the need for targeted test excavation to better assess the integrity, extent, distribution, nature and overall significance of the archaeological record;
- avoiding and mitigating impacts on cultural heritage values and identify any conservation outcomes, including mitigation measures and procedures for accidental finds at any stage of the development; and
- an assessment of the potential impacts on historic heritage in accordance with the *NSW Heritage Manual*, including any heritage conservation areas and State and local historic heritage items within and near the site;

- **Traffic and Transport** – including:

- an assessment of the likely transport impacts of the development on the capacity, condition, safety and efficiency of the road and rail networks and any cumulative impacts of other developments in the locality, including:
 - the site access routes, site access point and road closures in accordance with the *Roads Act 1993*; and
 - a description of the measures that would be implemented to mitigate and / or manage potential traffic impacts including a schedule of all required road upgrades, road maintenance contributions, management of oversized and over mass traffic and other traffic control measures, road closures developed in consultation with the relevant road authority;

- **Hazards** – including:

- a detailed description of the management of chemicals, concentrate and waste material and an assessment of the likely risks to public safety, paying particular attention to potential bushfire risks, during storage, handling, transport and use of any dangerous goods; and
- a Preliminary Hazard Analysis (PHA) prepared in accordance with the *Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis' and Multi-Level Risk Assessment* (DoP, 2011);

- **Visual** – including an assessment of the likely visual impacts of the development on private landowners in the vicinity of the development and key vantage points in the public domain, paying particular attention to any temporary and permanent modification of the landscape (overburden dumps, bunds, etc.), and minimising the lighting impacts of the development;

- **Waste** – including estimates of the quantity and nature of the waste streams that would be generated by the development (including waste rock, tailings and course rejects) and any measures that would be implemented to minimise, manage or dispose of the waste streams, including proposed management of acid forming, saline or sodic materials within waste rock

	emplacements or integrated waste landforms; • Closure, Rehabilitation and Final Landform – including a Rehabilitation Strategy providing: - a detailed overview of the final land-use and final landform, rehabilitation objectives and closure criteria for the development, including the conceptual final landform design; - identification and discussion of opportunities for progressive rehabilitation throughout the mine life and to improve environmental outcomes for existing disturbed areas within the development site; - rehabilitation objectives, performance standards and completion criteria; and - decommissioning of surface infrastructure; • Social – including an assessment of the social impacts of the development, prepared in accordance with the Department's <i>Social Impact Assessment Guideline for State Significant Projects (2021)</i>, including the likely impacts of the development on the local community, cumulative impacts (considering other mining developments in the locality), and consideration of workforce accommodation; • Economic – including an assessment of the likely economic impacts of the development, paying particular attention to the: - significance of the resource; - costs and benefits of the development for the State and region; - the demand for the provision of local infrastructure and services; and - consideration of the need for a Voluntary Planning Agreement in relation to the demand for the provision of local infrastructure and services.
Plans and Documents	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Part 8 of the Regulation. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include high quality files of maps and figures of the subject site and proposal.
Engagement	During the preparation of the EIS, you must consult with relevant local, State and Commonwealth Government authorities, infrastructure and service providers, community groups, Registered Aboriginal Parties (RAPs) affected landowners and holders of existing mining and exploration authorities. The EIS must describe the consultation process and the issues raised and identify where the design of the infrastructure has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided. The EIS must detail the engagement undertaken and demonstrate how it was consistent with the Department's <i>Undertaking Engagement Guide: Guidance for State Significant Projects (2021)</i>. The EIS must detail how issues raised and feedback provided have been considered and responded to for the development.

Expiry Date	If you do not lodge a Development Application and EIS for the development within 2 years of the issue date of these SEARs, your SEARs will expire. If an extension to these SEARs will be required, please consult with the Planning Secretary 3 months prior to the expiry date.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, Attachment 1 contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal. In the event of any guidelines being updated, the latest version must be applied, subject to any transitional arrangements and subject to timing of lodgement of the EIS.

ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Please also refer to the Department's Policies and Guidelines including strategic plans and guidelines at:
<https://www.planningportal.nsw.gov.au/major-projects/assessment/policies-and-guidelines>

Land	
	Primefact 1063: Infrastructure proposals on rural land (DPI)
	Australian Soil and Land Survey Handbook (CSIRO)
	Guidelines for Surveying Soil and Land Resources (CSIRO)
	The land and soil capability assessment scheme: second approximation (OEH)
Water	
Water Sharing Plans	Any relevant Water Sharing Plans for the development
Groundwater	NSW State Groundwater Policy Framework Document (DPI)
	NSW State Groundwater Quality Protection Policy (DPI)
	NSW State Groundwater Quantity Management Policy (DPI)
	NSW Aquifer Interference Policy 2012 (DPI)
	Australian Groundwater Modelling Guidelines 2012 (Commonwealth)
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
Surface Water	Guidelines for the Assessment & Management of Groundwater Contamination (EPA)
	Groundwater assessment toolbox for major projects in NSW – Overview document at www.industry.nsw.gov.au/water/licensing-trade/major-projects including NSW Guidelines for Groundwater Documentation for SSD/SSI Projects. Technical guideline (DPE)
	NSW State Rivers and Estuary Policy (DPI Water)
	NSW Government Water Quality and River Flow Objectives (EPA)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (EPA)
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems – Effluent Management (ARMCANZ/ANZECC)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems – Use of Reclaimed Water (ARMCANZ/ANZECC)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (EPA)
	Managing Urban Stormwater: Soils & Construction (Landcom) and associated Volumes 2A to 2E (DECC)
	Managing Urban Stormwater: Treatment Techniques (EPA)

	Managing Urban Stormwater: Source Control (EPA)
	Technical Guidelines: Bunding & Spill Management (EPA)
	A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH)
	Guidelines for Controlled Activities on Waterfront Land (NRAR 2018).
Flooding	Floodplain Development Manual (OEH)
	Floodplain Risk Management Guideline (OEH)
Noise and Vibration	
	Voluntary Land Acquisition and Mitigation Policy: For State Significant Mining, Petroleum and Extractive Industry Developments (DPE)
	Noise Policy for Industry (EPA)
	Interim Construction Noise Guideline (EPA) (or updated Construction Noise Guideline if in effect)
	NSW Road Noise Policy (EPA)
	Environmental Noise Management – Assessing Vibration: a technical guide (DEC)
Air Quality	
	Voluntary Land Acquisition and Mitigation Policy: For State Significant Mining, Petroleum and Extractive Industry Developments (DPE)
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA)
	National Greenhouse Accounts Factors (Commonwealth)
Biodiversity	
	Biodiversity Assessment Method (OEH)
	NSW State Groundwater Dependent Ecosystem Policy (NOW)
	Risk Assessment Guidelines for Groundwater Dependent Ecosystems (DPI)
	Policy and Guidelines for Fish Habitat Conservation and Management (Update 2013))
Heritage	
	Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW)
	Code of Practice for Archaeological Investigations of Objects in NSW (OEH)
	Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH)
	Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (OEH)
	NSW Heritage Manual (OEH)
Transport	
	Guide to Traffic Generating Developments (RTA)
	Road Design Guide (RMS) & relevant Austroads Standards
	Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development
Hazards	
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis
Socio-Economic	
	Social Impact Assessment Guideline for State Significant Projects (DPE)
Waste	
	Waste Classification Guidelines (EPA)
	Protection of the Environment Operations (Waste) Regulation 2014
	Environmental Guidelines: Solid Waste Landfills (EPA 2016)

	Tailings Management – Leading Practice Sustainable Development Program for the Mining Industry (Australian Government)
Resource	
	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 (JORC)
Rehabilitation	
	Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)
	Mine Closure and Completion – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)
	Strategic Framework for Mine Closure (ANZMEC-MCA)
	Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)
	Integrated Mine Closure: Good Practice Guide (ICMM, 2019)
	Guidelines on Tailings Dams – Planning, Design, Construction, Operation and Closure – Revision 1 (ANCOLD, July 2019)
Environmental Planning Instruments	
	State Environmental Planning Policy (Resources and Energy) 2021
	State Environmental Planning Policy (Planning Systems) 2021
	State Environmental Planning Policy (Transport and Infrastructure) 2021
	State Environmental Planning Policy (Primary Production) 2021
	State Environmental Planning Policy (Resilience and Hazards) 2021
	Bland Shire Local Environmental Plan 2011