

EMPR CHECKLIST

Instructions for Reviewing EMPR:	
Step ①	Briefly overview the reports to understand how it is organised and to determine the completeness of the information provided.
Step ②	Consider whether each Review Question, is relevant to the specific project. If so enter "Yes" in Column 3.
Step ③	<p>If a Review Question is identified as relevant, review the EMPR report in more detail and decide whether the information provided is sufficient for decision-making. If it is complete enter "Yes" or if is incomplete enter "No" in Column 4.</p> <p>Factors to consider include:</p> <ul style="list-style-type: none"> • The legal provisions that apply and the factors that the decision maker is required to take into account in the consent process for the project; • Whether the consent process at the EMPR stage is about the principle of the project or the detailed design; • The scale and complexity of the project and the sensitivity of the receiving environment; • Whether the environmental issues raised by the project are high profile; and • The views of the public and consultees about the project and the degree of controversy.
Step ④	If the answer to a Review Question is "No" consider what outstanding information is required and note this in Column 4. The reviewer may also wish to make any suggestions on where or how the information could be obtained.

SECTION 1 – PROJECT DETAILS		
1.1	Project Reference No	
1.2	Project Title	
1.3	Project Location	
1.4	Project Co-ordinates	
1.5	Property Description (Farm Portion and ownership)	
1.6	Applicant	
1.7	Environmental Assessment Practitioner (EAP)	

No.	Review Question	Relevant?	Adequately addressed?	Further information
SECTION 2 – PROJECT DESCRIPTION				
The Objectives and Physical Characteristics of the Project				
2.1	Is the need for and objectives of the mine explained?			
2.2	Are all the main components of the mining operation described			
2.3	Is the location of each component of the mining operation identified, using maps, plans and diagrams as necessary?			
2.4	Are all additional services required for mining operation described? (e.g. transport access, water, sewerage, waste disposal, electricity, telecoms) or developments (e.g. roads, harbours, powerlines & pipelines)			

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The Size of the Mining Operation				
2.5	Is the area of land to be occupied by the mine shown on a scaled map? (including any associated access arrangements, landscaping and ancillary facilities)			
Production Processes and Resources Used				
2.6	Are the types and quantities of raw materials especially water consumption needed for construction and operation discussed?			
2.7	Are the environmental implications of the sourcing of raw materials especially water use discussed (i.e. is water available)?			
Residues and Emissions				
2.8	Are the methods for collecting, storing, treating, transporting and finally disposing of waste products described (including spoil material)?			
2.9	Is the potential for resource recovery from wastes and residues discussed? (including re-use, recycling or energy recovery from solid waste and liquid effluents)			
Risks of Accidents and Hazards				
2.10	Are any risks associated with the mine discussed? Risks from handling of hazardous materials Risks from spills, fire, explosions Risk of traffic accidents Risks from breakdown or failure of processes or facilities Risks from exposure of the Project natural disasters (earthquake, flood, landslide, etc)			
2.11	Are measures to prevent and respond to accidents and abnormal events described? (preventative measures, training, contingency plans, emergency plans, etc.)			
2.12	Are there any issues on the description of the mine which is not addressed in checklist and further information is required to take a decision?			
SECTION 3 – CONSIDERATION OF ALTERNATIVES				
3.1	Were any of the following alternatives considered in the report? • Location alternatives • Process alternatives • “Time” alternatives • The No-Go option • Were any alternatives suggested by I&APS.			
SECTION 4 – RECEIVING ENVIRONMENT				
4.1	Is a description of the receiving environment provided, in terms of the following features:			
b	Geology and groundwater			
c	Aquatic environment (types of water resources, present state, characteristics; water availability)			
SECTION 5 – POTENTIAL IMPACTS OF THE PROJECT ON THE ENVIRONMENT				
5.1	Have the impacts of the mine on surrounding land use been			

No.	Review Question	Relevant?	Adequately addressed?	Further information
	described, especially the impact on existing water and sanitation infrastructure, dams, water resources, wetlands, etc			
5.2	Is the water environment of the area described? (including running and static surface waters, groundwater, estuaries, including run off and drainage. NB not relevant if water environment will not be affected by the Project)			
5.3	Does the EMPR indicate which water resources (surface or groundwater, wetlands, system and catchment) and their characteristics will be affected?			
5.4	Does the report address the magnitude and extent of the impact on the water resource body including the impact of abstraction, discharge, raising the temperature of the water, etc (i.e. water availability)?			
5.5	Have the findings of the specialist studies in terms of the impact of the activity on the water resources been included in the final design?			
5.6	Has the proponent considered alternatives, including re-use, of the waste water stream?			
5.7	Is the water balance comprehensive and accurate?			
5.8	Does the EMPR adequately address storm water and surface management issues?			
5.9	Does the EMPR discuss the potential degradation of surface water by increased suspended particles?			
5.10	Does the EMPR discuss the disruption and/or contamination of the groundwater aquifers, and the potential consequential impact to surface water?			
5.11	Does the EMPR discuss the potential of heavy metal accumulation in rivers and aquatic life?			
5.12	Is site drainage clearly explained especially the potential impact of acid mine drainage?			
5.13	Is the leaching of heavy metals and percolation of contaminated water from slimes dams and leach ponds discussed and quantified?			
5.14	Is the potential pollution and accumulation of amalgamation agents during processing of gold and silver from alluvial mining discussed?			
5.15	Is the impact of incomplete flushing or neutralising, pipe leaks and spills during solution mining which could pollute ground water discussed?			
5.16	Have all sensitive areas been identified and has the impact on such areas been quantified? (including buildings, other structures, mineral resources, water resources)			
5.17	Where a State forest is to be affected, have the sensitivity, condition and the dynamics of the plant communities and ecosystems involved been taken into account?			
SECTION 6 – SIGNIFICANT ENVIRONMENTAL IMPACTS				
Prediction of Direct Effects				
6.1	What is the impact of the mine on the livelihoods of			

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	communities (both downstream and upstream)			
6.2	Is the impact on water resources and their characteristics described?			
Prediction of Temporary, Short Term, Permanent, Long Term, Accidental, Indirect, Cumulative Effects				
6.3	Are cumulative effects on the environment off the Project together with other existing or planned developments in the locality described?			
Evaluation of the Significance of Effects				
6.4	Are the following factors considered in the assessment of each identified potentially significant impact – <ul style="list-style-type: none"> o cumulative impacts; o the nature of the impact; o the extent and duration of the impact; o the probability of the impact occurring; o the degree to which the impact can be reversed; o the degree to which the impact may cause irreplaceable loss of resources; and o the degree to which the impact can be mitigated; 			
SECTION 7 – MITIGATION MEASURES				
7.1	Where there are significant adverse effects on any aspect of the environment, especially the water resource, is the potential for mitigation of these effects discussed?			
7.2	Are all measures, which the developer proposes to implement to mitigate effects clearly described and their effects on the magnitude and significance of impacts, clearly explained?			
7.3	Are arrangements proposed to monitor, manage and report on mitigation measures?			
7.4	Are there any issues on mitigation measures not addressed in checklist and further information is required before a decision can be taken?			
SECTION 8 – SPECIALIST STUDIES				
8.1	Are the requisite specialist included? Studies may include: <ul style="list-style-type: none"> o Wetland o Aquatic o Delineation (riparian area and/or wetlands) o Geology and geohydrological o Agricultural potential o Socio-economic 			
8.2	Has an Integrated Water and Waste Management Plan (IWMP) been provided?			
SECTION 9 – PUBLIC PARTICIPATION				
9.1	Have the steps that were taken to notify potentially interested and affected parties been explained?			
9.2	Has a list of registered interested and affected parties been provided?			
9.3	Has a summary of the issues raised by interested and affected parties, the date of receipt of and the response of			

No.	Review Question	Relevant?	Adequately addressed?	Further information
	the EAP to those issues been provided?			
9.4	In the case where the project will affect the utilisation of water resources, have the interested and affected parties been adequately consulted?			
SECTION 10 – LEGISLATION AND GUIDELINES				
10.1	Have all the legislation and guidelines applicable to the project been identified?			
SECTION 11 – PLAN of STUDY FOR EIA				
11.1	Have the necessary provisions for water resources been made in the plan of study for EIA?			
SECTION 12 – REHABILITATION MEASURES				
12.1	Has a rehabilitation plan been provided?			
12.2	Are the rehabilitation measures appropriate?			
SECTION 13 – CLOSURE MEASURES				
13.1	Are the closure measures proposed practical and appropriate?			
SECTION 14 – DWA SPECIFIC REQUIREMENTS				
NEED FOR WATER USE AUTHORISATION				
14.1	Does the activity require authorisation for a water use in terms of the National Water Act (No. 36 of 1998)?			
14.2	If the activity entails a water use, is proof attached that an application was submitted to DWA?			
14.3	Was an Integrated Water and Waste Management Plan (IWWMP) submitted?			
14.4	Did the IWWMP include an Environmental Risk Assessment?			
14.5	Was a Reserve Determination undertaken?			

OVERALL APPRAISAL OF THE EMPR REPORT

Comment: