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TERMS OF REFERENCE FOR TERMINAL EVALUATOR

MANAGING RISKS ASSOCIATED WITH GOLD RIDGE MINE TSF PROJECT

June 2016 - Dec 2018

Consultancy/Position Title: Terminal Evaluator
Project Name: Managing Risks Associated with the Gold Ridge Mining TSF
Duty Station: Honiara, Solomon Islands
Duration of the Contract: • Contract Period: 1st November 2018 to 30th November 2018 • Starting date: 1st November 2018 • Duration: 20 Working days over 1.5 month (10 days home based/10 days duty station) • End Date: 14th December 2018

1. BACKGROUND AND CONTEXT

The Gold Ridge Mine Tailings Storage Facility (TSF) on the main island of Guadalcanal in Solomon Islands has been a constant threat to its surrounding communities since the April 2014 heavy rainfalls. The TSF is part of a bigger tailings storage system which has been operating since 1998 within a 25year 30km^2 lease. The tailings storage system consists of the main TSF embankment covering 0.62km^2, a water treatment plant with separate (now combined) sedimentation and discharge ponds and a Return Water dam upstream for storing treated water to be reused in the gold processing plant. The closure of the Gold Ridge Mine in 2014 also meant that maintenance of the water balance in the tailings storage system could not be sustained.

In the long term, the impacts of potential breach of the main TSF embankment would be catastrophic to the environment and more than 8000 people downstream since the tailings water contains harmful substances of which the two main chemicals of concern are arsenic and cyanide. Therefore, the Solomon Islands Government with support of the United Nations has developed project with following objectives:

- To design contingency planning response to natural disaster events related to the TSF
- To strengthen the existing capacity of MECDM, MMERE, MHMS and other key stakeholders (RSIPF and GCIL) to effectively monitor this situation for risk management, early warning and response.
- To conduct an environmental and socio-economic assessment of potential areas which will be affected in the event of any natural disaster related to the TSF.

The project is comprised of 3 components with respective outcomes to achieve the project goals. The first component is to develop contingency plans at institutional and community levels. Three technical studies were commissioned by the government to understand the hydrological and geotechnical influence on TSF safety and possible impact on physical environment in an event of a major contamination. The results of the studies will be incorporated into contingency plans at both institutional and community levels. Second is to strengthen government's capacity for monitoring the TSF through improving NPHL and MMERE's laboratory performance/ MECDM's field testing skills and also the overall performance of the data collection system by providing equipment and training. Last component is to establish management system for successful project implementation. Monitoring and evaluation plan has been developed and the project has been conducted monitoring against the set of indicators for each outcome.

As the project is approaching towards the end, the project team is in preparation of evaluating final results against the investment such as the activities implemented and inputs provided produced the expected results stated in the Project Document. UNDP is therefore looking for a consultant to conduct a terminal evaluation of the project.

2. EVALUATION PURPOSE

The terminal evaluation is aimed to assess the performance of the project. Results and lessons learned from the evaluation will be used by the government of Solomon Islands as well as UNDP to enhance future aid policy, programmes and projects, and also to be accountable through providing information on the project to the public.

3. EVALUATION SCOPE AND OBJECTIVES

The objectives of the terminal evaluation are to assess relevance, efficiency, effectiveness, and sustainability of the project as per the UNEG norms and standards. Notably, it will investigate whether: i) the project outputs against the planned results[1] outlined in the Project Document (ProDoc), ii) how project outputs are being achieved, and adjusted based on the changing environment to stay relevant iii) the efficiency with which outputs are being achieved. The terminal evaluation aims to draw lessons that can both improve the sustainability of benefits from this project and aid in the overall enhancement of UNDP programming. The evaluation will be conducted according to the guidance, rules and procedures of UNDP Evaluation Guidance[2].

4. EVALUATION QUESTIONS

The evaluator is expected to frame the evaluation effort using the criteria of relevance, effectiveness, efficiency, and sustainability, as defined and explained in the UNDP's Handbook on Planning, Monitoring

[1] Please see Annex A

[2] http://web.undp.org/evaluation/handbook/documents/english/pme-handbook.pdf

and Evaluating for Development Results[3]. A set of questions covering each of these criteria have been drafted and are included with this ToR (fill in Annex C). The evaluator is expected to amend, complete and submit this matrix as part of an evaluation inception report, and shall include it as an annex to the final report.

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5. METHODOLOGY

As mentioned above, the evaluator is expected to frame the evaluation effort using the criteria of relevance, effectiveness, efficiency, and sustainability as defined and explained in the UNDP's Handbook on Planning, Monitoring and Evaluating for Development Results.

The evaluation must provide evidence-based information that is credible, reliable and useful. Building on the desk review of available documents, the consultant is expected to use face to face or phone interviews – both structured and unstructured - as a means of collecting data on the performance and success of the project. The consultant may also consider making use of written questionnaires if required, which could be distributed to the project partners and stakeholders with the assistance of the project team. She/he is expected to follow a participatory and consultative approach ensuring close engagement with government counterparts, UNDP Country Office, project team, based in the country and key stakeholders. Interviews will be held with the following organizations and individuals at a minimum: Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM), Ministry of Mines, Energy and Rural Electrification (MMERE), and Ministry of Health and Medical Service (MHMS). The detailed methodology will be finalized during the inception phase.

The evaluator will review all relevant sources of information, such as the project document, project reports – project budget revisions, progress reports, technical assessment reports, institutional community plans and community contingency plans (called "Village Disaster Plan" by NDMO), project files, national strategic and legal documents, and any other materials that the evaluator considers useful for this evidence-based assessment. A list of documents that the project team will provide to the evaluator for review is included in Annex B of this Terms of Reference.

The above methodology is not exhaustive. The consultant can use other data collection and evaluation methods in order to assess the project. She/he is expected to conduct a field mission to Honiara, Solomon Islands.

6. DELIVERABLES

No.	Deliverables	Percentage of Total Price (Weight for payment)
1	Evaluation inception report (including evaluation matrix)	20
2	Draft terminal evaluation report	40
3	Terminal evaluation report	40
	Total	**100**

[3] http://web.undp.org/evaluation/handbook/documents/english/pme-handbook.pdf

7. EVALUATION TEAM COMPOSITION AND REQUIRED COMPETENCIES

Education	• Advanced University degree (at Master's degree level or higher) in Disaster Risk Reduction, Climate change, Environment, Social Science or and/or related field.	10%
Experience	• At least 5-8 years of proven experience of conducting evaluations of development projects especially on disaster risk management related projects • Experience applying SMART indicators and reconstructing or validating baseline scenarios • Experience in the use of participatory methodologies and developing gender sensitive evaluation methodologies	50%
Functional Competency	• Excellent analytical, facilitation, English communication and reporting skills • Knowledge of the Government of Solomon Island's DRM policies, frameworks and architect is an asset, but not required • Good understanding of the local context, knowledge, culture and languages will be an advantage, but not required	40%

8. EVALUATION ETHICS

The Evaluation consultant will be held to the highest ethical standards and are required to sign a Code of Conduct (Annex D) upon acceptance of the assignment. UNDP evaluations are conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluations'[4].

9. IMPLEMENTATION ARRANGEMENTS

The selected consultant will report to the Technical Working Group of the project composed of the three technical ministries (MECDM, MMERE and MHMS), UN agencies (UNOCHA and WHO) for review and this will be endorsed by the project board. The RSD team/ UNDP will manage the evaluation and provide logistical support.

10. TIME FRAME FOR THE EVALUATION PROCESS

The total duration of the evaluation will be 20 days according to the following plan starting from 5th November 2018. This will include desk reviews, field work - interviews, and report writing.

Activity	Timing	Completion Date
Preparation	*3* days	*7th November 2018*
Evaluation Mission	*7* days	*16th November 2018*

[4] http://www.unevaluation.org/document/detail/102

Draft Evaluation Report	7 days	*27th November 2018*
Final Report	*3* days	*14th December 2018*

Note: This consultancy is open to both National and International applicants. Individuals, group of individuals as well as consultancy firms having the requisite skills/ experience are eligible to apply.

12. ANNEXES

ANNEX A: PROJECT LOGICAL FRAMEWORK

Some changes were made to the logical framework based on the most updated endorsed Annual Work Plan. This may be revised in consultation with the project board.

Project Strategy	Objectively verifiable indicators			Sources of verification	Risks and assumptions
	Indicator	Baseline value	Target value and date		
Long-term goal: To strengthen institutional capacities to effectively monitor the risks associated with the Tailings Storage Facility and the Return Water Dam					
Project objectives: 1. To design contingency planning response to natural disaster events related to the TSF 2. To strengthen the existing capacity of MECDM, MMERE, MHMS and other key stakeholders (RSIPF & GCIL) to effectively monitor the situation for risk management, early warning and response 3. To conduct an environmental and socio-economic assessment of potential areas which will be affected in the event of any natural disaster related to the TSF	**Outcome indicators** • Institutional capacity and interagency coordination by key government ministries are strengthened for improved Monitoring of the TSF and the Return Water Dam as well as having the capacity to respond to disasters	Given the limited resources to date, the level of monitoring activities by GCIL, NPHL, MECDM, MMERE and UQ has been significant. However, a lack of coordination between these agencies has seen some duplication of effort and limited data sharing.	**By the end of the project:** • Contingency planning at the institutional and community levels are completed with better understanding of the TSF hydrology system, the surface profile and the contamination profile of the sediments, the dam model and structures, the likely and unlikely scenarios of TSF overflowing and the dam collapsing. • The monitoring capacity of MECDM, MMERE, MHMS and other key stakeholders (RSIPF & GCIL) are strengthen to effectively monitor dam water level and quality at the TSF and the surrounding communities on a frequent basis • The environmental and socio-economic impacts of potential areas which will be affected in the event of any natural disaster related to the TSF are known and understood by all key stakeholders	• Assessment reports • Contingency plans •Monitoring equipment	Risks: • Key government ministries MECDM, MHMS and MMERE are not working together to deliver the project expected outputs • There is political instability and government development priorities and policies likely to change • Target communities might not want to cooperate and to get involved in the implementation of the project activities because they are not well-informed about the project.

			and these impacts are communicated to the likely affected communities.		
Project Strategy	**Objectively verifiable indicators**			**Sources of verification**	**Risks and assumptions**
	Indicator	**Baseline value**	**Target value and date**		
Outcome 1: Contingency Planning exercise conducted and completed in an inclusive and participatory manner					
Output 1.1: Institutional contingency plans developed and put in place in an inclusive and participatory manner	Progress made towards the design, formulation and implementation of the institutional contingency plan	• No clear evacuation plans, or early warning systems in place • Closest response is police at Tetere or Henderson, each taking time to get to site and assess the situation. There was a police post set up closer to the dam but this was abandoned in 2015. • Different ministerial groups eg. Police have their own evacuation plans or procedures	• First draft of response/preparedness plans completed Q1 2017 • Simulation/training exercises carried out by February 2017	• Records of conducted interviews • Meeting reports • Training workshop materials • Plans • Reports • Institutional Contingency Plan	Assumptions: • Institutions and working groups are open to proposed coordination agreements and there is no active institutional resistance
Output 1.2: Contingency Plan for communities at risk developed and implemented with inclusive participation of key stakeholders, including communities	Progress made towards the design, formulation and implementation of the community contingency plan	• No disaster preparedness or response plans in place for downstream communities • Leadership structures in place that can be used in planning and coordination include chiefs, church leaders and landowner groups such as MDA, KTDS and GRCLC	• Community disaster preparedness and response plan completed by Q2 2017	• Community consultation reports • CBDRM training report • Progress report • Finalized Validation report • Finalized Community profiles • Finalized Simulation activity report • SIMEX work plan • Finalized Village Disaster Plans	Assumptions: • Communities will see the importance, value and the need for disaster preparedness and response plans, and cooperate fully with government
Output 1.3: TSF and RWD Stability Modelling conducted to inform contingency planning	A clear understanding of the "as built" stability of the TSF embankment, Saddle Dam and RWD is established	• Not clear at this stage the impact or effect that elevated water levels have had on the stability of these structures	• Clear understanding established by Q1 of 2017	• ToR for geotechnical Assessment • Work plan • Contract with consultant • Final and other reports of the geotechnical assessment	Assumptions: • All documents (designs of original dam and CQA) required for reviews are easy to access and available

Output 1.4: Catastrophic Dam Break scenario modelling	Improved understanding on the impact of a catastrophic dam break event and the possible coverage area	• No clear understanding in place of which areas will be worst affected by dam break, causes nearly all communities to be fearful. • Unknown if this risk was fully identified and understood during design and construction of the dam	• Catastrophic dam break modelling conducted. • Report on findings of study completed and made available to stakeholders • Held discussions with the downstream communities.	• Draft ToR for Dam Break modelling • Work plan • Final report	Assumptions: • Situation around the vicinity of the TSF is safe with no fear of security issues.
Output 1.5: Identification of key impacts from spillover to guide contingency planning	Key impacts from spillover and dam break scenario identified	• No baseline information on key impacts from spillover and dam break scenario	• Study on the potential impact of catastrophic dam break conducted. • Report on findings of study completed and made available to stakeholders • Held discussions with the downstream communities.	• ToR for hydrological Assessment • Work plan • Contract with consultant • Assessment reports	Assumptions: • Weather situation is normal with no natural disaster event happening during the assessment
Output 1.6: Assessment of TSF Tailings sediments-depth, volume, contaminant levels, density, chemical interaction with surface waters (fluxes)	Improved understanding of the depth of the sediments, volume, contaminant levels, density, chemical interaction with surface waters (fluxes)	• Depth, volume and density are unknown. Contaminant levels are below detectable level (below WHO standard) according to the Rapid environmental Health Impact Assessment by WHO, 2014. • UQ monitoring and assessment team observed an increase in the concentration of dissolved arsenic in the supernatant water, conditions causing this occurrence are unknown at this stage.	• Contractors/consultants to perform work identified • Work plan/ methodology submitted • Field work (sampling, parameter measurement) commence • Lab analyses and reports • Collating data and first draft prepared	• ToR for Physical environmental Assessment • Work plan • Contract with consultant • Assessment reports	
Project Strategy	**Objectively verifiable indicators**			**Sources of verification**	**Risks and assumptions**
	Indicator	**Baseline value**	**Target value and date**		
Outcome 2: The capacity of SIG on early warning and detection enhanced to effectively monitor the situation for early warning and response					
Output 2.1 A regular monitoring of Tailings dam water level, rainfall, arsenic and turbidity made available for enhanced early	Development of monitoring report (which informs the What To Do (WTD) messages by NDMO) template and routine circulation of data	• On December 6th 2016, Institutional Contingency planning workshop highlighted joint monitoring and messaging as a need. However, there has not been any monitoring report or template that informs the NDMO on What To Do developed.	• ~~Monitoring stations are identified~~ • Procurement ~~and installation~~ of monitoring instruments done	• Progress reports • Endorsed list of equipment from NPHL • Meeting minutes • Contingency plans • Monitoring report template	**Assumption** • Monitoring equipment and instruments are working properly and well secured from any vandalism activity

warning and detection capacity.			• ~~Testing of installed monitoring instruments~~		
Output 2.2 Capacity and needs of analysis of the National Public Health Laboratory (MHMS) and Geochemistry Laboratory (MMERE) for regular testing and monitoring assessed and gaps reduced	• Number of samples tested locally by NPHL and Geo Lab increased • Time taken for results to be made available is reduced • Monitoring report (which informs safety messages by MHMS) template developed and data regularly circulated	• Up until now, water samples collected from various points, including those at the downstream have to be sent to mainly Australia for testing. This contributes to increased costs and delays in receiving results.	• In country testing of water samples collected reducing costs and processing time. • National institutions equipped with tools and human resources to carry out these routine tasks. • Capacity and needs assessment of both the NPHL (MHMS) and the Geochemistry Laboratory (MMERE) is conducted. Ridge issue (and more broadly).	• Equipment procurement request letter from the ministries • Equipment lists from the ministries • Equipment • Receipts	
Output 2.3 Members of downstream and affected communities fully made aware of possible risks and mitigating measures through the design and roll out of awareness programs	• The number of community consultations to develop suitable safety messages including What To Do conducted with downstream communities agreed by relevant authorities	• Currently there has been a lack of proper communication channels • Uncensored and conflicting information received by communities causing fears	• Public communication strategy completed • Trainings are conducted for the relevant SIG staff • Community awareness meetings are conducted within the downstream communities	• Report on increased understanding of community on safety messages	Risks: • Dissatisfied communities or members not wanting to cooperate in the consultations
Output 2.4 Capacity of SIG staff enhanced to monitor tailings dam and downstream areas independently.	• Monitoring process and regular data sharing established	• The technical ministries have been doing their own monitoring. Yet they were not coordinated between the ministries.	• Monitoring team structure with roles and responsibilities established • Training for monitoring team conducted	• Progress report • Meeting minutes • Monitoring report templates	
Output 2.5 Geotechnical assessment training and use of equipment.	Decided by the board not to implement this.	n/a	n/a	n/a	n/a
Project Strategy	**Objectively verifiable indicators**			**Sources of verification**	**Risks and assumptions**
	Indicator	**Baseline value**	**Target value and date**		
Outcome 3: Project Management systems and mechanisms established for sound project execution and results delivery					

3.1 Coordination mechanisms and effective project management ensured.	• # Percent progress on the implementation of the project planned outputs • Number of TWG meetings • Number of board meetings	• Project activities already started for six months • Project outcomes agreed on key stakeholders in the overall project had been consulted	• Project document complete • Project budget confirmed • Project staff recruited	• Project progress reports • Project staff contracts • TWG meeting minutes • Attendance lists	
3.2 Monitoring and Evaluation (M&E)	• Monitoring and Evaluation reports	• Evaluation report to be produced at the end of the project.		• Evaluation report • Progress report • Evaluation ToR • Contract with evaluator	

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ANNEX B: LIST OF DOCUMENTS TO BE REVIEWED BY THE EVALUATORS

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Document	Description
Project document	• Project Document
Project reports	• Institutional contingency plan workshop Report • Project budget and financial data • Annual/Quarterly progress reports • Financial reports (eg. CDR Reports)
Technical documents produced by the project	Terms of Reference and reports for the following contracts: • Hydrological assessment reports /data • Geotechnical assessment reports /data • Physical environmetnal reports • Institutional Contingency Plan • Community Contingency Plan (Village Disaster Plans of 31 communities at risk) • Community Profiles • Community Evacuation Maps
Other relevant materials:	• Project Board meeting minutes • TWG meeting minutes • Workshop, meeting, consultation reports • Project budget revisions • National and local strategic and legal documents List and contact details for project staff, key project stakeholders, including Project Boards, and other partners to be consulted ***Project Staff*** Jiye Suh, Project In charge: jiye.suh@undp.org or phone +677 27446 John Sumana (UNDP Individual Consultant): sumanajohn25@gmail.com Deltina Solomon, Programme Associate: deltina.solomon@undp.org or phone+677 27446 ***Project Board*** Chanel Iroi, Under Secretary / Technical, MECDM: c.iroi@met.gov.sb Azusa Kubota, UNDP SOI Country Manager: azusa.kubota@undp.org Jeffrey Deve, Permanent Secretary, MMERE: jdeve@mmere.gov.sb Joe Horoku, Director, Environment and Conservation Division, MECDM: JHorokou@mecdm.gov.sb

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ANNEX C: EVALUATION QUESTIONS

This is a generic list. To be further detailed with more specific questions.

Evaluative Criteria Questions	Indicators	Sources	Methodology
Relevance: To what extent is the project suited to national development priorities and policies?			
• To what extent is the project in line with National Development Strategy and National Disaster Management Plan?	•	•	•
• To what extent are/do the objectives, design and allocation of resources realistic, integrate available knowledge and experience and adhere to recognized national or international standards?	•	•	•
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?			
• To what degree UNDP contributed to the observed results?	•	•	•
• What were unintended results (positive or negative) generated and the key explanatory factors explained?	•	•	•
• To what extent interventions have succeeded in reaching more vulnerable people, for example, women?	•	•	•
• What were the risks involved and to what extent were they managed?	•	•	•
• What lessons have been learned from the project regarding achievement of outcomes?	•	•	•
• What changes could have been made (if any) to the design of the project in order to improve the achievement of the project's expected results?		•	•
Efficiency: Was the project managed efficiently, maintaining the balance between the results achieved and the resources allocated to it?			

• Was the project implemented within the timeframe?	•	•	•
• Was the project executed within the budget?	•	•	•
• Were the implementation of the project concentrated on core activities (producing evidence-based contingency plans at institutional and community levels, procuring equipment and training)?	•	•	•
• What lessons can be drawn regarding efficiency for other similar projects in the future?	•	•	•
Sustainability: What is the likelihood that the results and benefits generated through a set of interventions will continue once the project is phased out?			
• Sustainability at design: Were exit strategies devised considering crucial factors such as political will and support, budgetary allocations for operational costs, existing technical skills, environmental preservation?	•	•	•
• Scaling up: What lessons can be drawn regarding sustainability of the project results? What changes could have been made (if any) to the design of the project in order to improve the sustainability of the project results?	•	•	•

ANNEX D: EVALUATION CONSULTANT CODE OF CONDUCT AND AGREEMENT FORM

Evaluators:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form[5]

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: _____

Name of Consultancy Organization (where relevant)**:** _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at *place* on *date*

Signature: _____

[5] www.unevaluation.org/unegcodeofconduct