



NATURAL RESOURCES AND ENVIRONMENT BOARD SARAWAK

[Incorporated under the Natural Resources And Environment Ordinance (Chapter 84 - Laws of Sarawak 1958 Ed.)]

ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REPORT APPROVAL

Terms and Conditions of Approval in accordance with the provisions of the
Natural Resources & Environment Ordinance 1993 (Cap. 84 - Laws of Sarawak) and
Natural Resources & Environment (Prescribed Activities) Order, 1994

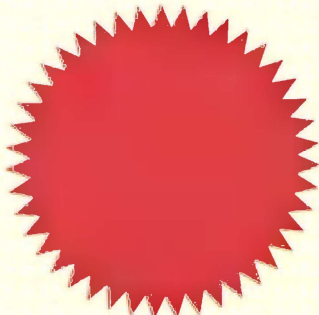
NAME OF PROJECT : THE PROPOSED LANDFILL ESTABLISHMENT AT C11 MAIN
ELECTRICAL AND MECHANICAL BLP6 PROJECT, BALEH,
SARAWAK

MAIN ACTIVITY : ESTABLISHMENT OF LEVEL 1 LANDFILL

PROJECT PROPONENT : SINOHYDRO CORPORATION (M) SDN BHD
47A, JALAN SELANGAN,
96000 SIBU, SARAWAK

DATE OF APPROVAL : 22 AUGUST 2022

REFERENCE NO. : (17) NREB / 600-7 / 2F / 7




[PEGGY RONIN ANAK EDIN]
Controller of Environmental Quality,
Sarawak

GENERAL TERMS AND CONDITIONS

1. COMPLIANCE

- (a) The project proponent shall adhere to the general operation and maintenance procedure that has been planned.
- (b) If any changes are to be made, the NREB shall be duly informed.
- (c) The project proponent shall sign an undertaking with the NREB to adopt and comply with all the *Terms and Conditions of Approval* contained herein for the protection and enhancement of the environment in its project site.
- (d) The project proponent shall display a copy of the document, i.e. *Terms and Conditions of EIA Report Approval for Environmental Protection*, at its site office. The document shall be made available for inspection by officers of the NREB when they carry out the monitoring or auditing.
- (e) The NREB reserves the right to amend, delete or add any of these approval conditions as and when it deems fit.
- (f) If there is no development within 3 years in the Project Area after approval has been granted, the Proponent shall undertake another environmental study and submit the report to this Board.

2. CONTRACT AGREEMENT

The project proponent must ensure that the Terms and Conditions for the protection and enhancement of the environment shall be included in all contract agreements with respect to the development and operation activities of the project; for further, the project proponent shall ensure that all these Terms and Conditions are observed, complied with and implemented by all contractors, their agents and servants, appointed to carry out the activities.

3. DATA AND REPORTS

- (a) The Project Proponent shall engage an Environmental Consultant to carry out environmental monitoring and provide environmental reports and data on the state of the environment *once every three months* upon commencement of the project.
- (b) The report shall be in the form and format as outlined in the **ANNEX II - "Environmental Monitoring Report" (EMR)**.
- (c) The water sampling points shall be in the locations as recommended in the EIA Report.

4. MONITORING

- (a) The officers of the NREB shall monitor the project development to ensure that all conditions herein are complied with.
- (b) The project proponent or its contractors shall give full cooperation and support to the officers of the NREB who shall carry out the monitoring and supervision on the development activities of the project.

5. CONSULTATION

The project proponent, the NREB and relevant parties as determined by the NREB shall hold consultations as and when required with regard to the protection and enhancement of the environment in the project site.

6. SPECIFIC TERMS AND CONDITIONS

The specific terms and conditions for the environmental protection at the project are as outlined in **ANNEX I**.

SPECIFIC TERMS AND CONDITIONS

LIST OF ISSUES AND MITIGATING MEASURES RECOMMENDED BY THE ENVIRONMENTAL CONSULTANT AS CONTAINED IN THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REPORT FOR "THE PROPOSED LANDFILL ESTABLISHMENT AT C11 MAIN ELECTRICAL AND MECHANICAL BLP6 PROJECT, BALEH, SARAWAK" AND ENDORSED BY THE NATURAL RESOURCES AND ENVIRONMENT BOARD (NREB) SARAWAK

ITEM	MITIGATING MEASURES RECOMMENDED BY THE ENVIRONMENTAL CONSULTANT	REFERENCE IN THE EIA REPORT	ENDORSED BY NREB WITH THE FOLLOWING VARIATION	
			IN TOTAL	
1.0 SOIL EROSION AND POTENTIAL SLOPE FAILURE	(a) Site clearing shall be confined to the areas that are necessary for landfill development and access road establishment.	Page C4 – 2	√	
	(b) Clearing and earthworks shall be carried out in stages and scheduled to be concurrent with dry periods.	Page C4 – 2	√	
	(c) Site clearing shall be staged from the lower elevation of the landfill to the higher elevation.	Page C4 – 2	√	
	(d) Plastic sheets or mulches from felled vegetation shall be laid on bare slopes as temporary surface protection from raindrop impact.	Page C4 – 2	√	
	(e) Consolidation works for open slope shall be carried out immediately and simultaneously during the site clearing phases.	Page C4 – 2	√	
	(f) The filling elevation of every layer of the landfill shall be labelled by the survey team to allow the timing of clearing.	Page C4 – 2	√	
	(g) Soil covering material shall be placed on stable high ground away from water bodies.	Page C4 – 2	√	
	(a) The garbage shall be adequately compacted and the cover material shall be placed and compacted over the garbage layer.	Page C4 – 3	√	
	(b) Adequate drainage shall be provided at the Project site. The drainage system shall be periodically inspected to ensure no blockage	Page C4 – 3	√	
3.0 WATER QUALITY IMPACT	(a) The landfill shall be located at least 100 m away from the nearest river, stream or other water bodies.	Page C4 – 3	√	
	(b) All surface drains and culverts shall be regularly maintained and inspected to ensure no blockages	Page C4 – 3	√	
	(c) Perimeter drains shall be installed, with proper grading provided to channel the surface runoff from the Project site into the river.	Page C4 – 4	√	

ITEM	MITIGATING MEASURES RECOMMENDED BY THE ENVIRONMENTAL CONSULTANT	REFERENCE IN THE EIA REPORT	ENDORSED BY NREB	
			IN TOTAL	WITH THE FOLLOWING VARIATION
	(d) Quarterly water quality monitoring shall be carried out from the commencement of the landfill construction. Monitoring of landfill leachate shall be incorporated during the operational stage.	Page C4 – 4	√	
	(e) The sedimentation basin shall be regularly desludged and the filtering cofferdam shall be maintained to ensure their effectiveness.	Page C4 – 4	√	
	(f) Final discharge of the landfill leachate shall meet Schedule 2 of the Environmental Quality (Control of Pollution from Solid Waste Transfer Station and Landfill) Regulation 2009.	Page C4 – 4	√	
4.0 NOISE POLLUTION	(a) Workers exposed to noisy machinery and/ or are involved with activities which generate high noise levels shall be provided with proper Hearing Protection Devices (HDP) such as earplugs and earmuffs.	Page C4 – 4	√	
	(b) No employee shall be exposed to the daily noise exposure level exceeding 85 dB(A) or daily personal noise dose exceeding hundred per cent, the daily maximum sound pressure level exceeding 115 dB(A) at any time or the peak sound pressure level exceeding 140 dB(C) as specified in the Occupational Safety and Health (Noise Exposure) Regulations 2019.	Page C4 – 4	√	
	(c) All equipment used during construction and operation of the landfill shall be periodically and properly maintained and serviced to reduce the generation of noise.	Page C4 – 4	√	
5.0 AIR POLLUTION	(a) Vehicles transporting construction materials shall be covered with canvas or tarpaulin to prevent spillage. Access road shall be cleared of spilled materials as to avoid dispersion of dust.	Page C4 – 5	√	
	(b) Open burning of any types of waste shall be strictly prohibited.	Page C4 – 5	√	
	(c) Construction vehicles and associated equipment shall be properly maintained through regular servicing to reduce the emission of pollutants.	Page C4 – 5	√	Refer to Appendix 4.2.1 in the EIA report for the Environmental Quality (Clean Air) Regulations 2014.
	(d) Quarterly monitoring of Particulate Matter, PM10 and methane shall be undertaken once the landfill operation commences.	Page C4 – 5	√	10/09/2022

ITEM	MITIGATING MEASURES RECOMMENDED BY THE ENVIRONMENTAL CONSULTANT	REFERENCE IN THE EIA REPORT	ENDORSED BY NREB WITH THE FOLLOWING VARIATION	
			IN TOTAL	
6.0 WASTE GENERATION AND MANAGEMENT	(a) Vegetative wastes shall be stacked at designated area near the Project site for natural decomposition.	Page C4 – 5	√	
	(b) Suitable vegetative wastes shall be used as mulches for the temporary control of soil erosion during clearing of the landfill area.	Page C4 – 5	√	
	(c) The landfill shall not be used to dispose any type of Scheduled Wastes and other toxic wastes.	Page C4 – 5	√	
	(d) Non-reusable earth matter shall be disposed at suitable approved area.	Page C4 – 6	√	
	(e) Optimum compaction shall be undertaken to increase the life expectancy of the landfill by maximizing the use of available space	Page C4 – 6	√	
	(f) Areas and facilities for separation of recyclable or reusable materials shall be provided to encourage the salvaging of wastes.	Page C4 – 6	√	
7.0 HEALTH AND SAFETY IMPACT	(a) All health and safety requirements shall be incorporated into contractual agreement with the contractors.	Page C4 – 7	√	
	(b) All workers involved in the construction and operation of the landfill shall be trained in the aspect of health and safety at a landfill.	Page C4 – 7	√	
	(c) Workers shall be provided with Personal Protective Equipment (PPE).	Page C4 – 7	√	
	(d) Necessary basic first aid and medical services shall be provided to workers including transport for injured personnel to the nearest medical facility as and when required.	Page C4 – 7	√	
	(e) Any construction activities extending beyond the day-light hours shall be provided with sufficient illumination at the work site.	Page C4 – 7	√	
	(f) The landfill area shall be fenced to restrict unauthorized access to the landfill and to keep out the vermin and stray animals.	Page C4 – 7	√	
	(g) Only authorized personnel shall be allowed to enter the landfill site. Public entry shall not be allowed unless with permission to avoid scavenging.	Page C4 – 7	√	
	(h) Equipment defects or safety hazard identified during the construction and operational stage shall be promptly reported and dealt with.	Page C4 – 7	√	<i>YJ</i> <i>01/09/2022</i>
	(i) Operations shall be stopped immediately if a severe safety hazard is identified.	Page C4 – 7	√	

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			IN TOTAL	
	<p>(j) A sign shall be placed at the entrance of the landfill. The sign shall have the following current information:</p> <ul style="list-style-type: none"> • Site name • Owner and operator • Contact phone number • Phone number in case of emergency (such as fire) • Hour of operation • Materials/ wastes accepted for landfilling and recycling • Materials / wastes banned 	Page C4 – 7	√	
8.0 SOCIO-ECONOMIC IMPACT	<p>(a) Concerns from the site office and quarters (accommodation) located about 950 m northwest of the landfill site shall be promptly addressed.</p> <p>(b) Re-vegetation shall be carried out on the outer surface of the landfill.</p>	Page C4 – 8	√	
9.0 CLOSURE AND ABANDONMENT	<p>(a) A closure plan for landfill shall be submitted and approved by NREB at least six (6) months before its closure. The closure shall specify at least the following items:</p> <ul style="list-style-type: none"> • Anticipated total waste volumes and tonnage and life of landfill (closure date); • A topographic plan showing the final elevation contours of the landfill and surface water diversion and drainage control; • Rodent and nuisance wildlife pest control procedures; • Design of the final cover including the thickness and permeability of barrier layers and drainage layers, and information on topsoil, vegetation cover and erosion prevention controls; and • Proposed end use of the landfill after closure. <p>(b) A proper landfill closure plan shall be prepared for abandonment.</p> <p>(c) All vegetative matters shall be disposed of at appropriate location for natural decomposition.</p> <p>(d) All temporary structures shall be dismantled.</p> <p>(e) All machinery and equipment shall be removed from site.</p> <p>(f) All earth wastes shall be disposed of at appropriate location or, where suitable, used as the covering material for the landfill during its closure for abandonment.</p>	Page C4 – 9	√	
		Page C4 – 10	√	
		Page C4 – 10	√	
		Page C4 – 10	√	
		Page C4 – 10	√	
		Page C4 – 10	√	
		Page C4 – 10	√	

FORMAT OF ENVIRONMENTAL MONITORING REPORT**1.0 GENERAL INFORMATION**

- Project title
- Date of commencement
- Physical progress of construction
- Date of submission of the previous Environmental Monitoring Report

2.0 WATER QUALITY SAMPLING AND ENVIRONMENTAL MONITORING**2.1 Particulars of Water and Air Quality Monitoring**

- Frequency
- Date of sampling / monitoring
- Weather and tidal conditions during and prior to sampling
- Geographical coordinates of the water sampling points

2.2 Environmental Monitoring

Compliance to the Terms and Conditions of the EIA Report approval and implementation of the prescribed Mitigating Measures on:-

- Control of air and water pollution;
- Control of soil erosion and sedimentation;
- Control of noise and vibration;
- Waste generation and management;
- Traffic disruption and hazards;
- Public and occupational safety and health issues;
- Public complaints and etc.

3.0 RESULT AND DISCUSSION**3.1 Water and Air Quality**

- Collation and evaluation of data (to attach Laboratory Analysis Report)
- Interpretation of data with comparison to the baseline and the previous monitoring data
- Discussion
- Recommendation(s)

3.2 Other Environmental Parameters

- Various environmental components as stated in section 2.2.
- Status of implementation of the recommended mitigating measures
- Proposed remedial action(s)

3.3 Comments Or Recommendation/Amendment to the Prescribed Mitigating Measures

- Immediate remedial actions to be taken
- Additional mitigating measures required

4.0 APPENDICES

- Relevant plates and maps shall be inserted