

PROJECTNI KATTA BICHONG

ROCHONPARA STONE MINES

BIAP:

**VILLAGE – ROCHONPARA, P.O.- DHANUA, P.S. – GAROBADHA, DIST. – WEST
GARO HILLS, STATE – MEGHALAYA**

**RONG·TE BIKOTANI DAL·ANI (AREA) 1.10 HECTARES (2.72 ACRES.)
AKING NO. III-26(6)**

**IN BURUNG ONGGIJAGIPA (NON-FOREST AREA) BIAP
BILSIO BADITA BIKOTGEN: 21905.7 Cubic BILSI PRAKO 59145.4 Tons (MAX)
BILSIPRAKO**

**BOULDER BA RONG·TE KO PORAIE NIANI SOMOI: 1st Feb. to
30th April, 2022**

**[Project Listed under activity 1(a) Mining of Minerals of EIA
Notification, 2006 and falls under category 'B1' as the area of mining is
in Cluster]**

APPLICANT

**Smt. Marsilla Ch. Sangma
VILLAGE – 43 ROCHONPARA, PO- DHANUA, PS –
GAROBADHA
DISTRICT – WEST GARO HILLS, STATE- MEGHALAYA –
PIN-794105**

GOLPO DILGIPA



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Environmental Clearance For 4.94 Acres/ 2.00 Ha Sudap Bisik (Chiran Songma) Stone Mine Project of Shri Balnen Ch. Sangma at Village – Sudap Bisik (Chiran Songma) , P.O. - Dhanua, P.S. – Garobdha, Dist- West Garo Hills, State- Meghalaya.

TALATANI

1.0 AGANCHENGANI

1.1 Project

la chanchiengagioa project-ra Rochonpara songo rong'te ba boulder ko bikotani ong'a, bikotna am'enggipa biapde Rochonpara, P.O. – Dhanua, P.S.- Garobadha, Dist. – West Garo Hills, State – Meghalaya, aro bikota am'enggipa biap ni dal'ara 1.00 Hectares ong'a.

la project ra 95498.6 cubic meters (257846.2 Tons) rong'te rangko donsogimin salrango bikotna miksongani donga. Bilsiprako 21905.7 Cubic meters (maximum) / 59145.4 Tons per year bikotna miksongani ba plan kaani dongaha.

1.2 Project Ka'nagipa ko nirokgipa mande

The project niroknagipa mande, Smt Marsilla CH Sangma ong'a, songara— Nogapara, Noga Nokat, P.O. & P.S. - Garobadha, Dist.-West Garo Hills, State- Meghalaya, aro ua mande Smt Marsilla CH Sangma, ua aganmin rong'te ko bikotna ba cho'na gita, Shri Misin Sangma songara Aking Nokma of Balnen, P.O. - Dhanua, P.S.- Garobadha, Dist.-West Garo Hills, State- Meghalaya. oniko bilsil 3 (gittam) na a'a ko para(lease) ko ra'aha. Aro is a'ako mikkangchi nangnikua ong'ode, para ragipa aro para on.gipa baksa meligrike agreement ba see jote on'aniko dakangkugen aro rong'terangko bikotkugem. Lol koba Meghalaya Government ni gita, Meghalaya Minor Mineral Concession Rules ni ningao, B/16/VII/383-82 on 28th Sep., 2020.

1.3 Para onani bilsil: 5.00 Bilsil na

1.4 Project kanagipa biap aro Rama Jalangrang

Ro'ong bikotana am'enggipa bipa de 0.13 km Rochonpara songode in Salgro Salaram Chipak onga aro District ni Head quarter Tura on 29 km. chelao in Salgro-Salaram chipak onga. Ua biapon- Rochonpara songan sepangbatgipa onga aro ua songoni chela 73.37 km, Salgro Salaram chipak gaaka. Sepangbatgipa Train station Mendi Pathar onide Salgro Salaram chipak, 73.37 km ni chelao donga. Shillong Airport de 202.36 Km Salgro Salaram chipak donga. Ro'ong bikotna amengagipa bipa, S.H.-2 (Singimari – Tura road) oni 0.35 Km (aerial distance) Salgipeng Saliram chipak gaakskaa.

Table 1: Project -ko kam kanagipa biapni gimin janapani

Particulars	Details			
Village	Manggapara			
Co-ordinates	Sl.no	Latitude	Longitude	
	1	25°41'14.62"N	89°56'24.14"E	
	2	25°41'13.59"N	89°56'25.07E	
	3	25°41'12.04"N	89°56'26.23"E	



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	4	25°41'11.33"N	89°56'24.67"E	
	5	25°41'09.85"N	89°56'23.47"E	
	6	25°41'11.04"N	89°56'22.51"E	
	7	25°41'11.71"N	89°56'22.07"E	
	8	25°41'12.61"N	89°56'21.20"E	
	9	25°41'13.72"N	89°56'22.21"E	

1.5 Maidakgipa Project ong'achim

la project ra gesan dakgipa project onga, jeon rongte ko cho'e a'aniko bikotgen aro ia project ra activity 1(a) ni ningao, Mining of Minerals ni ningo Schedule of EIA Notification, 2006 aro Category-B1, Mining Lease area in cluster ni ningao donmanako mangipa project ong'a.

1.6 Report ba Talataniko miksoingani

la EIA(Environmental Impact Assessment) Report-ko Terms of References (TOR) o pangchake State Environment Impact Assessment Authority (SEIAA), Meghalaya, 21st Nov., 2023 vide letter no. ML/SEIAA/MIN/WGH/P-351/2023/380 Dated 16 july 2023 ni dongimin niam o pangchake taria. Aro ia report ko Environmental Clerance ba mamungba champengani dongjana gita naim o pangchake tariaha.

1.7 Maina ia Project-ko nangachim

Boulder ba rong'tean building rikgiparangona, rama tarigiparang na aro gipin kamrangna nangchotngmotgipa ong'a. Gimiko rikaninion rong'tean nangchongmotgipa and nangtelaigipa bostu ong'a. Una agreba chonchongipa rong'te rangko cement rangmung brina aro traing ni ramarangna jakkala aro nanga. Daonni anching ni government ni dakenggipa kamranga rama challengrangko aro nangipa rikanirang ko buildingrangko namdapananin ong'a. Uarang ko dakna gita nanga gita aro chuonga gita, daldalgipa rong'te rangko aro rong'teni chiprangkon rama challeng ko tarina gita an'chingni Meghalaua a'dokna bangen nangenga. la rong'te bikotani Project ra songo ba songni chela bipaosa ong'gen. Uni gimin songni mande rangna kam ka'e cha'na gita ba nama cholko on'gen. Una agre ba ia project ko a'bachenganichi, songni nokchi tangkani gita ba janggi tangani gita namdapananiko mangen. Aro dalgipa aro rakgipa rong'teranga rama rikkam ba chibima rikkam rango a'a beako champengna gita jakkalna bilongen nama.

2.0. DONGSOGIMIN RO'ONGKO HISABANI

RochonparaStone Mine comes under Category - B (semi mechanized category). Therefore, conceptual plan of the mine has been prepared on the basis of life of the deposit considering the proved existence of the mineral up to 70 m RL. Conceptual mining plan has been prepared following the guidelines of IBM, keeping in view the present knowledge of the deposit, topography of the area, surface drainage pattern, mineable reserves available, mining technology and sites for waste disposal, etc.

Table 2: Quantity Geological & Mineable Reserves



Environmental Clearance For 4.94 Acres/ 2.00 Ha Sudap Bisik (Chiran Songma) Stone Mine Project of Shri Balnen Ch. Sangma at Village – Sudap Bisik (Chiran Songma) , P.O. - Dhanua, P.S. – Garobdha, Dist- West Garo Hills, State- Meghalaya.

Reserve	Quantity (Cubic Meters)	Quantity (Tons)
Geological	1076098	1076098
Mineable	313049	115944.07

Source: Mining Plan

3.0. PROJECT NI GIMIN TALATANI

Ro'ongko bikotani ba Mining ko adha machinerangchi aro adha mande chi dake cho'e kamko ka'gen. Rong'te ko a'kolrang puani aro nangode dynamite rangko jakkale blast ka'ani ba bretatanirangkoba rong'te rakgipako bikotaniko dakgen. Indiba nomgiparangko de blast kajawa. Jack hammer drill ba a.kol puanirangko dake rong'te rangko dynamite chi bretatgen. SMS slurry explosive and dynamite ko bretatna jakkalgen.

Ro'ongko bikotanai biap ko talatani ko Table-3 o mesokenga

Table 3: Mine kanagipa biap ni gimin talatani

Sl.No	Description	Particulars		
1.	Mine lease area	1.10 Ha		
2.	Forest Area	Nil		
3.	Mining Planned Period	5 years		
4.	Approval of Mining Plan	Mining Plan has been approved by Divisional Mining Officer, East Garo Hills, Williamnagar, DMO-W/MP/89/22/115 dated 06.12.2022		
5.	Type of mine	Opencast Mine		
6.	Method of mining	Semi-mechanized open cast mining. Shovel Dumper combination with deep hole drilling & blasting shall be used.		
7.	Total Reserve	Geological Reserve – 1076098 Tons – 398554.81 Cum Mineable Reserve – 313049 Tons –115944.07 Cum		
8.	Proposed Production	Years	Annual Production Plan	
			In Cubic Meters	In Cubic Meters
		1st	15134.5	40863.3
		2nd	18397.0	49672.0



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Sl.No	Description	Particulars		
		3rd	21905.7	59145.4
		4th	20887.5	56396.4
		5th	19173.7	511769.1
		Total	95498.6	257846.2
9.	Ore to Waste ratio	1:0.068 (On cum to cum basis)		
10.	Life of Mine	5.0 Years		
11.	Period of Lease applied	5 years		
12.	Working Regime	300 days / 3 Shifts per day / 8 hours per Shift		
13.	Bench height / bench width	5 m/6 – 7m		
14.	Final Bench Slope	45%		
15.	Over Burden Generation	14284 cum OB shall be generated during the current planed period		
16.	Topsoil to be generated	Nil		
17.	Fuel Requirement	HSD - 1044 liters / day (313.2 KL/year)		
18.	Requirement of Explosive	NA		
19.	Requirement of Water	8.02 KLD		
20.	Requirement of Power	Nil. 20 KVA DG Set proposed		
21.	Transportation	Through Tipper within lease area. By truck, outside lease area		
22.	Project Cost	Rs. 77Lakhs		

Source: Approved Mining Plan

4.0. Bilsi prako Rong'te bikotani

Bilsiprako roing'te ko bikotna chanchiani. Bilsa 5 Na chanchianiko Table 4 o mesokenga:

Table 4: Rong'te bikotana miksongani-Bilsa 3 na

SUMMARY OF YEARWISE OF PRODUCTION					
YEARS	Production in CUM/year	Production in CUM/Day	Over Burden Production in CUM/Year	Production in Tons/year	PROD. IN TONS./Day



Environmental Clearance For 4.94 Acres/ 2.00 Ha Sudap Bisik (Chiran Songma) Stone Mine Project of Shri Balnen Ch. Sangma at Village – Sudap Bisik (Chiran Songma) , P.O. - Dhanua, P.S. – Garobdha, Dist- West Garo Hills, State- Meghalaya.

SUMMARY OF YEARWISE OF PRODUCTION						
Years	Production In Cum/Year	Production In Cum/Day	O.B Production in Cum/Year	Production In Tons/Year	Prod. In Tons. /Day	Bench RL in meters
1st	15134.5	50.44	12047.7	40863.3	136.21	73-61
2nd	18397.0	61.32	2236.3	49672.0	165.57	67-61
3rd	21905.7	73.01	0	59145.4	197.15	67-55
4th	20887.5	69.62	0	56396.4	187.99	67-55
5th	19173.7	63.91	0	51769.1	172.56	55-43
Total	95498.6	318.3	14284.0	257846.2	859.27	Depth – 30m

5.0. Mande ko ba Labour rangko nangani

Rong'te bikotani biapo, Rochonpara Stone Mine o, chugimik 37 name changgijagipa, alamala changgipa aro name name changgipa manderangko nangnikani gita kam kana rakkigen aro ua manderangko, DGMS dongimin niam ni gita A'a nokgipa on'gen. Bak 10 ni bak 9 ko songo donggipa manderang ko dormanaha ko one contactual o kamo rakkigen.

6.0 MININGO NANGGIPA BOSTURANG -RONG'TE, CHI, CURRENT, PETROL/DIESEL

Table 5: Jakkalana nanggipa bosturang

Nanggipa Bosturang	Nangani	Unit
Diesel	1044/313.2	Litres /day (kl / year)
Bretana jakkalgipa bosturang	NA	Tons/year

Chi ko nangani

Chi ko camp o jakkalna gita, adumuko komiatna satna aro bolrangko ge'o chi runa gita jakkalna nanggen. Salantin 10.29 KLD is project na nanggen:

Table 6: Chi ko nanganirang

Sl. No.	Details	Requirement of Water (KLD)
1	Dust Suppression. (6 KLD in 1 Km)	Total length of approach road 0.44 Km. Requirement of water = $0.44 \times 10 = 4.40$ KLD Two times Water Sprinkling in one Day = $4.40 \times 2 = 8.80$ KLD (Nearly 1 Water Tanker of Capacity 10 KLD will be required in one day)
2	Drinking & Domestic	Water requirement for drinking & domestic purpose per person is 15 litre per day. Therefore requirement



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Sl. No.	Details	Requirement of Water (KLD)
		is 15 x37 = 555 litre / day say 0.56 KLD
3	Greenbelt Development	Water requirement for Greenbelt Development is 3 Litre/ Plant. Requirement of water = 1019x 3 = 3057L= 3.06 KLD
Total		8.02 KLD

Ringna ba songna rita gita chi ko ringwell ba chiakol niko jakkalgen. Gipin kamrangna, jekai, a'kol puna, adumuna chi satna aro bol rangna chi runa de chi tanker niko bree jakkalgen.

Currentko Nangani

Current ba electricity no nangjawa. Mine kana jakkalgipa machine gimikan diesel chi chalaigipa ong'a. 10 KVA Dg Set ko ba mine kagipa biap o dongen.

7.0. A.A MAIDAKE JAKKALGENCHIM

Table 7: Dongsoenggipa a'a and jakkalnasienga mine kaani biap

Category	Area in Ha.	Area in Acres
Safety Zone	0.00	0.00
Road	0.00	0.00
Total area in use	0.00	0.00
Balance area in used	1.10	2.72
Total applied area	1.10	2.72

Land Use Pattern after Proposed Plan Period of Five Years:

Category	Area in Ha.	Area in Acres
Quarry	0.68	1.68
Haul Road	0.06	0.15
O. B. Dump	0.07	0.17
Garland Drain with Settling Tank	0.07	0.17
Safety Zone	0.22	0.55
Total area in use	1.10	2.72
Balance area in used	0.00	0.00



Environmental Clearance For 4.94 Acres/ 2.00 Ha Sudap Bisik (Chiran Songma) Stone Mine Project of Shri Balnen Ch. Sangma at Village – Sudap Bisik (Chiran Songma) , P.O. - Dhanua, P.S. – Garobdha, Dist- West Garo Hills, State- Meghalaya.

Total applied area	1.10	2.72
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Land Use Pattern after Life of the Mine:

Category	Area in Ha.	Area in Acres
Quarry + backfilling + reservoir	0.81	2.0
Green belt	0.29	0.72
Total area in use	1.10	2.47
Balance area in used	Nil	Nil
Total applied area	1.10	2.72

8.0. PROJECT NI KOROS

Project ko start ka'na gita **Rs. 77.00 lakhs** ko jakkalgen and chalaina gita bilsu prako **Rs. 7.04 lakhs** ko jakkalgen.

9.0. PROJECT NI NAMGNI

Rong'te an mingsa nangchongmotgipa rangoni ong'a aro uko jakkale nok aro dgintang dingtang rikanirangko aro development ka'na gita rikna man'a. Rong'te a rakbegipa are ru'utbee baigipa ong'ani gimin rama are nokrangko rikna jakkala. Rong'te ni demand daororo nok rikna gita, industry rangko rikna are gipin gipin nangipa rangko rikna gita bilongen demand ong'bea. Dingtang dingtang development ni kam rangko daka rikanichi gimiknan namgni are silrooaniko ra'baa.

1. Direct ba in-direct kamrangko ong'katani

Komibeoba sak 38 ko is project ba rong'te bikotanio kamko on'gen are gipin mande rangko rong'te rangko salna garini driver ni kam are gari tarigipa are chona dokanrango dongtimna kamko on'gen.

2. la project Jongkipara songnasan ongaigija gipin sambao donggipa songrangnaba namgniko are silrooaniko ra'bagen.

Rama jalang: Gital rama jalangrangko tarigen and dongsoengagipa rama jalangrangko taridapgen



Environmental Clearance For 4.94 Acres/ 2.00 Ha Sudap Bisik (Chiran Songma) Stone Mine Project of Shri Balnen Ch. Sangma at Village – Sudap Bisik (Chiran Songma) , P.O. - Dhanua, P.S. – Garobdha, Dist- West Garo Hills, State- Meghalaya.

Anti ba bajar: Songo donggipa mande rangni tangka paisani gita nambatataniko mane anti ba bajar rangba nambata bosturangko palna gita mangel aro project sambaona doka rangba sokbagen.

Nanggipa rikanirang: la chanchienggipa project ni a'sel nangipa rikanirangko abachengna gita rong'te rangko chuonga gita on'gen.

Burung bolgrim rangko bariatgen. 3484 bol pangrangko ge'na gita is projectni sam ba wilwilao aro rama joljol ge'na gita chanchie donsoaha.

3. la rong'te bikotna am'gipa project, songni nokni namdapanina aro silroraanina bilongen dakakchaka ni ong'begen. lako dakanichi songni nokni manderang tangka paisa ni gita bilakbatgen aro paoraia skianioba bilakbatgen.
4. la project State aro Central Government-naba kajina gita tangkakoba bikote ongen.

10.0. SAMTANGTANGO (ENVIRONMENT) DONGGIPANI GIMIN TAIATANI

Nangchongmotgiparang- balwani quality, jokenggipa aro a'ningo donggipa chini obosta ba quality, a'a ni obosta, burung ni bol wa'a aro matburung rang, sambao songdongenggipa manderangni obosta.

4.1 SAMTANGTANGO (ENVIRONMENTAL) MASIE RA'ANI

a chanchienggipa project ko a'bachengna gita, samtangtango donggipa sam bol, chi aro balwa rangko 1st Feb. to 30th April, 2022 ona poraie aro masie niaha. Ua sandie aro poraie nianio, balwa ni quality ba obosta, kosako jokgipa aro a'ningo donggipa chiko, gamani (noise) aro a'a ni quality ko rabae name test kae niaha.larangko test ka'e nion kamao ongipin table o gita result ko man'aha.

Parameters	No. of Sites	Description	Permissible Level
Air Quality	8	- PM2.5: 31 µg/m³ and 37.9 µg/m³ - PM10: 60.1 µg/m³ and 69.7 µg/m³ - SO₂: 5.11µg/m³ and 12.7µg/m³ - NO₂: 14.3µg/m³ and 26.6µg/m³ - CO: 0.131 µg/m³ and 0.142 µg/m³	60 µg/ m ³ 100 µg/ m ³ 80 µg/ m ³ 80 µg/ m ³ 2 mg/m ³
Ground Water Quality	8	- pH varies from 6.75 to 7.06 - Total Hardness varies from 51.6 to 61.4 mg/l. - Chloride varies from 21.9 to 31.2 mg/l.	6.5-8.5 200-600 mg/l 500-2000 mg/l
Surface Water Quality	2	- pH varies from 6.68 to 7.81 - Total Hardness varies from 51.6 to 61.4 mg/l.	----



Environmental Clearance For 4.94 Acres/ 2.00 Ha Sudap Bisik (Chiran Songma) Stone Mine Project of Shri Balnen Ch. Sangma at Village – Sudap Bisik (Chiran Songma) , P.O. - Dhanua, P.S. – Garobdha, Dist- West Garo Hills, State- Meghalaya.

Parameters	No. of Sites	Description	Permissible Level
		Total Dissolved Solids varies from 237 to 330 mg/l.	
Soil Quality	8	- pH 6.73 – 7.14 - organic matter- 0.54% - 0.73% - Avl. Nitrogen N - 209 to 237 kg/ha. - Available Phosphorus-15.2 to 18.3 kg/ha	----
Noise Level	8	- Day Time (6:00 a.m. to 10:00 p.m.) 53.5 Leq dB(A) and 54.8 Leq dB(A), - Night Time (10:00 p.m. to 6:00 a.m.) 41.3 Leq dB(A) and 43.4 Leq. dB(A)	75 Leq dB (A) 70 Leq dB (A)

11.0. PROJECT KO CHALAIMITINGO BALWANA , CHI-NA , KA NA , BOLWA'ARANGNA, MATBURUNq RANGNA ARO SAMBAO DONGGIPA MANDERANGNA MAI ONGGENCHIM UKO TALATANI

11.1 Nokrangko rikmiting somoi

la rong'te ni mining ni project o , mamungkoba rikani dongjawa. Ala ma la rike office dakna, toilet, nengtakna aro accident ongarango sanna tarigipa nok na agrede dongjawa.Uni gimin sambao donggipa sambol rangna mamungba nosto ongani dongjawa.

11.2 Kam ka'miting somoio

11.2.1 A'a ko jakkalani somoio

Mine ka'na chanchigipa biap ni a'a de kam ka.mitingode dingtang ong'gen. Rong'te bikotmiting somoi rango a'a' rang ko cho'e a'ani chuanirang komianggen and bon'gen.

Dongsogimin a'a ko ma mung dakeba jakka lna skang taridapani dongjawa.

11.2.2 A'ako choani balwa maiba namgijani ong'en aro uko chamengani rama

Rong'te bikotode, a'dumu bange ong'katgen. Rong'te rangko a'a ko choe bikotgen. Una agreba a'dumu a'kol puanichi aro blast ka'anichi ong'katgen aro garirang re'anichiba ong'katgen. Sulphur dioxide (SO₂), Oxides of Nitrogen (NOx) dakgipa balwarangde gariko jakkalanichi, generator chalaianichi, excavator jakkalanichi ongkatskagen.



Environmental Clearance For 4.94 Acres/ 2.00 Ha Sudap Bisik (Chiran Songma) Stone Mine Project of Shri Balnen Ch. Sangma at Village – Sudap Bisik (Chiran Songma) , P.O. - Dhanua, P.S. – Garobdha, Dist- West Garo Hills, State- Meghalaya.

A'kolrangko puani

Rong'te ko bretatna gita a'kolrangko rong'te o pugen and uni a'selba a'dumu ong'katgen. A'kol puna gita matsramgipa drill bit rangko jakkalgen. Jeon a'kol puengachim, uno chi rangko rugen.

A'kol pugipa kam ka'gipa manderangna a'dumuoniko naljoke rakkina gita mask rangkoba on'gen.

Blast ka'ani ba bretatani

Blast ka'ode agrepile a'dumu ong'jawa. Indiba blast ka'miting somoi a'dumu baksa wal'ku bang'e ong'gen aro ua somoio balwa raka ong'ode kamachipak donggipa biaprangchi balangen.

Site Mixed Emulsion (SME)/ Site Mixed Slurry (SMS) explosives rangko sandie nieblast ka'na jakkalgen.

Una agreba, somoi namjaode, ba weather namjaode, jekai, walo ba mikka wana am'o blast ka.nirangko dakjawa.

Rong'te salani rama

Rong'te ko bikoton, uarangko truck rango gate, dane dona gita dongimin biapona salanggen. Una agreba breenggipa mande rangna ba gipin biapranonaba truck o gaten salanggen. Rong'te rangko salna jakkalgipa rama kutcha rama ong'ani gimin gari tyre rangni a'sel a'dumu ong'katgen.

- Gari jakkalgiprang de agre walku ong'jawa maina jakkalna gipa garirangko name maintain kae jakkalgen. Baita walku ong'engachim ukoba Emission test rangchi meter o nigen, jedakode agre walku ong'jana gita.
- Chi satkikigipa gari 12,000 liter chakgipako rong'te walgipa ramao satkikigen. Ramarango chi satkikigipa ko pangna somoigita satkikigen jedakode agre a'dumu ong'jana gita.
- Garirangko name tarie jakkalgen.
- Nangana bate rong'te rangkoba truck o gatna on'jawa aro gari rangkoba agre tarake salna on'jawa.

11.2.3 Mine ka'o jokenggipa chiring chibimana mai ong'genchim aro uko maidake naljokgen

Rong'te ko bikotmitingo mamung namgija chi rang ong'katajawa. Toilet o jakkalgipa chi rangkoba toilet a'kolosa name wate galgen.

Rong'te bikotna am'gipa biap o mamungba chiring jokanggipa dongjani gimin gipin chiring rangko nosto ka'jawa. Uan dake gipin chiringrangkoba chonatani chol dongjawa. Uni gimin chiring chibisiko rong'te bikoatnichi mamung ba nosto ka'atani dongjawa.



Environmental Clearance For 4.94 Acres/ 2.00 Ha Sudap Bisik (Chiran Songma) Stone Mine Project of Shri Balnen Ch. Sangma at Village – Sudap Bisik (Chiran Songma) , P.O. - Dhanua, P.S. – Garobdha, Dist- West Garo Hills, State- Meghalaya.

Rong'te rangko bikotani a'sel chi ko nosto ong'atani ba nosto ka'ani japangrang ko mesokatenga:

- Office aro nengtako jakkalgipa chi rang.
- Mikka wao jokbrakgipa chi.
Rong'te bikotgipa biaponi chi rang a'aplchi joke katjana gita name tarigen, je dakode moilarangba a'palchi balangjana gita.

Chi ko moila ongatjana gita champengani cholrang

- Jabolrangko galgipa biapo wilwile dale drain ko chogen aro ua drain on mikka wajoko chi rang skonggen aro mikka ni chi rang ko a'kolona watatgen.
- Noko ba office jakkalgipa chirangko soak pit o na watagen aro sok pit o niko bolrangna nangode jakkalgen.

Una agreba, kam ka'gipa manderangna nama ringani chi aro nama toilet rangko tarie on'gen.

11.2.4 Mine ka'o a'a ning'o donggipa chi mai ong'genchim aro Naljokani

Chi level ni kosako donggipa rong'te rangko bikotna amaengani ni a'a ningo donggipa chi rang mamung dakeba nosto ong'jawa. Uni gimin chirangko 'akolrangniko pump rangchi saldona nangjawa. Mikka wao ua a.kolrangko chi gapode , u chirangko ramarangko runa aro bol rangna runa jakkalskagen.

Chi ko moila ongatjana gita champengani cholrang

- Chi level ni kosako donggipa rong'te rangko bikotna amaengani ni a'a ningo donggipa chi rang mamung dakeba nosto ong'jawa. Uni gimin chirangko a'kolrangniko pump rangchi saldona nangjawa. Agre a'kolrangko mikkani a'sel chi gapode pumpchi chiringrangona wate galgen. Nangana bate chi store ong'giparangko wate galna gita dal'a pump ko install ka'gen.
- Nangani gita retaining wall, drain aro dal'a drain rangko chi name jokna gita tarigen. Moilarangko chimongna gita chamber ge'gittam donggipa tanki koba metre 3 apale tarigen jeon garini moilarang, amangrang chimongna gita man'gen. Last gipa chamber o de chi rongtalana agre dongjawaha aro ua chiko nanga gita wate galgen. Ua chamber o 1.5 chua aro 1.2 apala aro 1.5 apao dewaliko ba gatgen.

11.2.5 Mine ka'o gamani/dildilani ong'o mai ong'genchim aro Naljokani

Name sandie niani gitade rong'te bikot gipa biapode agre hala ba sound ong'ja aro mamung been nosto ong'aniba dongja.

Rong'te bikota am'gipa biapo de sound de donggen and kam ka'ani ba garirangni sound rangde banga bangijade donggen.



Environmental Clearance For 4.94 Acres/ 2.00 Ha Sudap Bisik (Chiran Songma) Stone Mine Project of Shri Balnen Ch. Sangma at Village – Sudap Bisik (Chiran Songma) , P.O. - Dhanua, P.S. – Garobdha, Dist- West Garo Hills, State- Meghalaya.

Rong'te ko bikotmiting somoi rango blast kaani sound,a.kol puani, gari rangni aro dingtang dingtang machine rangni sound de donggen.

Mine o ra iarangni a'sel noise ba sound ong'katgen

- A'kol puani ba drillong
- Blast ka'ani
- Garini aro gipin gipin machine rangni sound.

Sound ko komiatna dakgipa cholrang

- Sound komigipa machine rangkosa bregen aro nanga ong'ode sound rangko komiatna extra bosturangko tekdapgen.
- Generator na silensor ko tekgen.
- Blast kamiting o gama niko komiatna nanga gita blast ka'ani bostuko jakkalgen.
- Diesel gari aro machine rangko jerangan bangbate gamachim uarangko name tarie jakkalgen. Gari ni aro machine ni silensor rangko name tarironggen.
- Agre gamaniko chelchakna gita Protective devices ba chelchakani gananirangko kam kagiparangnaba on'gen.
- Mine ka.gipa biapni wilwilao bolrangko ba gamako komiatna ge'gen.

11.2.6 Blast ka'o mai ong'genchim aro Naljokani

Rong'te ko bikoton, rong'te rangko nomatna aro be'atna gita blast kana gita nanga. Blast kamiting somoi pangnan dikdiksana namen rake gam'a. Blast ka'mitingo gam'ade pangnan maichi blast ka'enga, baita a'kol dal'a, maidakgipa dong'te uno pa ngchaka.

Gam'aniko komiatani cholrang

Nanga gita is kamao segimin kamrangko name nigen:

- Blast ka'na jakkalgipa bostu: Name sandiani jamansa baita bilake blast ka'na nanga uko dakgen aro blast kaani bosturangko on'gen.
- Nanga gita simsake blast ka'gen.
- Stem ba a'kolko mituani bosturang: Stemming material ba a'kolko mituketgipa bosturangko jakkalgen.
- NONEL dakgipa ko nangtelana agrede jakkaljawa.



Environmental Clearance For 4.94 Acres/ 2.00 Ha Sudap Bisik (Chiran Songma) Stone Mine Project of Shri Balnen Ch. Sangma at Village – Sudap Bisik (Chiran Songma) , P.O. - Dhanua, P.S. – Garobdha, Dist- West Garo Hills, State- Meghalaya.

- Delay system: Kasine kasine blast kaaniko daken
- Blast ka'ani somoi: Blast ka'aniko salona agre de dakjawa.
- Blast ka'ani chang: Antio chang 3 ba chang 4 na bate blast kajawa.
- Warning: Blast kana skang pangnan siren ko game watgen aro manderangna sambao donggipa manderangna masiataniko dakgen.
- Changna sa agre de apsan biapo blast ka'taitajawa.

11.2.7 Blast ka'o chonchongipa rong'te rang bilo ong'genchim aro Naljokani

Rong'te bichemchem

Blast ka'miting somoio, chonchongipa rong'te rangchi manderang saakna manjana gita aro machine rangko nosto ong'atjana gita, chelchakaniko name tarigen. Rong'te ni rokom gita, a'kol pua dal'ani gita blast kamitingo bichemchem rong'terang metre 100 ba metre 150 na bate tilja ine nikaha. Bichemchem rong'te rangni bila bilaniko chelchakna gita is kamao janaggimin cholrangko dakna miksongaha:

1. Muffle blasting ba mitipe blast ka'aniko jeon nok jam rang 200 metre chelao donga, uko indakgipa blasting ko ka'gen.
2. Name chelgriek rong'te o a'kolrangko pugen aro name measure kaesa blast ka'gen.
3. Mituketaniko rong'tena batpile dakjawa.
4. Gonggegipa a'kol rangko rong'te ko nigrike pugen.
5. Mana dipetde nomgipa rong'te sambarango de blast kajawa.
6. Bichemchem rong'te rangko blast kana skangan name rontalatgen.
7. Rong'te o pugipa a'kol ko baita tua uko name pangnan check karonggen.
8. Warning rangko, lekka rangko name tape dongen blast kana skangde.
9. Blast kamiting somoio chelchakna gita nok rangko rikgen aro name nokingrangko ba tin rakipachi pingen.
10. Una agreba, blast kana skang, blast kana gipa biaprangko kam ka'gipa manderang donga ma dongja ha uko name re'e nichengen. Aroba security guard rangko biapo dongen naggipa aro ong'katgipa biaprangko dongen.

11.2.8 Samtangtango Dongipa burung bolgrim aro matbuburung rangna mai ong'genchim aro Naljokani

Mine kanagipa biap sambao- National Park, Wild Life Sanctuary, Bio-sphere Reserve, Elephant Reserve, Tiger Reserve or Elephant Corridor dakgiparang mamungba dongja.



Environmental Clearance For 4.94 Acres/ 2.00 Ha Sudap Bisik (Chiran Songma) Stone Mine Project of Shri Balnen Ch. Sangma at Village – Sudap Bisik (Chiran Songma) , P.O. - Dhanua, P.S. – Garobdha, Dist- West Garo Hills, State- Meghalaya.

Aroba Schedule-I o dongipa bolrang aro matburung mine kagipa biap dongja. Indiba mine kamitingo mana dipetde ramram bol wa'a rangkoba nosto kajawa.

Chanchisogimin gita, pang 835 bolrangko mine kagijagipa biaprangko aro rama joljolge'aniko dakgen.

Rong'te rangko chomitingo aro salangmiting somoi rango mande rangna a'dumu dakade dakgen aro balwa ba a'dumu rara daken. A'dumu dakako control kana gita, truck rangko cover ka'e salgen aro pangnan somoi gita ramarangko chi jipjipgen. Rama rangko a'dumu rangko komiatna gita bolrangkoba ge'gen. Moila banggipa chirangde mine kagipa biaponi ongikatjawa, uni gimin mamung dakeba health na ba chi na nosto ko onjawa.

11.2.9 Songnoki manderang mai namgniko man'gen and nengnikaniko champengsoani

Project ko start ka'na skang name sing'sandie songo noko donggipa manderang aro nokdangni janggi tangani bewalrang aro obostaranko project ko tariaha. la project namgnirangko bang'en songni manderangna bang'en on'gen ineba nikaha. Ka'mao project ni a'sel mai namgnirangko man'genchim uko sulsul mesokatenga:

- la project ka.anio gipinrangna a'ako para ondapna ba a'arangko breani mamung miksongani dongja. Uni gimin, R&R plan kode jakkaljawa.
- Kamrangko man'gen - la mining ko a'bachengna gita sak 23 manderangko songonikon rakkigen. Gipin manderangde is mine ka'gipaon gipin gipin kamrangko ka'e chana man'gen.
- Dongsoenggipa nok jamrang nosto ong'jawa.- Mine ka.gipa biapo skanggipa songni nokni manderangna kamko on'chengen aro man'a dipet a'palni manderangko kam ka'na gita on'jawa. Uni gimin kam ka.giparangna dingtang biaprangko aro nok rangko on'a nangjawa .
- Nok jamrang nambatgen
- Mining ka'gipa biapo namgijagipa balwarangko name simsake watanikodaken aro indaken nanga batede balwani pollution ko mikkangchiba komiatgen.
- Be'en bimangni an'sengbaljokani aro name dongani rangkoba skie onaniko dakgen.
- Somoi somoio manderangko check up ka.anirangkoba daken, sam rangkoba sualgen and skie on'anirangkoba dakgen. Kam kagipa manderangni nokdangrangkoba sao dingode samrangko on'gen.



Environmental Clearance For 4.94 Acres/ 2.00 Ha Sudap Bisik (Chiran Songma) Stone Mine Project of Shri Balnen Ch. Sangma at Village – Sudap Bisik (Chiran Songma) , P.O. - Dhanua, P.S. – Garobdha, Dist- West Garo Hills, State- Meghalaya.

- Nanga ong'ode projectko ka'enggipa company-ni manderang, songni manderangmung somoi somoi of gronggen agangrikanirangko dakgen jedakode is project-ko name chalaina mängen. Aro songni manderangna ba namgniko namgniko dakgen.
- Songni nokni manderangna bol wa'a rangko maidake ripingna nangachim aro maidake chiring chibisikko tange rakkina nangachim, uarangko skie on'anirangko ba dakanggen.
- Mine ka'gipa biapo chuonga gita samrangkoba don'gen aro altue jakkal man'a gita name dongen. place.
- Ringani chi ko chuonga gita me'dikrango ba biap namao dongen.
- Su'buchakna aro ki'chakna toilet rangko name tarigen and name rong'tale rakkigen.

12.0. JABOLRANGKO NAME GALANI

Kosako dong'gipa a'a rang komiebeoba 15,210 cubic meter donga. A'mangrang agre bangjaoba ua a'mangrangko name cho'e dongen and uko jamano bolrangko ge'na jakkalgen. A'mangrangko galchakgipa biaprangko wilwile dale nala chogen jedakode gipinchi chi mane katangjana gita.

13.0 BOL WA'ARANGKO GEDAPANI

Bol wa'a rangko jakkalna nanggiagipa biaprangko ripinggen aro rama joljol bolrangko ba name ge'gen aro dake dakanichi a'dumurangkoba komiatna gita man'gen. Gimik pang 3,484 bolrangkoba ge'gen. Bolrangko ge'na gita, Rs.3.21 lakhs tangkarangko chame donaha and bilsianti, Rs.0.70 lakh tangkarangko ge'gimin bolrangko biroka chame donmanaha.

14.0 MIKKA CHI KO CHAKE JAKKALANI

A'a rangko mikka wamitingo mane katangjana gita aro a'ningo donggipa chirangko tange rakkina gita, mine ka'gipa biap o tarianiko daken. Mikka ni chi ko domdakna gita, chi tankiko name rongtalna manjole, chamber donge tarigen.Ua tankiona chi jokbana gita name slope ong'e chi ramakoba tarigen.

Chimonggimin mikka chi rangko bolrangna chi runa, ki'na subuna aro a'dumurangko komiatna runa jakkalgen. Una agreba a'ningo donggipa chirangko nosto ong'jana gita aro tange rakkina gita nanga kamrangko ba ka'gen.



15.0 SAMTANGTANGO DONGIPA BOL WAA RANGKO NIROKNA CHAMGIPA TANGKA

Samtangtango dongenggipa bol waa, chiring chibisik aro matburung rangko name nosto ong'gija rakkina gita bilsio prako **Rs. 3.05** lakhs tangkarangko chamaha.

16.0 SONGNI NOKNI MANDERANGKO TOMDILO KOROS KA'NAGIPA TANGKA

Ministry of Environment, Forest & Climate Change ni bidingo 30th September, 2020 o rai ongimin gita, EAC jinma ni meeting ongmiting somoi, songni nokni nangnika gita kam rangko kaangna nanggen and nengnikanirangko ba kam kae on'a gita nangen. Songni nokni nengnikanirang dongode uarangko maidake dangdike ongenchim, uarangkoba name lekkao see done tarina gita nanggen. Songni mande rang maiba nengnikanirang donggenchim ong'ode uarang nengnikanirangko kame ka'e on'a gita tangka Rs.3.0 lakh koba chame donaha.

17.0. SAMBAO DONGGIPA BOL WAA RANGKO NAME RAKKIE DONANIKO CHANCHIANI

MP je daggipa project rangko implement kaon, name aro mamungkoba nosto kagija project ko kaanirangko nirokani dongimin niam donga. For each stage of the program, the EMP lists all the requirements to ensure effective mitigation of every potential biophysical and socio-economic impact identified in the EIA. Environmental Management Plan manede sambao donggipa boll waa rangko name rakkiani chanchiani geprak kamnan nanggipa kobor rangko on'gen. Samtangtango donggipa bol waa, chring chibisik rangko name tange nosto ong'gija rakkina gita, is company **Rs.13.44 lakhs** aro **Rs.6.25 lakhs** rangko bilsio koros kana gita chamanaha.