

KI PASOH

BAN IOH JINGBIT IA KA ENVIRONMENTAL CLEARANCE

(Category - B1, under item 1 (a), as per EIA Notification 14th September' 2006 and its subsequent amendments till date)

IA

“Boulder Stone Mine”

**Jaka: Shnong - Syllai Madan, Laitkynsew, Laitlyngkot Khyrim Syiemship, District-
East Khasi Hills, State: Meghalaya**

Jingpynmih ba lah ban pynmih: - 4, 97,110 TPA of ROM (Boulder stone: 3, 97,690

TPA & Jaboh: 99,420 TPA)

Jingheh ka Jaka: - 4.99 Ha; LOI Ia

ioh ha ka tarik 2018

Por ba Lease: - 30 Snem.



**Jingtipniah ia ka TOR : Issued by SEIAA, Meghalaya vide letter no.
ML/SEIAA/MIN/EKH/81/2020/4/1346 dated 15th Dec, 2020**

Baseline data ba la pynmih : Nohprah 2022 to Rymphang 2023 (Winter Season)

Project Jinglut : Rs. 463.6804Lacs

PROMOTER

Shri Khrikshon Lyngkhoi

R/o: K.L.Complex, Demseiniong, Shillong,
East Khasi Hills, Meghalaya

ENVIRONMENTAL CONSULTANT

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NABET Accreditation: NABET/EIA/2023/ RA0192

(Rev.02)

KA PASOH

1.1 KA JINGSDANG.

Ka project ba la kdew “Boulderstone Mine” ka ba don ha Syllai Madan, Laitkynsew, Laitlyngkot Khyrim Syiemship, District - East Khasi Hills, State: Meghalaya. Ka jaka baroh ba la mang naka bynta kata ka project ka long 4.99 ha. Ka rukom tih ia u mar kan long da kaba shu khlung ia ka khyndew da ki kor ki bor bad sa kaba shu ksam shapoh.

Ka letter of intent la ai ha ka kyrteng jong I Bah. Khrikshon Lyngkhoi lyngba ka shithi no. KH./8/ML/Stone/69/ Dated 2018 na ka office jongka Department of Forest and Environment, Office of the Divisional Forest Officer, Khasi Hills (T) Division, Shillong. Ka jaka ba la ioh jingbit na ka bynta ka mining ka don ka jingheh kumba 4.99 ha. bad ka mineable reserves ne ka jingdon u maw kalong 35,82,600 Tonnes bad lah pynmih 4, 97,110 TPA of ROM (Mawthup: 3, 97,690 TPA & Jaboh: 99,420TPA).

1.1.1 KYRTENG KA JAKA.

Ka Project ba la mang na ka bynta “Boulder Stone Mine” kaba don ha Syllai Madan, Laitkynsew, Laitlyngkot Khyrim Syiemship, District- East Khasi Hills, State: Meghalaya.

1.1.2 KI MAT JONG KANE KA PROJEK.

Sl. No.	Particulars	Details
1.	Kyrteng jong ka Project	Boulder Stone Mine
2.	Jaka	Syllai Madan, Laitkynsew, Laitlyngkot Khyrim Syiemship, District- East Khasi Hills, State: Meghalaya
3.	Jingheh jong ka jaka na ka bynta ka project	4.99 Ha.
4.	Jait Jaka	Jaka la Jong
5.	Ka Jingpeit na ka liang ka jing Khyన్నిuh u Jumai	Ka hap hapoh ka Zone – V

1.2 JINGBATAI IA KA PROJEK

Ka letter of intent la ai ha ka kyrteng jong I Bah. Khrikshon Lyngkhoi lyngba ka shithi no. KH./8/ML/Stone/69/ Dated 2018 na ka office jongka Department of Forest and Environment, Office of the Divisional Forest Officer, Khasi Hills (T) Division, Shillong. Ka jaka ba la ioh jingbit na ka bynta ka mining ka don ka jingheh kumba 4.99 ha.

bad ka mineable reserves ne ka jingdon u maw ban pynmih 35,82,600 Tonnes pynmih 4, 97,110 TPA of ROM (Mawthup: 3, 97,690 TPA & Jaboh: 99,420TPA).

Ka rukom tih ia u maw kan long da kaba shu khlong ia ka khyndew da ki kor ki bor bad sa kaba shu ksam shapoh bad pynpait ia u maw.

1.2.1 GEOLOGY

1.2.1.1 Local Geology

U Maw u paw sha jrong ha ka jaka ba la mang bad ka long kum ba la kdew harum:-

Table 1.1: Local Geology

Geological Age	Group Name	Formation Name	Rock Type
Recent	Newer Alluvium	Unclassified	Sand, Silt and Clay
.....UNCONFIRMITY.....			
Eocene	Jaintia Group	Shella Formation	Calcareous Boulder Stonee

1.2.1.2 Physiography

Ka topography jong ka jaka ba la kdew ka long khohruh khohram ba ym long madan don ba long lum don ba long madan, Haka jingjrong ba jrongtam ka long 1785 mRL bad haka jingjylliew ba shapoh 1765 MSL. Ka nala ba don ha ka jaka ba ka kdew ka long shathie lam shatei.

1.2.2 GEOLOGICAL AND MINEABLE RESERVES

A) Total Mineral Reserves	UNFC Code	Boulder Stone (Tonnes)
Proved Mineral Reserves	111	16,44,400
Probable Mineral Reserves	121 & 122	19,38,200
Total Mineable Reserves		
B) Total Remaining Resources		
Feasibility Mineral Resources	211	2,90,190
Pre-Feasible Mineral Resources	221+222	8,30,630
Measured mineral resources	331	
Indicated Mineral resources	332	
Inferred Mineral Resources	333	9,22,940
Reconnaissance mineral resource	334	

1.2.3 KA RUKOM TIH IA U MAR POHKHYNDEW:

Ka rukom tih ia u maw kan long da kaba shu khlong ia ka khyndew da ki kor ki bor bad sa kaba shu ksam shapoh bad pynpait ia u maw. Ka jingpyntreikam kan long kat kum ka Mining Plan ba la ioh jingbit bad PMCP ka dei:-

- Ka rukom tih ia u maw kan long da kaba shu khlong ia ka khyndew da ki kor ki bor bad sa kaba shu ksam shapoh.
- Ka mied jingjrong yn buh 6m bad jingiar jong ka mied kam dei ban duna ia ka mied jingjrong.
- Baroh hynniew mied yn pynbha kata naduh ka level mied 1781 mRL (Nalor mied), 1775 mRL, 1769 mRL, 1763 mRL, 1757 mRL, 1751 mRL, bad 1745 mRL (duna mied).
- Ka slope mied kan ai 85°.
- Ka jingrah kan long na ki jaka buh ne ki stocks.

1.2.4 KA JINGTIP JONGKA JINGMIH

Ka jingpynmih ia u maw hapoh san snem kan long katkum ba la kdew harum:-

Table 1.2: Production Details

Year	ROM (T)	Mineral Boulder Stone(T)	Waste/ sub-grade (T)
1 st	430320	344260	86060
2 nd	430320	344260	86060
3 rd	437580	350060	87520
4 th	442200	353760	88440
5 th	497110	397690	99420
Total	22,37,530	17,90,030	4,47,500

**Source:- Approved Mining Plan with PMCP*

1.2.5 KA JINGPYNDONKAM IA KA JAKA.

Ka jingpyndonkam ia ka jaka ba la kdew na ka bynta ban tih ia u marpoh khendew ka kynthup ia ka jing khlong iaka khyndew ba tap najrong, nangta pynpait ia u maw ba la paw hajrong hadien ba la dep pynkhuid ia ka khyndew bad kan long kum ba la kdew harum:-

Table 1.3(a): Land Use Pattern

S. No.	Land Use Category	Pre-Operational (Ha.)	Operational (Ha.)	Post-Operational (Ha.)
1	Top Soil Dump	--	0.01	--
2	Overburden Dump	--	0.15	0.15

3	Pit & Quarry Area	--	3.95	4.35
4	Road	--	0.05	--
5	Infrastructure/Plant/Crusher	--	0.40	--
6	Afforestation	--	0.30	0.40
7	Mineral Storage	--	--	--
8	Waste/Sub – grade stack yard	--	--	--
9	Reclamation*	--	--	*
10	Undisturbed Area	4.99	0.13	0.09
Total		4.99	4.99	4.99
<i>*Shown at table no. 2.6 (b)</i>				

Table 1.3 (b) : Ka Jingpynim Biang ia ka Jaka:

Conceptual Land Degradation	Proposed Reclamation	
Area in Ha.	Area in Ha.	Measures
4.90	0.55	Green belt and jaka noh Jaboh ban pynthung dieng.
	3.45	Ha ka jaka ba sharum jong ka table ban pynkylla jaka buh um.
	0.20	Pyndap ia ki jaboh ki mar ba reject bad ban pynim biang ia katta ka jaka da ki jing thung.

1.3 KA JINGLONG KA MARIANG:

Ban peit bha ia ka mariang kum ka meterorology, ka lyer, ka um, ka khyndew bad ka jinglong jong ka jingsawa, ki jaka peit bniah la buh ha ki hynriew jaka ha ka jaka ban pule/peit thuh. Ia ka baseline data la shim ha ka por tlang (Nohprah’ 2022 haduh Rymphang’ 2023). Ia ka jingbatai bniah ha kine ki jaka la ai harum:-

Table 1.4: Sampling Location

Sampling Location	Distance (Km)	Direction	Components
Mine Site	--	--	Air, Water, Noise, Soil
Pomlum	1.3	ENE	Air, Water, Noise, Soil
Mawkajem	1.1	ESE	Air, Water, Noise, Soil
Dymmlew	2.7	SSE	Air, Water, Noise, Soil
Umktieh	2.7	S	Air, Water, Noise, Soil
Lewmawlong	2.0	WNW	Air, Water, Noise, Soil
Setthliew	5.15	NNW	Air, Water, Noise, Soil

1.3.1 KA JINGLONG JINGMAN KA JAKA.

1.3.1.1 Ka jingling ka khyndew:

Ki symboh khyndew la shim na ki hynniew jaka bad ha ka jingpait bha ia ka jingshong ka khyndew ka long harum:

pH	:	7.12 to 7.65
Soil Conductivity	:	364 to 427 μ mhos/cm
Total Nitrogen (N)	:	161 kg/ha. to 360 kg/ha.
Phosphorus as P	:	56 kg/ha to 59 kg/ha.
Potassium as K	:	236.00-248.50 (mg/kg)

1.3.2 Ka Jinglong Jingman jong ka Um:-

Ki um na ki hynniew tylli ki jaka ban pule la shim. Ka jingiohi ia ka jingtohkit la pyni harum:-

Table 1.6: Water Quality Status

S.No.	Parameter	Units	Requirement (Desirable Limits).	Permissible Limits in the Absence of Alternate Source.	Mine Site	Pomlum	Mawkajem	Dymmiew	Umktieh	Lewmawiong	Setthliew
Organoleptic & Physical Parameters											
1.	Colour	Hazen Unit	5	15	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2.	Odour	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3.	Taste	-	Agreeable	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4.	Turbidity	NTU	1	5	<1.0	<1.0	<1	<1	<1.0	<1.0	<1
5.	pH value	-	6.5-8.5	-	7.54	7.16	7.35	6.98	7.48	7.18	6.93
6	Total Dissolve Solid (TDS)	mg/l	500	2000	389.2	321.0	402.0	241.9	325.0	380.0	260.0
General Properties											
7	Aluminum (as Al)	mg/l	0.03	0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
8	Total Ammonia	mg/l	0.5	No Relaxation	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
9	Anionic surface Detergents(as MBAS)	mg/l	0.2	1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
10	Barium (as Ba)	mg/l	0.7	No Relaxation	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
11	Boron (as B)	mg/l	0.5	2.4	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
12	Calcium(as Ca)	mg/l	75	200	56.95	56.95	54.32	61.47	65.27	56.82	52.39
13	Chloramines (as Cl ₂)	mg/l	4.0	No Relaxation	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
14	Chloride (as Cl)	mg/l	250	1000	15.73	14.62	14.69	13.95	16.26	14.39	13.82
15	Copper (as Cu)	mg/l	0.05	1.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
16	Fluoride(as F)	mg/l	1.0	1.5	0.38	0.31	0.28	0.32	0.29	0.30	0.28
17	Free Residual Chlorine	mg/l	0.2	1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
18	Iron (as Fe)	mg/l	1.0	No Relaxation	0.129	0.124	0.132	0.129	0.128	0.121	0.120
19	Magnesium (as mg)	mg/l	30	100	3.84	3.79	4.10	4.18	3.92	4.06	3.65
20	Manganese (as Mn)	mg/l	0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
21	Mineral Oil	mg/l	0.5	No Relaxation	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
22	Nitrate (as NO ₃)	mg/l	45	No Relaxation	0.32	0.31	0.30	0.32	0.33	0.31	0.30
23	Selenium (as Se)	mg/l	0.01	No Relaxation	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
24	Silver (as Ag)	mg/l	0.1	No Relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
25	Sulphate (as SO ₄)	mg/l	200	400	26.75	24.65	26.82	26.83	25.81	23.92	22.87
26	Sulphide(as H ₂ S)	mg/l	0.05	No Relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

27	Alkalinity(as Ca CO ₃)	mg/l	200	600	201.0	194.0	187.0	187.0	189.0	176.0	179.0
28	Total Hardness (as CaCO ₃)	mg/l	200	600	174.0	167.0	164.0	165.0	173.0	161.0	160.0
29	Zinc (as Zn)	mg/l	5	15	0.162	0.159	0.151	0.148			
Parameters Concerning Toxic Substances											
30	Cadmium (as Cd)	mg/l	0.003	No Relaxation	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
31	Cyanide (as CN)	mg/l	0.05	No Relaxation	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
32	Phenol	mg/l	0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
33	Lead (as Pb)	mg/l	0.01	No Relaxation	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
34	Mercury (as Hg)	mg/l	0.001	No Relaxation	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
35	Molybdenum (Mo)	mg/l	0.07	No Relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
36	Nickel (as Ni)	mg/l	0.02	No Relaxation	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
37	Poly nuclear Aromatic	mg/l	0.0001	No Relaxation	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
38	Poly chlorinated biphenyl	mg/l	0.0005	No Relaxation	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Microbiological Parameter											
39	Escherichia coli		Absent/100ml		Absent	Absent	Absent	Absent	Absent	Absent	Absent
40	Coliform Bacteria		Absent/100ml		Absent	Absent	Absent	Absent	Absent	Absent	Absent

1.3.3 Ka Jinglong Jingman Jong Ka Lyer:

Ban peit bha ia ka jinglong jong ka lyer ha ka jaka pule ka systematic ambient air quality monitoring la pyniaid ia ki jait jingjaboh (PM₁₀, PM_{2.5}, NO_x, SO₂ and CO) ha ki hynniew jaka ba don ki ambient air quality monitoring stations.

1.3.3.1 Jinglong Ka Lyer:

Ka Ambient air quality monitoring la pyniaid shakhmat ha ka por ar sien shi taiew ha ki phra jaka ha kawei ka aiom kata naduh Nohprah' 2022 haduh Rymphang' 2023. Ka jingiohi ia ka jinglong jong ha baroh ki jaka ki long kumne harum. Ia kine la pyniahap kat kum ka jingbuh da ka Central Pollution Control Board (CPCB) jong ka rural bad residential zone.

Table 1.7: Ambient Air Quality Status

S. No	Sampling Location		Parameters				
			PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (mg/m ³)
1.	Mine Site	Min	40.29	13.68	3.93	5.25	0.47
		Max	57.14	20.92	6.18	8.29	0.59
		Avg.	44.27	16.33	5.34	6.80	0.53
		98th% ile	55.35	20.57	6.11	8.26	0.59
2.	Pomlum	Min	40.26	15.43	5.37	6.55	0.32
		Max	54.36	22.43	7.67	8.69	0.92
		Avg.	45.65	17.76	6.10	7.45	0.57
		98th% ile	53.38	22.06	7.64	8.64	0.90
3.	Mawkajem	Min	32.58	13.79	4.8	6.14	0.45
		Max	50.75	22.4	6.5	8.86	0.55
		Avg.	41.31	17.29	5.63	7.45	0.51
		98th% ile	50.18	22.37	6.41	8.69	0.55
4.	Dymmiew	Min	36.02	13.76	4.33	7.09	0.46
		Max	49.15	20.84	8.44	12.64	0.79
		Avg.	45.87	18.12	7.22	9.58	0.62
		98th% ile	48.92	20.40	8.43	12.64	0.78
5.	Umtieh	Min	32.69	22.61	4.24	8.43	0.47
		Max	48.69	27.54	8.14	10.46	0.82
		Avg.	45.76	24.44	6.00	9.43	0.58
		98th% ile	48.58	27.17	7.72	10.46	0.81
6.	Lewmawiong	Min	35.41	14.32	5.35	8.54	0.47
		Max	45.02	21.38	7.89	10.98	0.85

		Avg.	40.98	16.62	6.89	9.95	0.62
		98th% ile	44.61	21.22	7.89	10.98	0.82
7.	Setthliew	Min	40.92	16.72	5.03	8.84	0.48
		Max	53.4	23.84	7.54	10.9	0.92
		Avg.	44.97	18.79	6.18	9.80	0.70
		98th% ile	51.48	23.38	7.51	10.89	0.89
NAAQ STANDARDS			100	60	80	80	2

1.3.4 Jinglong Jingma Jongka Jingsawa:

Ka jingthew ia ka jingsawa la pyniaid ban tip bha ia ka jinglong ka jingsawa ha ki hynriew jaka ban pule. Ka jingthew ia ka jingsawa ha man ki jaka la shim ha 24 kynta. Ka jingiohi ba la ioh la pyniahap bad ka national standards bad la shem ba long kat kum ka standard. Ki data ba la ioh la pyni harum:-

Table 1.8: Ambient Noise Level Status

Location	Date of Sampling	Day Time (6.00 AM to 10.0PM)	Night Time (10.00 PM to 6.00 AM)
Mine Site	08.12.2022	56.8	35.5
Pomlum	24.12.2022	51.4	38.1
Mawkajem	05.12.2022	52.6	40.5
Dymmiew	04.01.2023	50.0	35.6
Umktieh	18.01.2023	53.6	40.3
Lewmawiong	23.01.2023	54.8	42.0
Setthliew	01.02.2023	52.5	38.5
Standards			
Category of Area/ Zone		Day Time	Night Time
Industrial Area		75	70
Commercial Area		65	55
Residential Area		55	45
Silence Zone		50	40

1.3.5 Ka Jingioh Jingkot jong ki Briew:

Ka jaka pule ka kynthup ia 39 tylli ki shnong Syllai Madam, Laitkynsew, Sub Division – Pynursla, District – East Khasi Hills hapoh 10 km ka jaka sawdong na ka mine.

Table 1.9: Demography Profile of the Study Area

S. No.	Particulars	Details
1.	No. of Villages	37
2.	Total Population	20767
	a. Male	10224
	b. Female	10543
3.	No. of Households	4037
4.	No. of Literates	12984
	a. Male	6180
	b. Female	6804
5.	Main Workers	8908
	a. Male	4942
	b. Female	3966
6.	Marginal Workers	815
	a. Male	322
	b. Female	493
7.	Non-workers	11044
	a. Male	4960
	b. Female	6084

(Source: Census, 2011)

1.3.6 BIOLOGICAL ENVIRONMENT

Buffer Zone
Flora
Climber – 19 Specie
Herb – 40 Species
Shrubs - 70 Species
Tree – 74 Species
Fauna
Amphibian – 17 Species
Fish - 16 Species
Avifauna – 92 Species
Butterflies – 28 Species
Mammals – 27 Species

1.4 Ka Jingpynkreh bad ban tehlakam na ka jingjot jongka Mariang:

Ki symboh jong ka jingpynkreh bad ban tehlakam na ka jingjot jongka mariang ka long kat kum ka jingkdew ba harum:-

Impact	Mitigation Measures
Jinglong bad ka jingpynkhreh na ka bynta Jaka.	
Ka khyndew kan sa julor namar ba tih bad bret ia ki jaboh.	<ul style="list-style-type: none"> ➤ Ka jingkyllum ban tih ia ka thliew kan long 4.35 ha na ka 3.45 ha. (ba harum duh ka table), yn pyndonkam kum ban buh um ia ka tam 0.20 ha. yn pyndap khyndew, ban kam biang bad pynbha daka thung jingthung.
Jinglong bad ka jingpynkhreh na ka ban ym pynjaboh pynjaklia ia ka um Um	
<p>Ban pyllait ia ki um jakhlia na ka Jaka Trei.</p> <p>Ka jingiakynduh ka um khyndew por pyntreikam ha ka jingtih.</p>	<ul style="list-style-type: none"> ➤ Kan nym don jingpyllait um jakhlia na ka jaka tih. Jaka tih kan long kum ka jaka buh um. ➤ Kat kum ka Mining Plan ba la shim bad ka PMCP, ka jingheh jong ka pit (1715 mRL) kan long hajrong ka um khyndew bad kan ym kynduh.
Jinglong bad ka jingpynkhreh na ka ban yn ym pynsnew Lyer	
<ul style="list-style-type: none"> ➤ Pumpum kan her por tih, por rah bad pynhiar. ➤ Ki lyer jaboh kin bha na ba iaaid kali. 	<ul style="list-style-type: none"> ➤ Ia ki kali ba iaaid ha ka jaka treikam yn shna bad peit bha ban buh ka jingmih lyer hapoh ki adong. ➤ Ha jaka pynhap bad pynkiew bad ki lynti iaaid, yn pynbuh um ban pashaid ban pynduna ka jingmih pumpum. ➤ Ha ban pyrthuh ia ka jingkylla ha ka jinglong jong ka lyer, AERMOD version 8.8.0 model la pyndonkam. Ka baheh tam ba pynkiew ia ka jingkhleh khyndew PM₁₀ & PM_{2.5}, bad lyer jaboh NO_x & CO na ki bapher ki jaka ba tih ha ka por pule (tlang) la iohi ba ka long biang. ➤ Ki jingmih kan iai don hapoh ka National Ambient Air Quality Standards na ki bynta ki kharkhana/ jaka sah briew.
Jinglong bad ka jingpynkhreh na ka bynta Jingsawa	
<ul style="list-style-type: none"> ➤ Jingsawa na ka daw ba leh mining 	<ul style="list-style-type: none"> ➤ Ka jingsawa na baroh ki jaka ka long man ka por bad hatang por treikam

<ul style="list-style-type: none"> ➤ Jingsawa na ka daw ba iaid kali. 	<ul style="list-style-type: none"> ➤ Ka jingthew ia ka jingsawa ba la shim data ha ka jaka ka long hapoh ka adong jong ka National Ambient Noise Quality Standards ➤ Ka jingdon jong ka jingsawa ka long duna ha kane ka jaka ba la kah ki lum ki wah/ba shna kali.
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Ka Jingioh Jingkot ne Ka Jingiarap na ka bynta ki Briew

<ul style="list-style-type: none"> ➤ Jingiohkam ➤ Jingpeit bniah iaka jingkoit jingkhiah ➤ Jaka ai pule 	<ul style="list-style-type: none"> ➤ Assistance to schools and scholarship to children will be provided. ➤ Ka jingtreikam mining kam ktah than ia ka jingioh jingkot ki briew ➤ Kam don jingkyndria (0) ha ka jaka ba la mang ban leh mine. ➤ Kumba 67 ngut ki nongshong shnong kin ioh lad treikam ryngkat bad ka jinghikai man ka por ban pyntbit ki sap bapher. ➤ Ki rukom bathymmai ban aikam/ioh pisa yn sa ioh pynmih. ➤ Ka jingpeit ia ka jingkoit jingkhiah man ka por da ki health camp. ➤ Ka jingiarap skul bad ioh scholarship ia ki khynnah yn ai.
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<ul style="list-style-type: none"> ➤ Jingtah jong ka jingkylla ha jinglong jingman jong ka mariang ➤ Ki mrad bad ki jingthung ki ban shah ktah. 	<ul style="list-style-type: none"> ➤ Ka jingpyntreikam ia ka mining kan don ka jingtah bajur bha ia ki mrad bad jingthung jingtep. Ka jinglong jong ka projek ka long ban iarap ia ki jingthung jingtep ha ka jaka ba la thmu. ➤ Ki jingthung jingtep ba don ha ka jaka mining ki long ki dieng bad sanium. Kin nym shah pynthud na ka daw ka jingpyntreikam mining. Te, ka jingtah ia ki jingthung jingtep kan long kaba duna. ➤ Baroh ki jingdonkam ban peit ia ka jing jaboh yn shim da u nongshimwai ban pynduna ia ka jingtah ia ka mariang ba ker sawdong. ➤ Ki jingheh jong ki jingthung hajan bad shajan ki jaka sah. Ka jingsawa bad khiah na ka daw ba pynbthei bad jingtreikam ki machine kin beh ia ki mrad na khlaw bad ki sim na ki skum hajan. ➤ Ki jaka ba kyllum bad ki jaka ba pyniakhlad ki long jah na ki jaka mariang ba kloie ban shah ktah. Te ka jingtah ia ka jinglong jingman jong ka mariang bad ki mrad ka long ba duna. ➤ Ia ka Green belt yn pynroi bad u pud u sam u riew shimet ba ai wai ban long kum ka kynroh na ki jaboh ia ka jinglong jingman ka mariang. ➤ Ka la don ruh ka jingiashimti ia ka jingthung jingtep ha ka lynti iaid kali jong u nongshimwai bad ka surok ba ia snoh
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	<p>lang.</p> <ul style="list-style-type: none">➤ Ka jingkit ia u mar kan long ha ka por sngi khnang ka kan yn ym pynwit ia ki jingim ba don sha marjan.➤ Baroh ki kyndon ba la buh da ka pollution control measure kin hap ia bud.
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1.5 KA PROGRAMME BAN PEIT BNIAH NA KA BYNTA KA MARIANG .

1.5.1 LYER.

Ka jingtest bad peit bniah ia ka rukom long ka lyer kan long kat kum ka kyndon jong ka SPCB bad CPCB.

1.5.2 Ka Um.

Ka jing peit bniah na ka bynta ka um poh khyndew ha ki jaka ki ba biang: Ka jing shim ia ka um samples ba saw sien ha ka shisnem. Kata por pyrem, synrai, tlang.

1.5.3 Ka Jingsawa.

Ka jingshim jingkhien ia ka jingsawa man ka por ha jaka ba trei hajan ki kor ba trei ha por sngi ne miet.

1.5.4 Ka Jingkoit Jingkhiah.

Ka jingpeit bniah ha ka liang ka koit ka khiah ia ki nongtrei kan long ha man la ki por bad ki dawai kin don ha ka jaka ba ki sah ki nongtrei and ba painkhana kan don hajan ka jaka ba ki trei. Ka umdih kan long kaba biang na ka bynta kiba trei.

1.6 ADDITIONAL STUDIES

1.6.1 Ka Jingpynsngew Paidbah

Ka jingia pynsngew paidbah kan long kat kum ka kyndon ka EIA Notification 14th September, 2006 bad ki kyndon ba dang shu mih halor jong ka.

1.6.2 Ka Jingtreikam bad ka Jingtehlakam ia ki Jingma:

Ka jingpeit ia ka jingma ka dei ka jingpule ba dap da ka jingbymtikna bad mad jingma ha ki katno katne ki jaka. Ban peitngor ia ka jingma ka dei ban ithuh ia ki jingma ba iadei bad ka jingpyntreikam mining, bad ban sgewthuh kumno bad hangno yn shem bad ianujor ia ka jingkynduh (ha ka pisa lane ha kiwei kiwei) ha ka jingmih. Ka pyni bad nujor ia ki jingma ia ki riew shimet, ki kam bad government agencies ba lah ban ioh na ka mariang lane da ki jingjia ki briew. Tangba kin don hi katto katne ki daw kiba lah ban pynlong kaba ma ha ki por treikam/jingmaham ha ba tih ia u maw (minor minerals).
Ia ki jait jingma la pynithuh por tih mawshun bad la pyni harum:-

1. Ba mynsaw por pynkiew, pyniaid bad bret ia u maw.

2. Ba mynsaw da ka daw ba iaaid kali

3. Ba rung um

Ban pyniaid bha ia ki kam ki jam, ki jingkdew harum yn bud na ka bynta ban iada na ki mynsaw ha ka mine.

Step 1: Ki jingtiit ia ki jingma ba ktah na ka jingpynjot

Step 2: Ki jingtiit ia ki briew ba don ha ka jingma

Step 3: Ki jingwengnoh ia ki jingjulor

Step 4: Ka jingtipbniah na ka bynta ka jingma

Step 5: Ki lad ban iada ba iadei ban shim

Step 6: Ban buh jingkhein

Step 7: Ban peit biang

1.7 Jingiohnong na kane ka Projek.

Ka jingleit iew ia u Maw thup ka la kiew ha ka state ba lah bun ki kharkhana bad ki jingtrei jingshna kiba ha rukom, ka jingdon jong kane ka projek ka iarap ban pyndap ia ka jingdonkam maw. Ka jinglah ban pynmih ia u mar ka long 4,97,110 TPA (Mawthup; 3,97,690 TPA & Jaboh: 99,420 TPA) ba lah mang ban pyndap ia ka jingkwah jong ka iew.

Ka jing don jong kane ka projek kan sa pynioh kam pynioh jam ia ki briew paidbah kan long ha kano kano ka liang, Ka jing kiew ka ioh ka kot ruh kan long ha baroh ki liang ha jingpule puthi, jing koit jingkhiah, jingai jing hikai, ki kali mator, ki kharkhana, ki jingshna ki ba bunjait. Ka jing thung ia ki dieng kan don lyngba ka social forestry programme ha ki shnong, school, ha ki panchyat ha baroh ki liang ban pynkiew ia ka jingkhuid bad ban pynkhie im biang ia ka mariang.

1.8 Environment Management Plan.

Ka Proper Environmental Management Plan lane kata ka rukom ban sumar ban iada ia ka mariang ha ka rukom kaba paka la tyrwa ha ka jaka tih ia u maw ban pynduna na ka jingtah jur ia ka mariang, bad ka jingpeit bniah khnang ba ka mariang kan ym jot kan don.

1.8.1 Ka Jingpynbeit naka bynta ka Jaka:

Ka jingpynkhreh naka bynta ka jaka ba la kdew ka long kumne harum:

- 1) Ha kaba lut jong utu u maw, ka jingtih jong baroh ka jaka ka long 4.35 ha.
- 2) Ka jing thung ia ki dieng la mang na ka bynta ka jaka kaba 0.75 ha. na kaba ka jingthung kan long ha ka jaka ba lah noh khyndew (0.20 ha.),jaka noh jaboh (0.15 ha.) bad jaka bym trei (0.40 ha.).

1.8.2 Ka Jingpeit na ka bynta ka Um:

Ki kato katne ki kyndon ba hap ban bud khnang ban lah ban teh lakam ia jingjaboh ka um:

- Pynshong nongrim ha ka result ba shisha ba mih na ka jingthew ba man ka por.
- Ka jingthew ia ka hiar jingkiew jong ka um ha ka jingiadei bad ka jingtih ia u mar ha ka miej kaba dei ban shong ka um khnang ba kan ym ia jan bad ki umthliew.
- Ka jing peit bniah bad ban test ia ki samples jong ka um ha ki jaka ba ka don slem ka jingpeit bniah kan long ha man ki por.
- Ka jakhlia ba mih na ki jaka painkhna kumta ter ter kin leit beit sha septik tank lynba ki soak pit.

1.8.3 Ka jingpeit bniah na ka bynta ka lyer:

Ki katto katne ki kyndon ban pynduna ia ka jingtah ia ka lyer:

- Ka jingstet ki kali speed kin long ha ka juh ka speed.
- Ka jing peit bniah ia ka lyer ba mih na ki kali.
- Ka jingshim jingkhien ia ka jingbun ki kali ha u surok bad ban pynduna ia ka jingieng sha surok khnang ban lait na ka block bad kan lait na ka jing pynthut ia ki briew paidbah.
- Ki kali kit maw kin hap tap da ka trapal ia ka body jongki.
- Ka Jingpynduh ia ka jingkit bun palat khnang ban lait na ki jingmysaw ha lynti na ba hap u map na kali sha lynti.
- Ka jing pynbha ia u surok.
- Ka jingpynkhuid ia ki pum pum kan long ha man ki por ban pynduna ia ka pum pum ba mih na u surok ban hier cha ka lyer.

- Jing pyn ai um ia ki lynti ba la pynshna.
- Ban shna ia ki jaka buh um ha ki surok ban tehlakam ia ka jingmih ki pum pum.
- Jingshna ia ki Speed breakers ban pynduna ia ka jing pynher ki kali ban lait na kano kano ka jingmynsaw.
- Ka jing peit bniah bad ban shim samples ia ka jingling jingman ka lyer na ka jaka trei, lada ka jingthew ka kiew sha kaba palat ka jingpynbeit kan don.

1.8.4 Ka jingpeit bniah na ka bynta ka Jingsawa:

Ki katto katne ki kyndon ban pynduna ia ka mih ka jingsawa:

- Ka jingpeit bniah na ka bynta ki sngi trei (ha ka por mynsngi) ban pylliat ia ka jingtah ia kiba don sawdong na ka jingsawa.
- Ka jing peit bniah ba man ka por ia ka jinglong ki kali bad ki kor.
- Ki kali kin don ha ka jinglong ba biang bad ban yn ym ai lad ban kit palat.
- Ka jingbym ai lad ban pynher sted ki kali ha ki surok.
- Ki machine ban tehlakam ia ka jingmih ka jingsawa sha ba palat kin don.
- Ki tiar na ki bynta kiba trei kum kiba phong na skhor khnang ban lait na ki jingsawa ba jur haba don hajan ki kor bad kiwei kiwei.
- Ka jingsawa ba mih na ki jingtrei kin mih ha ka kor ba la buh ban iohi bad ban tehlakam ia ka jingheh ka jingsawa bad kaba buh ia ka jingma ia ki nongtrei.

1.8.5 Ban peit ia ka jingkoit jingkhiah bad ka jingma jingmynsaw:

- Ban lait na ka jingpang ia ki nongtrei ba mih na ki pum pum, jingsawa ter ter, ki jing peit bniah kin don khnang ban lait na ki jingma.
- Ka jing tista ha ka shim ia ki test bad ban peit bniah ia baroh ki kor ki bor kat kum ka jingshna jong ki.
- Ka jingai ia ki tiar iada sha baroh ki nongtrei,
- Ka jing ai jingsumar ne ka medical check sha baroh ki nongtrei.
- Ki programme ai jingia syllok bad ki nongtrei kan don ha man la ki por.

1.8.6 Ka jingpeit naka liang ka ioh ka kot ne ka jingiarap ha ka im lang ka sahang:

- U Environmental Officer ba dei ban khmih bad peit bniah ia ka mariang.
- Kumba 33 ngut ki nongtrei kin ioh trei beit directly bad 5 haduh 10 kin long indirectly.
- Ka jingioh kam ha ki por ba long training ban pynmih ia ki rukom trei kiba ha rukom.
- Ia ki trai shnong kan don ka kam bad ban pynkiew ia ka jing iohkam iohjam.
- Ka jing khmih ia ka koit ka khiah kan long ka ba tista.

1.8.7 Ka jingpeit ia ki jingim kiba don:

Ymdon jingpynjot ne ka jingduh jait ka ki jingim na ka jingith ia u maw. Ka jing peit ne sumar ia ki dieng ne ki jingthung ba la thung ka pynduna ne ka khang na ka jingktah ka mariang na ka jingtih ia u maw.

1.9 Ka jingpynkut:

Ia ka jingpule EIA la leh kat kum ka jingmynjur ka ToR. Ka jinglong jingman bapher jong ka mariang la peit thuh kaba iadei bad ka jingtreikam mining. Ka jingiadei bad ki jingktah la ithuh bad peitshai. Da la peit bha ki lad ki lynti ban ianujor ia ka jinglong jong ka mariang ia ka Environmental Management Plan la pynkhreh bad la buh ka pisa ba donkam. Ka EMP ka la long ba iar, ba jem bad pher man la ka por ba rai biang.

Ka projek kan pynkiew ia ka jingioh nong ia ka State Govt. bad kumjuh kan rah ia ka ioh ka kot jong ki briew shnong. Ka programme pynbha ia ka greenbelt kan iarap ban kham jyrngam shuh shuh ia ki jaka ba marjan. Kumta, ka projek ba la don kan ym ktah ia ka mariang lane ia ka jinglong jingman ki jingthung jingtep ba marjan. Ka Senior Management kan shym khia ia ka jingrai ia ka projek jong ka EMP bad ki jingpyntreikam ban pyntikna ba ka EMP ka long ba treikam bha bad biang. Kumta, ki lad ki lynti badei yn shim ban jop ia baroh ki thong ba la buh ha ka EMP bad ka projek kan sa wanrah ka jingktah babha ha ka jaka pule.
