

KA JINGPYNBNA BAD KA JINGPYNKUT

1.1 KA JINGSDANG:

Ka Kong Kuntimai Tangdhara ka dei ka trai jong ka par mawshun Rikaleng, kaba don ha shnong Sohbar, Sohbar Sirdarship, East Khasi Hills, Meghalaya kaba heh haduh 2.3125 hectare. Kane ka par mawshun ka la treikam naduh u snem 2018. Ia ka Environment Clearance na ka bynta kane ka par mawshun la ai da ka District Environment Impact Assessment Authority, East Khasi Hills, katkum ka jingpynbna EIA kaba la pynmih ha ka 15 tarik Nailar, 2016, lyngba ka shithi no. EKJ.20/17/2017/10/47/1002 jong ka 5 tarik u Nailar, 2018. Katkum ka jingthoh jingkyrmaw jong ka ophis ba la pynmih da ka tnad jong ka Ministry of Environment, Forest & Climate Change Office (MoEF&CC), ka sorkar India, ha ka 28 tarik u Risaw 2023 (shithi no F. No. IA3-22/11/2023-IA.III (E-208230)), ki nongpeit ia ka projek mynta ki la pan jingkhein biang ia ka par mawshun kaba la don lypa na ka SEIAA, Meghalaya. (La buh lang ia ka kopi jong ka O.M. kum ka **annexure-I**)

Katkum ka Memorandum jong ka ophis jong ka tnad Environment, Forest & Climate Change Office kaba la thoh ha ka 12 tarik u Naiwieng, 2018 kaba ong ba-

"Lada ka jingheh jong ka kynhun ne ka par ka palat ia ka 5 ha. ka EIA/EMP dei ban pyntreikam ha ka rukom ai jingbit shwa ia ka mariang".

La pynlong ia ka cluster, kaba kynthup ia ka jingheh kaba 20.584 hectare. Kumta, ia ka projek tih mawshun yn pynhap ha ka kyrdan B1.

1.1.1 KYRTENG JONG KA JAKA:

Ka jaka ba la mang ka don ha ka Shnong- Shnong Sohbar, Sohbar Sirdarship, East Khasi Hills, Meghalaya. Ka par tih mawshun ka long 2.3125 hectare ryngkat ka jingtyrwa ban pynmih marpoh khyndew kaba 2,07,825 TPA ROM (Mawshun- 1,87,050 TPA & Ka Kyndew/Subgrade- 20,775 TPA).

1.1.2 KA JINGPYN BNA SHAPHANG KA JAKA:

S. No.	Particulars	Details
1.	Kyrteng jonkg ka Project	"Rikaleng Limestone Mine
2.	Jaka	Sohbar Village, Sohbar Sirdarship, East Khasi Hills, Meghalaya
3.	Jingheh ka Jaka	2.3125 Ha.
4.	Jait Jaka	Private Land



5.	Ka jingpeit na ka liang ka jing Khynniuh u Jumai	zone V very high damage risk zone (MSK IX or more) category
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1.2 KA JINGBATAI BNIAH NA KA BYNTA KA PROJECT:

Ha kaba sdang ia ka shithi jingthmu (LOI) na ka bynta u mawshun marpoh khyndew, Area: 2.3125 hectare la ai ha ka Kong Kuntimai Tangdhara da ka Ophis jong ka Divisional Forest Officer Khasi Hills Division, Shillong ha ka liang jong ka Smt Kuntimai Tangdhara lyngba ka shithi no. KH/8/ML/Limestone/68/9005 ha ka 17.10.2017.

Īa kane ka Environmental Clearance la ai da ka Ophis jong u Deputy Commissioner: DEIAA, East Khasi Hills District, Shillong, Govt. jong ka jylla Meghalaya lyngba ka shithi no. EKJ.20/17/2017/10/47/1002 jong ka 05.01.2018.

Ia ka Mining Plan ba mynta ba la mynjur bad ka PMCP da u Mining Engineer, Directorate of Mineral Resources Meghalaya: la ai lyngba ka shithi no. DMR/MM/79/2017/26-A ha ka 31.07.2024.

Ki marpoh khyndew kiba lah ban tih ki long kumba 9,35,400 MT ban pynmih mawshun ha ka dor kaba 2,07,825 TPA ROM (Mineral Limestone- 1,87,050 TPA & Mineral Waste/Subgrade- 20,775 TPA). Ia ki kam tih mawshun yn pynlong da ka rukom tih mawshun kaba la pyndonkam da ki kor kiba plie .

1.2.1 KA JINGPEIT BNIAH IA KA KHYNDEW:

Ka jingpeit bniah na ki trai shnong.

Ka jingbud ryntih jong ki maw ha ka jaka ba la mang ka long kumba la ai harum :-

Table 11.1: Local Geology

Geological Age	Group Name	Formation Name	Rock Type
Recent	Newer Alluvium	Unclassified	Sand, Silt and Clay
-----UNCONFIRMITY-----			
Eocene	Jaintia Group	Shella Formation	Lime Stone

Source:- Approved Mining Plan dated 31.07.2024

Ka Jinglong bad ka dur Jong ka Jaka.

Ka jinglong jong ka jaka ba la mang ka long kaba lum bad kaba don maw. Ka jingkiew hapoh ka jaka ba la ai wai ka long 75 mRL ka lynti kaba heh tam haduh 27 mRL ka lynti kaba rit tam.



1.2.2 KA JINGPEITBNAIAH BAD KA JINGLAH BAN PYNMIH.

Mineable Reserve : 9,35,400 MT
 Production : 2,07,825 TPA ROM
 Life of Mine ~ 5 Snem katkum ka plan tih mawshun ba la mynjur.

1.2.3 KA RUKOM TIH IA U MARPOHKHYNDEW:

Ka rukom tih ia u maw kan long da kaba shu khleng 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 jingtih ka dei/kan long da ki machine ba heh, machine hydraulic excavator, machine ban pynkit, machine pynpait maw, kali kit maw.
- Ka jingpynbthei ka hap ban/kan long da ki thliew kiba lyngkot ne kiba jrong da kaba kat kum ka kyndon jong ka DGMS
- Ka jingjrong bad jingheh jong ka ben la pynneh/yn pynneh kum 6 meter kawei kawei da kaba pyrkhath ia ka jingpynlong jong ki mashin.
- Ka machine pynpait bad khleng ban/hap pyndonkam ia ka jing pynmih ia u mar.
- La pynbiang ia ka jingker sawdong jong ka thliew/ jingtih ban peit ia ka jingrung khlem da thmu jong ki briew bad ki mrad ha ka jaka trei.
- Ia ka um dih la/yn wanrah na ki um paidbah kiba don ha shnong bad la buh ha ki khiew um ha ka ophis jong ka jaka bad hajan ki jaka trei na ka bynta ban dih bad ha ki tank cement hajan ka ophis jong ka jaka na ka bynta kiwei pat ki jingthmu.
- Ka khyndew kaba mih ha ka por tih ia u maw ha ka jaka tih la/yn sa pynkhlad bad buh kyrpang ha ka jaka kaba 0.01 hectare hajan u mawpud uba '1' bad yn pyndonkam ban thung ha ka por tlang.
- La pynbiang ia ki nala um ba don ki kynroh parapet bad yn kdew sawdong ka thliew ban peit ia ka jingrung jong ka um kaba tuid ha ka por tlang sha ka thliew trei.
- Ki jingshakri ha ka jaka kum ka ophis jong ka jaka, ka tank um, ka jaka trei, ka kamra shet & bam, ka paikhana bad kiwei kiwei la dep pynbiang bad yn pynneh pynsah hajan ka jaka tih mawshun ha ka jaka ba la mang.
- Ha ka por jong kane ka skhim tih mawshun u trai parmaw u hap pynmih shiphew tylli ki bench i.e. Na ki kyrdan bench 63mRL (ba hajroh), 57mRL, 51mRL, 45mRL, 39mRL, 33mRL, 27mRL, 15mRL, 9mRL, 3mRL, 9mRL(ba hapoh) .



- Ia ki surok ban leit sha ki faces la pynbiang bad yn pynbha na ka por sha ka por na ka bynta ka jingleit jingwan jong ki kali.
- Ka ranad jong ka ben kan long 85°. Ka jingkit marpoh khyndew ka long beit na ki thliw ne na ka jaka buh marpoh khyndew ba shipor.
- Ia ki jaboh marpoh khyndew la/yn bret ha ka liang ba shathie jong ka jaka ba trei hajan u mawpud '1' ha ka jaka 0.10 ha na ka bynta 6 meter ka jingjrong ha ki ar tylli ki phyllaw kiba jrong 3 meter kawei kawei.
- La pynbiang ia ki jingker maw bad yn pynneh pynsah sha ka liang kaba kham jrong jong ki jaka bret niut bad ban teh la kam ia ka jingsyntuid ka khyndew.
- Ka jingsam shapoh kan dei lyngba ba pynsynried um shwa ne daka pyndonkam da ka kor pynduna pump um.

1.2.4 KA JINGTIP SHAPHANG KA JINGPYNMIH IA U MAR.

Ka jingpynmih ia u mar katkum ka snem na ka bynta san snem kan ia id katkum ka table harum: -

Table 1.2: Production Details

Year	Tentative Excavation in Tons (ROM)	Waste/Sub Grade of Limestone in Tons	Mineral Limestone in Tons
First Year	2,07,825	20,775	1,87,050
Second Year	2,07,825	20,775	1,87,050
Third Year	2,07,825	20,775	1,87,050
Forth Year	2,07,825	20,775	1,87,050
Fifth Year	2,07,825	20,775	1,87,050
Total	10,39,125	1,03,900	9,35,225

Source-Approved Mining Plan with PMCP 31.072024

1.2.5 KA RUKOM PYNDONKAM IA KA JAKA

Ka plan pyndonkam jaka jong ka jaka par mawshun ban kynthup ia ki bynta shwa ban pyntreikam, ka jingpyntreikam bad hadien ka jingpyntreikam la ai harum: -

Table 1.3: Land Use Pattern

S. No.	Land use Category	Present (Ha)	End of 5th year (Ha)	End of mine (Ha)
1.	Top Soil Dump	--	--	--
2.	Waste Dump	0.10	0.10	0.10 (Reclaimed by plantation)
3.	Excavation (voids)	2.00	2.00	2.00 (Plantation)



	Only)			on upper benches – 1.33 ha & Water Reservoir-0.67 Ha)
4.	Roads	0.020	0.040	0.040
5.	Buildup Area	--	--	--
6.	Township Area	--	--	--
7.	Afforestation	0.05	0.10	0.15
8.	Reclamation (Backfilled)	--	--	--
9.	Mineral Storage	--	--	--
10.	Processing (Crushing)	--	--	--
11.	Undisturbed area	0.1425	0.0725	0.0225
Total		2.3125	2.3125	2.3125

1.3 KA JINGBATAI SHAPHANG KA MARIANG .

Na ka bynta ban peit bniah ia ki jinglong jong ka mariang kum ka jinglong ka suinbneng, ka lyer, ka um, ka khyndew bad ka jingsawa, la buh ia ki jaka peit bniah ha ki shiphew tylli ki jaka ha ka jaka ban pule binah. Ia ki jingtip ba sdang la lum ha ka aiom slap hadien (risaw' 2023 haduh nohprah' 2023). Ia ka jingtip ba bniah shaphang ki jaka shim nuksa la ai harum:-

Table 1.4: Sampling Location

S. No.	Sampling Location	Distance (Km)	Direction	Components
1.	Mine Site	--	--	Air, Ground Water, Noise, Soil
2.	Sohbar	3.2	N	Air, Ground Water, Noise, Soil
3.	New Komorah	1.0	E	Air, Ground Water, Noise, Soil
4.	Nongjri War	4.1	ENE	Air, Ground Water, Noise, Soil
5.	Umsaw	2.8	SSW	Air, Ground Water, Noise, Soil
6.	Mawthang	3.7	NW	Air, Ground Water, Noise, Soil
7.	Umwai	3.8	NW	Air, Ground Water, Noise, Soil
8.	Umngot River (Upstream)	1.0	E	Surface Water



9.	Umngot River (downstream)	1.0	SE	Surface Water
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1.3.1 KA JINGLONG KA JAKA

1.3.1.1 Ka jingbha ka khyndew.

La shim nuksa ia ka khyndew ha ki hynriew tylli ki jaka hala kajong kajong ka jaka. Ia ka jingmih na ka jingpeit bniah ia ka khyndew la ai kumne harum:-

- La lap ba ka pH ka long hapteng 7.25-7.60.
- La lap ba ka jingdon um jong ka khyndew ka long hapteng 372 haduh 484.2 μ hos/cm.
- U Nitrogen kum u N la shem ba ka don hapteng 0.019 haduh 0.041 Kg/ Hectare
- U Phosphorus kum ka P la shem ba ka don hapteng 10.67 haduh 14.3 mg/kg .

1.3.2 KA JINGLONG JONGKA UM.

Ka um napoh khyndew.

La peit bniah ia hynniew tylli ki nuksa um hapoh khyndew bad ar tylli ki nuksa um ba ha sla khyndew ha ka jaka ban peitbniah. Ki jingmih na ka jingpeit bniah ki long kumne harum:

- La lap ba ka pH ka long hapteng 7.26-7.78.
- La lap ba ka TDS ka don hapteng 312-500 mg/l.
- La lap ba ka jingkhlain ka long hapteng 156-189 mg/l.
- La lap ba ka Fluoride ka don hapteng 0.18 - 0.27 mg/l.

Kiwei pat ki jingthew kum ka Calcium, ka Magnesium, ka Kloraid, ka Sulphate bad ka Nitrate la lap hapoh ki kyndon ba la buh. Ka jingpeit bniah ia ka met – met na ka bynta kiwei pat ki jingthew ruh ki la long hapoh ki pud ba la shah katkum ki kyndon katkum ka IS: 10500. Ka jinglong jong ka um ka long kaba lah ban dih ha ka mariang.

Ka um ha sla khyndew.

- Ka pH jong ka um ba don ha sla khyndew la lap ba ka don hapteng 7.36 haduh 7.59.
- La lap ia ka DO ha ka jingheh kaba 7.3 haduh 7.6 mg/l .
- La lap ia ka BOD ha ka jingthew jong ka BDL (<2.0)
- La lap ia ka COD ha ka jingheh kaba 15 haduh 18 mg/l .



1.3.3 KA JINGLONG JONG KA LYER.

Ban bishar bniah ia ka jinglong ba sdang jong ka jinglong ka lyer ha ka jaka pule la pynlong ia ka jingpeit bniah ia ka jinglong ka lyer kaba ryntih na ka bynta ki jingpynjakhlia kiba la buh kyndon (PM10, PM2.5, NOX, SO2 bad CO) ha ki hynniew tylli ki jaka peit bniah ia ka jinglong ka lyer.

Ka jingpeit bniah ia ka jinglong ha lyer sawdong:

La pynlong ia ka jingpeit bniah ia ka jinglong ka lyer sawdong da kaba pynlong ar sngi ha ka shi taiew ha ki hynniew tylli ki jaka kiba kynthup ia kawei ka aiom kaba pura kata u bnai risaw 2023 haduh u bnai nohprah 2023. Ki jingkhein jingdiah bapher bapher kum ka 98 percentage, ka jingkhein pdeng, ka jingkhein kaba heh tam bad kaba rit eh la khein na ki jingkhein ba la peit bniah. ki data na ka bynta baroh ki jaka peit bniah ia ka AAQ. Ia kine la ianujor bad ki kyndon ba la buh da ka Central Pollution Control Board (CPCB) na ka bynta ki jaka nongkyndong bad ki jaka sah briew.

Ia ka jingpeit bniah kaba la pynshong nongrim ha ka jingpule bniah ia ki jingmih la lum lang harum:-

PM10:- Ka jingkhein kaba heh tam na ka bynta ka PM10 kaba la iohi ha ka jaka tih mawshun ka long 87.48 $\mu\text{g}/\text{m}^3$ bad ka jingkhein kaba rit tam na ka bynta ka PM10 kaba la iohi ha Umwai ka long 61.64 $\mu\text{g}/\text{m}^3$. Ka jingthew kaba 24 kynta kaba lah ban pyntreikam na ka bynta ki jaka karkhana, jaka sah nongkyndong bad kiwei kiwei ka long 100 $\mu\text{g}/\text{m}^3$.

PM2.5:- Ka jingkhein kaba heh tam na ka bynta ka PM2.5 kaba la iohi ha ka jaka tih mawshun ka long 48 $\mu\text{g}/\text{m}^3$ bad ka jingkhein kaba rit eh na ka bynta ka PM2.5 kaba la iohi ha Umwai ka long 24.61 $\mu\text{g}/\text{m}^3$. Ka jingthew kaba 24 kynta kaba lah ban pyntreikam na ka bynta ki jaka karkhana, ki jaka sah nongkyndong bad kiwei kiwei ki jaka ka long 60 $\mu\text{g}/\text{m}^3$.

SO2:- Ka jingkhein kaba heh tam na ka bynta ka SO2 ba la iohi ha ka jaka tih mawshun ka long 11.04 $\mu\text{g}/\text{m}^3$ bad ka jingkhein kaba rit tam na ka bynta ka SO2 ba la iohi ha Umsaw ka long 5.2 $\mu\text{g}/\text{m}^3$. Ka jingthew kaba 24 kynta kaba lah ban pyntreikam na ka bynta ki jaka karkhana, ki jaka sah nongkyndong bad kiwei kiwei ki jaka ka long 80 $\mu\text{g}/\text{m}^3$.

NOx:- Ka jingkhein kaba heh tam na ka bynta ka NO2 ba la iohi ha ka jaka tih mawshun - 20.27 $\mu\text{g}/\text{m}^3$ bad ka jingkhein kaba rit tam na ka bynta ka NO2 ba la iohi



Project:- "Rikaleng Limestone Mine"	
Applicant:- Smt Kuntimai Tangdhara	Executive Summary

ha Umwai 10.81 µg/m³. Ka jingthew kaba 24 kynta kaba lah ban pyntreikam na ka bynta ki jaka karkhana, ki jaka sah nongkyndong bad kiwei kiwei ki jaka ka long 80 µg/m³.

CO: - Ka jingkhein kaba heh tam na ka bynta ka CO ba la iohi ha ka Mine Site-1.45 mg/m³ bad ka jingkhein kaba rit eh na ka bynta ka CO ba la iohi ha Sohbar ka long 0.24 mg/m³. Ka jingbuh por kaba 8 kynta na ka bynta ki jaka karkhana, ki jaka sah nongkyndong bad kiwei kiwei ka long 2.0 mg/m³.

Jingpynkut: Ki jingmih na ki jingtip ba la buddien ki pyni ba ka jinglong ka lyer ba marjan jong ka thain ha ka jingialang baroh kawei ka iahap bad ki kyndon jong ki kyndon jong ka jinglong ka lyer ba marjan jong ka ri jong ka CPCB, ha baroh ki jaka ba la buddien .

1.3.4 KA JINGMIH JONG KA JINGSAWA

Ia ka jingpeit bniah ia ka jingsawa la pynlong na ka bynta ban tip ia ka jingsawa ha ki hynriew tylli ki jaka ha ka jaka pule. Ia ka jingsawa ha kawei pa kawei ka jaka la buh jingthoh haduh 24 kynta. Ia ki jingmih ba la ioh la ianujor bad ki jingthew jong ka ri bad la shem ba ki don hapoh ki jingthew.

KA RESUL

A) Ka Jingmih Ka Jingsawa ha ka Por Mynsngi Leq (por mynsngi)

Ka por sngi Leq (sngi) ka jingsawa ha baroh ki jaka la iohi ba ka long hapdeng 50.4-58.4 dB (A). Ka jingsawa kaba heh tam ka long 58.4 dB (A) ha ka jaka jong ka Mine bad ka jingsawa kaba duna tam ka long 50.4 dB (A) ha Nongjri War ha ka por ba leh ia ka jingpule. La iohi ba ki jingsawa ha ka por mynsngi ki long katkum ka jingthew ba la buh kaba long 75dB (A) ha ka jaka pule.

B) Ka Jingmih Ka Jingsawa ha ka Por Mynmiet Leq (por mynmiet)

Ka jingsawa ha ka por miet Leq (miet) ha baroh ki jaka sah la iohi ba ka long hapdeng 36.2-42.5 dB (A). Ka jingsawa kaba heh tam ka long 42.5 dB (A) ha Umsaw bad ka jingsawa kaba duna eh ka long 36.2 dB (A) ha Nongjri War ha ka por ba leh ia ka jingpule. La lap ba ka jingsawa ha ka por miet ha ka jaka tih mawshun la lap ba ka long kaba heh bha namar ka jingkhieh jong ki kali, hapoh ka kyndon ba la buh kaba long 70 dB(A).

1.3.5 KA IOH KA KOT HA KA IMLANG SAHLANG.

Ka jaka pule ka kynthup ia ka jaka jong ka projek bad ka radius kaba 10 km sawdong jong ka, kaba kynthup ia phra tylli ki tehsil: Pynursla, Shella Bholaganj, Myllem, Mawphlang, bad Khatarshnong Laitkroh, kynthup ia ki 53 tylli ki shnong.



Ki don 3,879 tylli ki longiing, kaba kheif kyllum lang ki don phra ngut ki dkhot ha kawei kawei ka longiing. Na kine, 4.92% ki don hapoh 0-2 Km, 41.48% hapoh 2-5 Km, bad 53.60% hapoh 5-10 Km. Ka jingdon briew baroh ka long 19,716 ngut, ha kaba 5.31% ki im ha ki jaka ba jngai 0-2 km, 41.76% ha ki jaka ba jngai 2-5 km, bad 52.93% ki im ha ki jaka ba jngai 5-10 km. Napdeng kine, 51.45% ki dei ki shynrang bad 48.55% ki dei ki kynthei, kaba pynlong ia ka jingkhein kynthei bad shynrang kaba long 944 ngut na ka 1,000 ngut ki shynrang. Ka jingdon jong ki khynnah kiba don ha ka rta 0-6 snem ka long 19.74%, ha kaba ka jingkhein kynthei ka long 923 ngut na ka bynta man la ka 1,000 ngut ki khynnah shynrang.

KA JINGPEITBNIAH HA KA IMLANG SAHLANG

Ha ka jaka pule, ka jaitbynriew Scheduled Caste ka kynthup ia 1.53% na ka jingbun briew baroh, ha kaba 1.49% ki shynrang bad 1.58% ki kynthei, kaba pynlong ia ka jingkhein kynthei bad shynrang kaba 999 na man la ki 1,000 ngut ki shynrang. Katba ki jaidbynriew Scheduled Tribe ki don tang 1.78% na ka jingbun briew, ha kaba 77.42% ki shynrang bad 78.86% ki kynthei, kaba ialam sha ka jingkhein shynrang bad kynthei kaba long 961 ngut na man la ka 1,000 ngut ki shynrang.

KA JINGNANG JINGSTAD HA KA JAKA BA LAH PEIT BNIAH.

Ha ka jaka pule, 55.58% na ka jingbun briew baroh kawei ki dei kiba nang ban thoh ban tar, ha kaba 55.96% ki shynrang bad 55.18% ki kynthei, kaba pyni ba ka don ka jaka ban pynbha ha ka jingpule jong ki khynnah kynthei bad kynthei. Pynban, 45.99% na ki nongshong shnong ki dei ki bym nang thoh nang tar, kaba kynthup ia 37.16% ki shynrang bad 55.86% ki kynthei.

KA JINGPEIT IA U NONGTREI & BAD KA JINGPYNBEIT IA KA RUKOM TREI.

Ka jingiashim bynta ha ka kam baroh kawei ha ka jaka pule ka long 39.06%, ha kaba 50.74% ki shynrang bad 24.61% ki kynthei ki iashim bynta ha ka kam. Napdeng ki nongtrei, 31.47% ki dei kiba la khein kum ki nongtrei ba kongsan bad 6.58% kum ki nongtrei ba marjan. Kiba bun ki shynrang ki trei ha ki karkhana rit, ka rep ka riang, bad ka kam, katba ki kynthei pat ki trei nyngkong eh kum ki nongtrei ba marjan namar ki kam ha iing ha sem, ha kaba bun ruh ki rep ia ki jaka rep jong ki.

KI JINGMIH BAD JINGIM HA KA MARIANG.



Ka mariang ba im jong ka Meghalaya, kaba kynthup ia ki jingthaw ba im bapher bapher ha ka khyndew bad ha um, la bishar bniah ia ka jingktah ia ka mariang ban iada ia ki jingthung jingtep bad ki mrad ki mreng. Ka jingheh jong ka jylla kaba 22,429 km² ka kynthup ia 8,514 km² ki khlaw, ha kaba 722.36 km² ka don hapoh ka jingpeit beit jong ka tnad khlaw ka jylla. Ia ki jait khlaw la phiah kum ki khlaw kiba shit, kiba rit, bad kiba shit, ryngkat bad ki jingpher kiba kynthup ia ki khlaw kiba jyrngam, kiba jyrngam shiteng, ki jaka ba jyrngam bad kiba rkhiang, bad ki jaka jyrngam. Ki khlaw kiba rkhiang ki mih ha ki jaka kiba kham jrong, katba ki jaka shyiap ki mih na ka jingpom pathar ia ki khlaw. Haduh u snem 2001, ka jingheh jong ka khlaw ka Meghalaya ka long 15,584 km², kumba 69.5% na ka jingheh jong ka jylla, ha kaba ki bynta kiba kongsan la pyniaid da ki local council bad ki jaka treikam tynrai.

Floral Diversity in Study Area

Study Area
Flora
Climbers –19 Species
Herbs – 40 Species
Shrubs - 70 Species
Tree – 74 Species
Orchids- 8 Species
Fauna
Reptiles - 9 Species
Butterfly/ Moth –28 Species
Mammals –15 Species
Avifauna-79 species

Aquatic Ecology (Phytoplankton and Zooplankton)

Phytoplankton

Study Area
Cyanophyceae- Blue green algae - 06 Species
Cholorophyceae- Green Algae - 12 Species
Euglenophyceae /Flagillates – 02 Species
Bacillariophyceae-Diatoms – 11 Species

Zooplankton



Ki khniang bad ki khniang cladocera ki long ki bynta ba kongsan jong ki jaitbynriew ba im ha ki dohkha kiba long kum ka jingbam jong ki dohkha.

Ki Taxa kiba la iohi ha ki jaka bapher bapher jong ka Wah Umngot ki long ki jait Rotaria sp. (Rotifers) bad ki Bosmina sp. (Kladosera). Ha kaba iadei bad ki mrad, la iohi ba baroh ki don 25 tylli ki taxa ha baroh lai tylli ki station.

Taxa at different sites of Umngot river
Protozoa - 05 species
Rotifera - 09 species
Copepoda - 03 species
Cladocerans - 06 Species
Ostracods - 02 Species

Na kine ki 25 tylli ki Taxa, 5 tylli ki dei na ka klas Protozoa, 9 tylli ki dei na ka klas Rotifera, 3 tylli ki dei na ka Copepoda, 6 tylli ki dei na ki Cladocerans bad 2 tylli na ki Ostracos. Ka Rotifera ka dei ka kynhun kaba bun tam.

Ki jingim bym don shyieng

Ki mrad ba don shyieng hapoh um ki long kiba kongsan ha ki wah bad ki jaka shyiap, kiba pyniasoh ia ki nongpynmih ba kongsan bad ki nongbam ba kham heh. Ki long kum ki dak jong ki jingkylla ha ka mariang bad ka jinglong ka um, ryngkat bad ka jingriewspah jong ki jait jingthaw ba la ktah da ka jinglong ka um.

Macro benthos Invertebrate fauna in the Study Area
Ephemeroptera - 10 Species
Odonata - 01 Species
Diptera - 02 Species
Hemiptera - 02 Species
Molluscan - 02 Species

Nektons (Ki dohkha ba long ban khwai)

Ka Wah Umngot ka don 16 jait ki dohkha na ki 7 tylli ki longiing, ha kaba 50% na ki Cyprinidae, kaba pyni ia ka jingduna jong ki dohkha (ichthyofaunal diversity). Ka jingduna jong ka jingpher ka dei namar ka jinglong jong ki wah bad ka jingpyndonkam ia ka khyndew. La iohi ia hynriew jait ha ka jaka ba la ktah da ka projek.



Ha ka por ba bishar bniah ia ki jingthaw ba im bad ka jingsngewkhia bad ki nongshim bynta ha ka thain ka la pynpaw ba ka jaka pule jong ka projek kam hap ha ka lynti leit jingleit jong ki Sim kiba leit jingleit. Ha kawei pat ka liang, ym don uwei ruh na ki mrad kiba kongsan kiba don ha ka jaka jong ka projek bad ym don jaka shong jaka sah jong ki mrad khlaw kiba kongsan ha ka jaka jong ka projek. Baroh ki jait syntiew bad ki mrad ba la pyntip na ka jaka pdeng ki long kiba ju don bad kiba la saphriang bha ha ka jaka ba la buh kyrpang ruh. Kumta, lah ban ong ba ka projek bad ki kam kiba iadei bad ka kim lah ban ktah ia kino kino ki bynta jong ki syntiew bad ki mrad ha ka rukom kaba kongsan tangba la pyntreikam ia ki jingai jingmut/jingai jingmut ha kane ka kaiphod. Ki jingpyntreikam kiba pyrkhing ia ki lad pynduna EMP/ ki long kiba donkam ban pynthikna ba ki jingthaw ba im jong ka jaka pule kim dei ban shah ktah ha ka rukom kaba sniew.

1.4 KI JINGKTAH BA LA KHMIIH IA KA MARIANG BAD KI LAD BAN PYNDUNA

Ka jingpynkut ia ki jingktah kiba sniew kiba la khmih lynti ia ka mariang namar ka jingtih mawshun kaba la don lypa bad ki lad ban pynduna la ai harum: -

Jinglong ka Khyndew		
Aspects	Impact	Mitigation Measures
Ka jinglongdur jong ka jaka	Ka jingtih ia u mar ka pynkylla ia ka dur jong ka khyndew, ka pynlong ia ki jaka ba thylli, bad ka pynthut ia ka jaka.	Pyntreikam ia ka jingpynbha ia ka khyndew, pynduna ia ka jingpynthut, teh lakam ia ka jingtwa khyndew, pyniaid bha ia ka um, iada ia ki jingthaw ba im, iatreilang bad ki paidbah, bad buddien ia ki jingpyrshang ban pynbha pat.
Ka jingtwa bad jingpynjot ia ka khyndew	Ka jingtih parmaw ka pynthut ia ka khyndew, kaba ialam sha ka jingtwa bad jingkhluit.	Pynlong ia ki nala um bad ki pung um, thung ia ki jingthung jingtep, pynduna ia ka jingpyndonkam ia ki mashin kiba heh ha ki jaka ba slap, bad pyndonkam ia ki jingpynkylla ia ka khyndew na ka bynta ban pynbha pat.
Ka jingpom pathar ia ki khlaw bad ka jingpynjot ia ki jaka shong jaka sah	Ka jingtih mawshun ka pynlong ia ka jingpom ia ki khlaw bad ka pynthut ia ki mariang.	Pyniaid ia ka jingthung jingtep ha ki jingkhang ba la buh da ka ain, sawdong ki jingtei, bad ki jaka bym pat trei; pynthikna ba palat 33% na ka jaka ba la ai wai yn thung biang ha kaba kut jong ka jingtih mawshun

Ka jingktah ha ka dur bad ka jingpynjot ia ka jingitynnad:	Ka jingtih par maw ka pynkylla ia ki jaka bad ki jingpeit ba itynnad.	Pynlong ia ki jaka pynitynnad ia ka jaka bad ki jingthung jingtep ban pynduna ia ka jingpynthut kaba lah ban iohi
Ka jingkylla ha ka jaka, ki thliw ba jyllop, bad ka jinghiar khyndew	Ka jingtih par maw ka pynlong ia ka jingtwa khyndew bad ka pynkylla ia ka rukom tuid um.	Pynduh ia ki jingktah ha ka jaka ba la ai wai, pynleit jingmut ha ka jingthmu kaba bniah, ka jingpynbha, ka jingthung katkum ki bynta, bad pynroi ia ki jaka buh um.
Ka jaka khhijumai V .	Ka jingtih par maw ha ki jaka ba don jingma ka wanrah ia ka jingma kaba khraw ia ka mariang.	Pyntreikam ia ki jingpyniaid ba pyrkhing ia ka mariang, ka jingstad ba thymmai, bad ka jingpeit bniah kaba bniah; pynneh pynsah ia ki jaka lum ben katkum ka plan tih mawshun bad pynlong ia ki jingpule ia ka jinglong sngur jong ki jaka lum.
Ka jingpynkhuid ia ka jingtap khyndew bad ka jingpynmih jaboh:	Ka jingtih mawshun ka pynmih shibun ki jaboh bad ka khyndew.	Pyniaid ia ki jaboh lyngba ka jingbret jaboh ha ka rukom kaba biang, pynskhem ia ki jaka bret jaboh da ki kynroh ba pynskhem, bad pyndonkam ia ka khyndew ba la tih na ka bynta ban thung khnang ban lait na ki jingbuh jingkynmaw ba neh.

Ka Jinglong Ka Um

Ka Umpohkyndew

Ka jingiakynduh bad jingduh jong ka um hapoh khyndew; ki jingkylla ha ki jinglong jong ka um.	Ka jingtih mawshun ka lah ban iakynduh bad pynjaboh ia ka um hapoh khyndew bad ka ktah ia ki jinglong jong ki um hapoh khyndew.	La buh ia ki pud jong ki thliw ban kiar na ka um hapoh khyndew. Ia ka jingdonkam um la pynbiang/yn pynbiang lyngba ka jingpynpoi um da ki tanker na ki wah um kiba don hajan, ym na ka um hapoh khyndew. Hadien ka jingtih mawshun, yn pyndap biang ia ka um ba kynja mariang, bad yn buddien man ka por ia ka jinglong jong ka um hapoh khyndew.
Ka um jakhlia na ki tank bad ki thliw um.	Ka um jakhlia ka lah ban tuid bad pynjaboh ia ka um hapoh khyndew.	Ia ki jaboh jabaiñ la/yn pyntreikam da ki tank jakhlia bad ki thliw um. Ia ka sboh ba la pynskhem la pyndonkam/yn pyndonkam na ka bynta ban thung jingthung.

Ka jingpynmih ia ki dawai ne ki mobil bad ki nar kiba heh.	Ka jingmih um na ki jaboh jong ki par maw ka lah ban pynjaboh ia ka um hapoh khyndew.	Ym shym la pyndonkam/yn pyndonkam da ki dawai ne ki nar kiba heh. Ka jingpyniaid ia ki tailings kiba biang, ki liner ban khanglad, bad ka jingpyniaid ia ka um kaba biang ka dang/kan pyntreikam. Ka jingpeit bniah man ka por kan pynthikna ia ka jingiada ia ka um hapoh khyndew.
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Ka Um ha Sla Khyndew

Ka jingpynjakhlia ia ki um kiba don hajan.	Ka um kaba tuid ka lah ban kit ia ki sboh bad ki dawai, kiba lah ban pynsniew ia ka jinglong ka um bad pynsniew ia ki jingthaw ba im ha um.	Yn nym pyndonkam da ki dawai ne ki nar kiba heh. Ki plan pyniaid um kin pyniaid bha ia ka jingtuid um lyngba ka jingpyndonkam ia ki pung ba la buh bad ki jaka pyntuid um maw.
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Ka jingkylla jong ka um.	Ka jingtih ia u mar ka lah ban pynkylla ia ka rukom tuid um bad pynduna ia ka jingdon um shapoh wah, kaba ktah ia ki jingthaw ba im.	Ka jingtuid um na ka mariang kan sah khlem shah ktah. Ka jingpynbha hadien ka jingtih kan pynphai biang ia ka jaka sha ka jinglong tynrai jong ka. Yn pyniaid bad pyndonkam ia ka um slap, da kaba buh ia ki lad jingiada na ka jingtwa khyndew ban iada ia ka jinglong ka um.
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Ka Jinglong ka Lyer

Ka jingmih na ki mashin heh bad ki kali kit mar.	Ka jingmih jong ki jakhlia (NOx, SO2, VOCs) ka iarap ia ka jingjaboh ka lyer.	Pynbiang ia ki mashin da ki lad jingpynmih lyer kiba mynta, pynbha man ka por, bad pynbha biang ia ki jaka ba la pynthut da ki jingthung jingtep ban pynskhem ia ka khyndew bad pynduna ia ka pum pum. Pyniasoh ia ki nongshong shnong ha ki plan pyniaid ia ka jinglong khuid ka lyer.
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Ka pum pum bad ki jingjaboh na ki jaka tih par maw	Ka pum pum bad ki jingjaboh kiba mih na ki jaka tih maw ki pynlong ia ka jingjaboh ka lyer.	Pynkhreh biang ia ki jaka ba la pynthut da ki jingthung jingtep ban pynskhem ia ka khyndew bad ban pynduna ia ka dewbilat. Pyniasoh bad pyntip ia ki nongshong shnong ha ki plan
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pynkhuid ia ka jinglong ka lyer ban weng ia ki jingeh bad ban pynbha ia ka jingkhuid.

Ka Jingmih jong ka Jingsawa

Ka Jingsawa ba heh	Ka pynthut ia ki nongtrei, ki shnong kiba don hajan, bad ki mrad khlaw.	Pynlong ia ki jingkhang ia ka jingsawa, pynbha ia ki tiar, pyndonkam ia ki jingpynbeit ba iada na ka jingkhieh, buh por ia ki kam kiba don jingsawa ha ki por ba kham duna ka jingsawa, pyntreikam ia ki buit ban pynduna ia ka jingsawa, plan ia ka jingpynbthei ba la tehlakam, bad pynthikna ba ki surok kit ki long kiba suk.
Ka jingtreikam kaba bteng khlem shong	Ka jingmih ka jingsawa kaba neh na ki belt kit bad ki kor pynkhylllem.	Ka jingpynbha man ka por ia ki mashin, khanglad ia ka jingstet jong ki trok, buh ia ki jingpynjem sur ha ki tiar, bad pynbiang ia ki kamra ba khang na ka bynta ki nongpyniaid
Jingtah ia ka koit ka khiah	Ka jingbym lah ban iohsngew,ka jingklusai, ka jingbym lah ban iothiah,bad ka jingpynthut ia ka jinglong jong ki mrad.	Pynioh jingiada ia ka jingsngap, pyntreikam ia ki jingpyniaid synshar, pynkylla ia ki kam, pynlong ia ka jingthung jingtep ha kylleng, pynlong ia ki jingpeit bniah ia ka koit ka khiah man ka por, bad pynlong ia ka jingpeit bniah ia ka jingsawa man ka por.

Ka Imlang Sahlang bad ka ioh ka Kot

Ki jingtah kiba Sniew bad Jingpynbha

Ki jingshem ia ka Jingeh ha ka imlang sahlang	Ka jingbun briew bad ka jingtreikam ha ka ioh ka kot ka lah ban pynjynjar ia ki jingshakri ha ka imlang sahlang bad ki jingtei ha ka thain.	Yn pynlong ia ki jingiatreilang bad ki sorkar pdeng bad ki seng treimon sngewbha ban kyntiew ia ki jingshakri ha ka imlang sahlang. Yn pyntreikam ia ki prokram pynroi ia ka imlang sahlang ban weng ia ki jingeh ha ka imlang sahlang.
Ka jingtah ia ka kolshor	Ka jingtih par maw ka lah ban pynthut ia ka rukom im tynrai bad ki	Ki nongshong shnong kin iashim bynta ha ki jingthmu bad ki jingshim rai kiba iadei bad ka kolshor.



	rukom lehniam jong ki trai ri trai muluk ne ki nongshong shnong .	Yn kyrshan ia ki jingthmu ban pynneh pynsah ia ka kolshor bad yn burom ia ki riti dustur jong ka thain.
ka koit ka khiah na ki nong ai jingsumar jong ki shnong	ki kam tih maw ki lah ban kynthup ia ki mat kum ka jingjaboh ka lyer bad ka um, ka jingsawa, ka jingkiew ka jingma na ki jingpang bampong, ka jingshah ktah ha ki dawai kiba lah ban pynmysaw, bad ka jingpynthut ia ka jinglah ban ioh ia ki tyllong um kiba khuid .	Yn pynlong ia ka jingpeit bniah ia ka koit ka khiah man ka por jong ki nongtrei bad ki nongshong shnong kiba don hajan. Yn buh ia ki jingthoh shaphang ka koit ka khiah bad ka jingshngain jong u nongtrei. Yn ai jinghikai ia ki nongtrei. Yn pynbiang ia ki tiar iada shimet sha ki nongtrei. Yn pynthikna ia ka jingshngain bad jingbha jingmiat jong ki nongtrei katkum ki kyndon bad ki kyndon tih marpohkhyndew.
Ka jaka shong jaka sah	Ki projek tih mawshun ki lah ruh ban wanrah, ka jingshah pynkynriah jaka, ka jingkiew jong ki kam runar, ka jingbym iaryngkat ha ka ioh ka kot, ka jingeh ha ki jingtei, bad ki jingeh ha ka pateng kaba slem, kaba ktah jur ia ki jaka shong jaka sah jong ki briew kiba don hajan bad ia ka jinglong jingman jong ki.	Ka jaka sah kaba jan tam ka jngai 2.3 km ha SSW. (Shnong - Umsaw). Ym don kano kano ka jingshah pynkynriah jaka ha ka met ne ka ioh ka kot namar ka projek bad kumjuh ruh ym shym la antad ha ki por ban wan ruh. Ki lad ban pynduna jingeh na ka bynta ki jaka shong jaka sah jong ki briew kiba don hajan ki kynthup, ka jingbei tyngka ha ka koit ka khiah bad ki jingtei jong ki paidbah, ban pynthikna ia ka jingmyntoi ha ka ioh ka kot kaba hok, ban pynrung ia ki nongshong shnong ha ka jingshim rai bad kiwei kiwei.

Ka Jingmih bad Ka Jingioh Jingmyntoi**Ka Jingmih bad ka Jingpynmih:**

- Ka jingpynkiew ia ka ioh ka kot kaba pdeng na ka bynta ki nongshong shnong kiba trei ia ki kam tih mawshun kiba kum kita da kaba beit bad khlem da beit.
- Ka jingkiew ha ka khajna jong ka sorkar bad ka sorkar pdeng.
- Ka jingtreikam kaba jop jong ka karkhana kan khring shuh shuh ia ki nongbei tyngka na ka bynta ki karkhana, kaba ai jingmyntoi ia ka imlang sahlang bad ia ka jaitbynriew.

Ki Lad Kamai

- Kumba 21 No. ki briew kin ioh kam beit na ka projek tih mawshun.
- Ka jingkhmih lynti ban thaw ia ki lad kamai kiba thymmai kiba beit bad ki bym beit.
- Ka jingkhmih lynti ban kiew ha ki lad kamai ki bym dei na ka rep ka riang, kiba iadei beit bad bym iadei beit.
- Ka jingwan jong ki briew kaba duna eh la khmih lynti ha ka por ba pyntreikam.

Ka Jingtei da kaba shnahi.

- La khmih lynti ba yn pynkhlain ia ka surok bad ka bording ha katei ka thain kum shi bynta jong ka jingpynroi kaba bud ryntih.

Ka Jinglong Ka Mariang

- Ka jingpynkhuid ia ki jingthung jingtep .
- Ka jingsawa bad jingkhah na ki kam tih maw .
- Ka jingpynmih ia ka um ba la jakhlia .
- Ka jingpynmih dewbilat
- Ka jingpynkylla ia ki jingthung jingtep na ka bynta ban tih.

- Ka jingpom pathar ia ki khlaw ki btap, ka jingpynthut ia ki mrad khlaw, bad ka jingpynjot ia ki jingthung jingtep ha um.
- Ka jingpynkynriah jaka ia ki mrad bad ki sim, ka jingpynthut ia ki mrad khlaw kiba don ha ka thain.
- Ka jingpynjot ia ki jingthung jingtep bad ki mrad ba im ha um.

Pynlong ia ki jingpeit bniah: la pynkhreh ia ka kaiphod EIA kaba bniah ban sngewthuh ia ki jingktah kiba lah ban mih bad ban shna ia ki lad pynduna kiba biang.

Kiar na ki jaka ba don Jingma: Ka jingaiwai tih mawshun ka don ha ka jaka jong ki riw shimet, bad ym don ki jaka ri mrad ne ki jaka ri mrad hapoh ka jingjingai kaba 10 kilometer na ka jaka aiwai. Namarkata, ka jingma ban ktah ia ki jaka kiba rit ka long kaba duna bha.

Ki jingjurip ia ki jait jingthaw: La pynlong ia ka jingwad bniah ban tip ia ka jingdon jong kino kino ki jait jingthaw kiba don ha ka Schedule I lane ki jingthung jingtep kiba sngewkhia hapoh ka jaka pule. Ym don kano kano ka jait jingthung jingtep ne ki jait



	<ul style="list-style-type: none"> • Ka jingtah ia ki jingthung jingtep kiba don hajan bad ka mariang ba im. • Ka jingduh noh ia ki jingthung jingtep bad ka jingpynthut kaba lah ban mih na ka bynta ka mariang ha ka thain. 	<p>jingthung kiba don ha ka schedule 1 kiba la lap ha ka jaka ba la leh ia ka jingpule.</p> <p>Ki Plan ban pynthymmai: Pynkhreh ia ki plan na ka bynta ban pynthymmai ia ka mariang bad pyndonkam ia ki jait jingthung trai ri ban thung biang.</p> <p>Ka Jingpyniaid ia ka Um bad ka Iyer: Pyniaid ia ka jingjaboh ka um bad ka lyer lyngba ka jingpyniaid bad jingpeit bniah kaba biang.</p> <p>Ka Jingpynduh kaba shngain: Pyndonkam ia ki jaboh tih maw da ka jingkitkhlieh bad wad ia ki lad ban pyndonkam biang.</p> <p>Ka Jingtehlakam ia ka Jingtwa Khyndew: Pyntreikam ia ki rukom iada na ka jingtwa khyndew kum ki jingker dewbilat bad ka jingthung ia ki jingthung jingtep.</p> <p>Ka Jingiashim bynta jong ki nongshim bynta: Iatreilang bad ki nongshong shnong bad pynbeit ia ki jingeh jong ki lyngba ka jinghikai bad jingai jingmut.</p> <p>Ka jingpeit bniah kaba bteng: Buddien ia ki jingtah ia ka mariang bad ai kaiphod halor ka jingbud ryntih ia ki lad pynduna.</p> <p>Pynbud ia ki kyndon: Bud ia ki kyndon jong ka mariang bad ki jingdonkam ban ai jingbit.</p>
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1.5 KA PROKRAM BAN PEIT IA KA MARIANG:

1.5.1 Ka Lyer.

Yn pynlong ia ka jingpeit bniah ia ka jinglong ka lyer katkum ki kyndon jong ka SPCB bad CPCB .



1.5.2 Ka Um.

Yn pynlong ia ka jingpeit bniah man ka por ia ka jinglong ka um hapoh khyndew ha ki jaka kiba biang. Yn lum ia ki nuksa um saw sien ha ka shisnem katta. Shwa - Slap, Slap, Hadien - Slap bad Ka Por Tlang.

1.5.3 Ka Jingsawa.

Yn buh jingthoh ia ka jingsawa man ka por ha ka jaka tih mawshun hajan ki mashin ba treikam ha ka por mynsngi bad miet.

1.5.4 Ka Jingkoit Jingkhiah bad ka Jinghuid Jingsuba.

La pynlong ia ka jingpeit bniah ia ki nongtrei man ka por bad la pynbiang ia ka jaka sumar. La pynbiang ia ki painkhana bad ki jaka dih um hajan ka jaka tih mawshun. Ka um dih ka dang/kan long kaba lah ban ioh na ka bynta ki nongtrei.

1.6 KA JINGPEIT BNIAH NA KA B YNTA KIWEI KIWEI DE.**1.6.1 KA JINGSNGEW PAIDBAH.**

Ia ka kaiphod EIA/EMP ba la shna lypa la dang pynpoi. Ia ka jingpynsngew paidbah yn pynlong katkum ki jingbthah jong ka EIA Notification 14th September, 2006 bad ki jingpynkylla hadien jong ka.

1.6.2 KA JINGPEIT BAD KA JINGPYNBEIT IA KI JINGMA

Ka jingpeit bniah ia ki jingma ka dei ka jingpule bniah ia ki jingbym thikna bad ki jingma kiba iakynduh ha ki bynta bapher bapher. Ki nongpeit bniah ia ki jingma ki wad ban ithuh ia ki jingma kiba don ha ki kam tih mawshun, ban sngewthuh kumno bad mynno ki mih, bad ban antad ia ka jingktah (ha ka liang ka pisa tyngka ne kiwei kiwei) jong ki jingmih kiba sniew. Ka batai bad bishar bniah ruh ia ki jingma ia ki briew shimet, ki kam bad ki tnad sorkar kiba lah ban mih na ki jingjia ba sniew kiba lah ban mih na ka mariang bad na ki briew.

Hynrei ki don ki daw bapher bapher, kiba lah ban wanrah ia ki jinglong jingman/ jingma ha ka jingtrei bym shngain ha kaba tih ia u mawshun (ki marpoh khyndew kiba rit). La ithuh ia kine ki jait jingma ha ka por ba tih ia u mar: -

1. Ba mynsaw por pynkiew, pyniaid bad bret ia u maw.
2. Ba mynsaw da ka daw bai aid 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 jingit ia ki jingma ba ktah na ka jingpynjot

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

Step 3: Ki jingwengnoh ia ki jingjulor

Step 4: Ka jingtipbniah na ka bynta ka jingma



Project:- "Rikaleng Limestone Mine"	
Applicant:- Smt Kuntimai Tangdhara	Executive Summary

Step 5: Ki lad ban iada ba iadei ban shim

Step 6: Ban buh jingkhein

Step 7: Ban peit biang

1.7 KA JINGMYNTOI NA KA PROJEK.

Ka jingdawa ia u mawshun ka la nang kiew ha ka jylla namar ka jingkiew ha ki kam karkhana bad ka jingpynroi ia ka projek kaba la don lypa ka thmu ban pyndep ia ka jingpynbiang ia u mawshun. Ka jinglah jong ka par ka long 2,07,825 TPA ROM da kaba thmu ban pyndap ia ka jingduna ha ka jingdawa – jingpynbiang.

Kane ka jingtih mawshun ka dang/kan pynmih kam beit bad bym beit. Ka ioh ka kot jong ka thain kan ioh ia ka jingkiew bad kan don ka jingroi baroh kawei jong ka thain ha ka liang ka pule puthi, ka koit ka khiah, ka jinghikai, ka jingpynsgewthuh, ka leit ka wan, ki kali, ki karkhana, bad ki jingtei. Ka kyrdan im katkum kan ioh ruh ia ka jingkiew ha ka liang kaba bha. Yn pynlong ia ka jingthung kum ka prokram social forestry ha ki shnong, ki skul bad ki jaka ba la mang da ki bor synshar Panchayat/ Jylla ban pynbha ia ka mariang jong ka sawdong sawkun jong ka.

1.8 KA PLAN BAN PYNĪAID NE PYNBHA ĪA KA MARIANG

Ka Plan Pyniaid ia ka Mariang (EMP) ka thmu ban pynneh pynsah ia ka mariang da kaba pyrkhath ia ki jaka pynduna ia ka jingjaboh ba la shna ha ka jaka tih mawshun. Yn shim katto katne ki kyndon ba kongsan kiba synshar ia ki lad jingiada ia ka mariang.

1.8.1 KA JINGPYNĪAD ĪA KA JINGPYNDONKAM ĪA KA JAKA

Yn shim ia ka plan pynthymmai harum ha kane ka par maw.

- Ha kaba kut jong ka jingim jong u mawshun, ka jaka ba la tih baroh kawei kan long 2.00 Ha.
- 0.05 ha na ka jaka baroh kaba la ai wai ki la don lypa hapoh ka jingthung.
- Baroh yn thung 100 tylli ki dieng ha ka jaka kaba 0.10 ha ha ki san snem ban wan jong ka jingtih mawshun (33% na ka jaka ba la ai wai).
- Nalor kata, yn thung 1.33 ha ka jaka bad 1,330 tylli ki dieng ha ki ben ba shalor jong ka thliw ba la tih bad 0.10 ha. halor ka jaka bret jaboh haduh kaba kut jong ka jingim jong nga. Kumta, ha ka por ba dang pyrkhath ka jaka baroh kaba la tap hapoh ka greenbelt kan long 1.58 ha. ryngkat bad ki 1580 tylli ki dieng.



1.8.2 KA JINGPYNBNA BAD JINGPEIT BNIAH IA KA UM

Katto katne ki lad jingiada ba la shim na ka bynta ban tehlakam ia ka jingjaboh ka um ki long kumne harum::

- Da kaba pynshong nongrim ha ki jingmih na ka jingpeit bniah yn shim ia ki lad pynbeit.
- Ka jingthew ia ka jingkylla ka um ban bishar ia ka jingktah jong ka kam tih maw ia ka jingduna um ha ki jaka ba jan jong ki tyllong um ba la tih bad ki tyllong um ba la tih.
- Yn pynlong ia ka jingpeit bad jingbishar bniah man ka por ia ki nuksa um ha ki jaka ba kongsan ban peit ia ka jinglong ka um.
- Ia ka um jakhlia na iing yn pynpoi sha ki septic tank bad sa ka thliw.

1.8.3 KA PLAN BAN TEHLAKAM IA KA JINGLONG KA LYER

Ka jingbud ia ki kyndon ban tehlakam ia ka jingsniew ka lyer ki long harum:-

- Ka jingsted jong ki kali hap ban peit bniah bad kin leit beit da kajuh.
- Ka jingpeit bniah ia ka jingpynmih tдем ki kali bad ki kot kali ba biang.
- Ka jing iaid ne jingmih ki kali na jaka trei kin long ba baing khnang ba kan yn ym pynthud ia ka leit ka wan ki nongshong shnong.
- Ki kali ba kit ia ki mar dei ban tap da ki trapal.
- Ban yn ym shah ban kit sha ba palat ban lait na ka jinghap sha surok.
- Ban pynbha ia ka surok.
- Ka jingtista ban pynkhuid ka iarap ia ka lyer ban lait na ki pum pum.
- Ka jing pynsynried um sha ka surok khnang ban lait na ka jingsniew jong u surok.
- Ka shna ia ka jingiada na rud surok ban iada ha ba don pum pum.
- Ia u speed breaker yn shna khnang ban tehlakam ia ka jing pynstet kali. Tangba, ka jingmaham ia ka jingpynstet ia ka kali kan sa don.
- Ka jingtista ba peit bniah bad pule bniah ia ka jinglong jingman ka lyer kan long ha man la ki por. Lada ka jinglong jingman ka lyer ka long palat ia kaba dei ban long, kaei kaba donkam ban leh naka bynta ka jingbha dei ban leh.

1.8.4 KA PLAN BAN TEHLAKAM IA KA JINGMIH KA JINGSAWA:

Ki kyndon ban tehlakam ne pynduna ia ka jing mih ka jingsawa ki long harum:-

- Ka jingmih ka jingsawa kan tang ha ki por mynsngi por trei khnang



ban lait na ka jingthud ia kiba don shajan.

- Ka jingpeit bniah ia ka rukom long ki kali ki machine kan long ha man la ki por bad ban kyliang ia kiba dei ban kyliang.
- Ka jing pynbha ia ki kali ka long kaba donkam bad yn ym shah ban kit palat pud.
- La maham iaka jingpynsted kali ha kaba iadei bad u surok bad ki surok shnong.
- Ka jingpeit bniah ia ka rukom mih ka jingsawa kan long ha man la ka por khnang ban lait na ka jingpynthud ha ka jingiadei bad ka jingmih jongka jingsawa.
- Personal Protective Equipments i.e., earmuffs and earplugs ban pynbiang ia ki nongtrei khnang ban lait na ka jingsawa kaba khlain.
- Ka jingpeit na ka jingkoit jingkhiah kan long ha man la ka por na ka bynta ki nong trei ban lait na ka jingshah ktah ha ka jingsawa ba mih.
- Ka jingsawa ba mih por trei kan pyni ha ki kor ki bor khnang ban teh lakam ia ka jingkhlain bor ka jingsawa ba mih ha ka por trei.

1.8.5 KA JINGKOIT KOIT BAD KA JINGSHNGAIN HA KA KAM

- Ban lait jingma ia ka koit ka khiah ki nongtrei na ki pum pum, jingsawa, bad kiwei kiwei de ki lad jingiada dei ban don ha ka jaka trei.
- Ban tista ban peitbniah ia ki tiar ki machine ba pyntrei katkum ka rukom ba ki lah shna ia ki.
- Ban ai ia ki personal protective equipment ia ki nongtrei ha jingtrei.
- Ban pait bniah ia ka koit ka khiah ki nongtrei ha manla ki por.
- Ka jingia pynsngewthuh ia ki nongtrei ka donkam.

1.8.6 KA JINGLONG JINGMAN JONGKA IMLANG SAHLANG

- Ki Sahep kiba dei peit ia ka mariang ki dei ban peit ia jinglong jingman khnang ba kan ym kthah ia ka mariang.
- Kane ka projek ka dang ai kam ai jam ia 21 ngut ki briew. Ki lad kamai kiba kham bun kin sa mih ha ki por ban wan na ka projek.
- La pynbiang/yn pynbiang ia ki lad kamai, ryngkat bad ka jinghikai man ka por ban pynroi ia ki sap treikam kiba kham jied ia ki kyrtong na ka thain.
- Ki camp jingkoit jingkhiah ba man ka por ki dang iaid/yn pynlong.

Project:- "Rikaleng Limestone Mine"	
Applicant:- Smt Kuntimai Tangdhara	Executive Summary

1.8.7 KA PLAN BAN TEHLAKAM IA KA JINGMA IA KI JINGIM BA DON MARJAN:

Ym don jingma ban ktah ne ki jingma ia ki jingim ban mih na ka jaka trei (mining activity). Tangba, ka jingpeit bha bad ka jingthung ia ki dieng kan don khnang ban tehlakam ia ki jingma ia ka mariang bad ki jingim ba don ha ka.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.
