

KA EXECUTIVE SUMMARY

JONG

KA PROPOSAL BAN TIH MAWSHUN

HA

**Wahlathma, Lumshnong, East Jaintia Hills District
Meghalaya**

JINGHEH KA JAKA: 4.58 HEKTAR, KA BAN PYNMIH KUMBA: 2,00,070 MT SHI SNEM

IA KABA LA TYRWA DA

**U Kermiky Dkhar
Thangskai, East Jaintia Hills District,
Meghalaya**

LA PYNBIT PYNBIANG DA

KA ENVIRO INFRA SOLUTIONS PVT. LTD.

(Accredited by NABET (Quality Council of India)

For EIA studies as 'A' Category Consultant

(Sl.No. 53th, List of Accredited Consultant Organizations June2020)

Address: - 301,302 & 305, SRBC, Sec-9, Vasundhara, Ghaziabad, U.P.

Ph.: 0120- 4151183

[Email: eis@enviroinfrasolutions.com](mailto:eis@enviroinfrasolutions.com)

Website: www.enviroinfrasolutions.com

Naitung 2020

KA EXECUTIVE SUMMARY

1.0 KI KTIEN KHMAT

1.1 KA JINGTHMU JONG KA KAIPHOT (REPORT)

Ka jingthmu jong kane ka projek ka long na ka bynta ban tih mawshun ha ka jaka kaba heh kumba 4.58 Hektar ha Wahlothma, Lumshnong, East Jaintia Hills District, Meghalaya. Ia ka lease la ai lyngba ka Letter of Intent No. JH/MMMCR-2016/2016-17/869/B/2126, dated 30/01/2020 sha ka Kermiky Dkhar Lime Stone Mine. Kadei ka rukom tih open cast mining ha kaba shiteng na ka kam yn pyntrei da ki mashin katba shiteng pat yn trei da ki briew. Ia ka proposal na ka bynta ka Terms of Reference (TOR) la aplai ha u bnai Rymphang 2020 bad namar ba ka project ka hap ha ka Mining Lease kaba palat ia ka 5 Hektar, namarkata, ia ka Environmental Impact Assessment (EIA) yn hap leh katkum ka TOR kaba la ai da ka SEAC, lyngba ka EIA notification MoEF&CC, dated 14th September, 2006 na ka bynta ban ioh clearance na ka bynta kane ka kam tih mawshun ha katei ka jaka.

1.2 SHAPHANG KA PROJEK BAD HALOR U NONGTYRWA

1.2.1 Shaphang ka Projek

Ia ka projek **Kermiky Dkhar Lime Stone Mine** yn pyntrei ha ka jaka kaba heh kumba 4.58 Hektar kaba don ha Wahlothma, Lumshnong, East Jaintia Hills District, Meghalaya. Kane ka par ka lah ban pynmih mawshun la kumno kumno kumba 2,00,070 Ton u mawshun ka ka shisnem.

1.2.2 Shaphang u Nongtyrwa ia kane ka Projek

Ka M/s Kermiky Dkhar Lime Stone Mine kadei ka kompeni shimet bad kane ka par ba la tyrwa ban tih mawshun kan shim jaka kumba 4.58 Hektar.

Ka Jaka jong u Nongtyrwa

Trai: M/s Kermiky Dkhar Lime Stone Mine

Ba shong ba sah ha: Thangskai, East Jaintia Hills District, Meghalaya

2.0 KHYNDIAT SHAPHANG KANE KA PROJEK

2.1 Ka Rukom Pyntrei ia ka Projek

La tyrwa ban tih mawshun ha kane ka jaka kaba don kumba 4.58 Hektar ha kaba ia ka kam yn pyntrei mar shiteng da ki mashin bad marshiteng pat yn

trei da ka bormet. Kane ka par mawshun kan lah ban pynmih la kumno kumno kumba 2,00,070 ton u mawshun ha ka shisnem. Katkum ki jnit ki jnat jong ka EIA Notification kiba la pynmih ha ka 15 tarik u Kyllalyngkot, 2016 bad ka 1 tarik u Naitung, 2020, kane projek ka hap ha ka category "B1" namar ia kane ka Projek yn pyntreikam ha ka jaka kaba heh 5 Hektar shaneng.

2.2 Ka Jingheh jong ka Projek

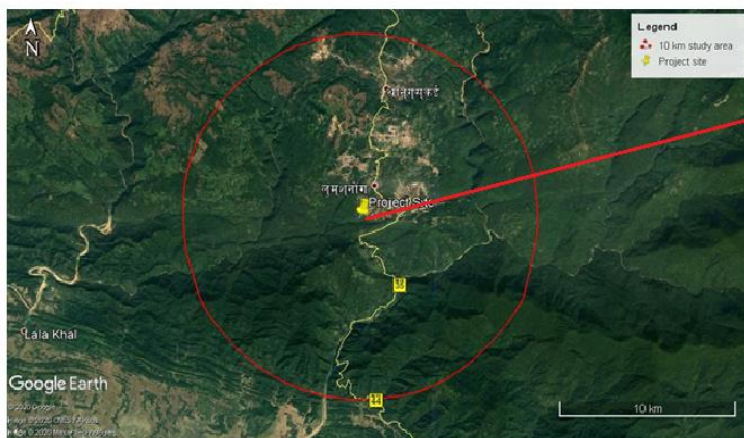
Kane ka kam tih mawshun ha kane ka jaka kan pynmih la kumno kumno 2,00 ,070 ton u mawshun ha ka shisnem . Ka jingdon jong u mawshun ha kane ka jaka ka long kumba 32,00,000 ton bad la kumno kumno lah ban pynmih mawshun kumba 10,00,350 ton hapoh ka San snem. Kaba sah nangta, kata, $32,00,000 - 10,00,350 = 21,99,650$ ton, kan neh kumba 10.99 snem lada ka jingpynmih mawshun ka long 2,00, 070 ton ha ka shisnem.

2.3 Ka Jingjlan bad Jinglut antad jong ka Projek.

La antad ba kane ka projek kan neh kumba 16 snem bad ka jinglut kyllum lang kan long kumba 23 lak tyngka.

2.4 Ka Jaka ban pyntrei ia ka Projek

Kane ka jaka ha kaba yn tih mawshun ka hap hapoh ka shnong Wahlaithma, Lumshnong, East Jaintia Hills District. Iaka map jong ka jaka tih mawshun la pyni hangne harum:



Pillar	Latitude	Longitude	Pillar	Latitude	Longitude
1.	25°09'50.3"N	92°22'02.2"E	18.	25°09'39.7"N	92°21'58.0"E
2.	25°09'49.7"N	92°22'01.8"E	19.	25°09'39.6"N	92°21'56.5"E
3.	25°09'49.5"N	92°22'01.7"E	20.	25°09'39.7"N	92°21'56.5"E
4.	25°09'49.3"N	92°22'01.6"E	21.	25°09'40.1"N	92°21'54.6"E
5.	25°09'48.7"N	92°22'01.4"E	22.	25°09'41.0"N	92°21'54.5"E
6.	25°09'48.3"N	92°22'01.3"E	23.	25°09'41.7"N	92°21'52.3"E
7.	25°09'47.8"N	92°22'01.4"E	24.	25°09'43.3"N	92°21'52.5"E
8.	25°09'45.9"N	92°22'00.7"E	25.	25°09'48.1"N	92°21'54.6"E
9.	25°09'45.1"N	92°21'59.8"E	26.	25°09'46.0"N	92°21'56.4"E
10.	25°09'44.8"N	92°21'59.7"E	27.	25°09'46.9"N	92°21'57.2"E
11.	25°09'44.6"N	92°21'59.3"E	28.	25°09'48.6"N	92°21'57.2"E
12.	25°09'44.3"N	92°21'58.7"E	29.	25°09'49.3"N	92°21'57.4"E
13.	25°09'43.0"N	92°21'58.7"E	30.	25°09'50.1"N	92°21'57.0"E
14.	25°09'42.6"N	92°21'59.5"E	31.	25°09'50.43"N	92°21'57.19"E
15.	25°09'42.4"N	92°21'59.6"E	32.	25°09'50.4"N	92°21'58.1"E
16.	25°09'42.2"N	92°21'59.7"E	33.	25°09'50.7"N	92°22'00.0"E
17.	25°09'41.8"N	92°21'59.2"E			

2.5 KI JNIT KI JNAT JONG KANE KA PROJEK

2.5.1 Katto katne ki bynta jong ka 'Mining Lease'.

Ka **Table 1** ka kdew shaphang ki katto katne ki bynta jong ka 'Mining Lease':

Table 1: Katto katne ki bynta jong ka Mining Lease

Sl. No.	Jingkdew	Jingbatai
1.	Ka kyrteng jong ka Par	Ka jingtyrwa ban tih mawshun ha shnong Wahlathma, Lumshnong, East Jaintia Hills District, Meghalaya.
2.	Ka jingpynmih mawshun	Kumba 2,00,070 ton ha ka shisnem
3.	Longitude bad Latitude	25°09'39.6"N haduh 25°09'50.7"N bad 92° 21' 52.3"E haduh 92° 22' 02.2"E.
4.	Ka rukom pyntrei ia kane ka Projek	Opencast semi mechanized method ha kaba shiteng na ka kam yn pyntrei da ki mashin, katba shiteng pat da ka bormet.
5.	Ka Jingheh jong ka Par	4.58 Hektar
6.	Ka Jingpyntrei ia ki mashin	Shiteng na ka Projek yn pyntrei da ki mashin, katba shiteng pat yn trei da ka bormet.
7.	Ka Jingjylliew bad Kynian jong ki thliew tih mawshun (Bench Height & Width)	6m
8.	Ka Jingsharing jong ki thliew tih mawshun (Bench Slope)	85°
9.	Ka rukom kit ia u mawshun	Yn pyndonkam da ki trok bad tipper
10.	Ki Nongtrei	Kumba 45 ngut
11.	Ka jingdonkam um	Kumba 5 Kilo Litar Shisngi
12.	Nangno yn ring um	Da kaba shu drill/Na ki wah ne wahduid
13.	Ka Jingthungdieng (Hadien 5 Snem)	Ha ka jingheh ka jaka kumba 0.20 Hektar
14.	Ki tynrai dieng ban thung ha ki San snem	Kumba 200 tynrai

2.5.2 Ka Jingsain bad Jingpynmih Mawshun

Ha kane ka Projek, yn tih ia u mawshun da kaba pyndonkam ia ka 'open cast mining with semi mechanization, ha kaba mar shiteng na ka kam yn pyntrei da ki mashin, katba mar shiteng pat yn trei da kabormet. Ka jingjylliew bad kynian jong kawei kawei ka thliew tih mawshun (Bench Height & Width) ka long 6 metre. Yn shna lynti ia id shaduh ki 'bench' katkum ka jingdawa jong ka kam. Ia ka 'blasting' yn leh ha ki thliew ba jyndong ne ba jylliew katkum ka jingai jingbitjong u DGMS. Yn pyndonkam da ki 'pneumatic breaker' bad 'hydraulic breaker' ban tih mawshun. Ban iada na ka jingliat bakla ki briew ne ki mrad ki mreng ha ki thliew, yn ker sawdong ia ka jaka tih mawshun. Ia ka khyndew kaba mih na ka jingtih thliew yn pynlang shi jaka na ka bynta ban ioh pyndonkam ha kaba thung dieng ynda dei ka aiom thung.

Ia ka jinglah ban pynmih mawshun shi snem shi snem la ai ha ka **Table 2** harum:

Table 2: Jingpynmih mawshun

Snem	Jingpynmih mawshun (Ton)
Snem ba Nyngkong	200070
Snem ba Ar	200070
Snem ba Lai	200070
Snem ba Saw	200070
Snem ba San	200070
Kyllum lang	1000350

2.5.3 Ka Rukom Tih Mawshun

Yn tih ia u mawshun da kaba pyndonkam ia ka 'open cast' mining with semi mechanization, ha kaba mar shiteng na ka kam yn pyntrei da ki mashin, katba mar shiteng pat yn trei da ka bor met. Ka jingjylliew bad kynian jong kawei kawei ka thliew tih mawshun (Bench Height & Width) ka long 6 metre. Yn shna lynti ia id shaduh ki bench kat kum ka jingdawa jong ka kam. Ia ka 'blasting' yn leh ha ki thliew ba jyndong ne ba jylliew katkum ka jingai jingbitjong u DGMS. Yn pyndonkam da ki 'pneumatic breaker' bad 'hydraulic breaker' ban tih mawshun. Ban iada na ka jingliat bakla ki briew ne ki mrad ki mreng ha ki thliew, yn ker sawdong ia ka jaka tih mawshun. Ia ka khyndew kaba mih na ka jingtih thliew yn pynlang shi jaka na ka bynta ban ioh pyndonkam ha kaba thung dieng ynda dei ka aiom thung.

2.5.4 Ka Jingktah ia ki sawdong sawkun, ka Jingthmu ban pynbha pat iaka jaka ba lah dep tih mawshun bad ka Jingthmu ban thung dieng

Ka Jingktah ia ka khyndew na ka daw jong ka jingtih mawshun bad ka jingpynbha pat ia ka

Kano kano ka jingtih ia ki mar pohkhyndew ka ktah ia ka mariang sawdong. Namar ba ha kane ka projek yn pyntreikam lyngba ka ‘open cast mining’, kan don ka jingktah ia ka mariang sawdong katei ka jaka. Namarkata, ha ryngkat ka jingiatreilang bad ki bor pyniaid District bad ki Dorbar Shnong, yn pynlong ia ka jingthungdieng ha katei ka jaka.

Katei ka jaka ha kaba yn tih ia u mawshun kam dei ka jaka kaba don khlaw. Ka jingktah kan long ha ka jaka ba long lum ka ban shah ktah na ka daw jong ka ‘open cast mining’. Ha ki san snem jong ka jingtih mawshun, kumba 2.30 hektar yn tih na ka bynta ban khlung mawshun.

Ka Jingtyrwa ban pynbha biang ia ka jaka ba shah ktah na ka jingtih mawshun:

Ia ka jingtih mawshun yn sdang na ka jaka ba kham lum bad sa hiar pat sha ki jaka ba kham madan. Ha lynter ki pud jong ka jaka tih mawshun, yn thung ia ki dieng kiba ia hap bad katei ka jaka. Yn thung dieng ruh ha sawdong ki wah/um, ki surok bad kumta terter katkum ka jingaijingmut u DFO lane ka tnat ka rep ka riang. Yn thung kumba 100 tynrai ki dieng ha ka jaka kaba don kumba 0.10 hektar bad yn leh kumta ha ki rud jong ka jaka ba lah dep tih mawshun.

2.5.5 Ka Rukom pyndonkam ia katei ka jaka haduh mynta

Ia mynta, kane ka jaka kam dei ka jaka kaba don ia ki khlaw ki btap.

3.0 KA JINGLONG KA KHYNDEW, KA LYER, KA UM BAD KUMTA TERTER

3.1 Ka Jinglong ka Khyndew

La ioh ban shim nongmuna ia ka khyndew na ki san jaka kiba don sawdong katei ka par ban wad bniah halor ka jait khyndew kaba don ha katei ka jaka. Ka pH jong ka khyndew ka iarap ban batai shaphang ka jingdon jong ki ‘nutrients’ hapoh jong ka. La lap lyngba ka jingthew pH ba ka khyndew ha katei ka jaka ka long ‘acididic’ malu mala (5.78 haduh 6.47) .Ka ‘electrical conductivity’ ha katei ka jaka la lap ba ka long hapdeng 349 haduh 418 $\mu\text{mhos/cm}$.

3.2 Ka ‘Meteorology’

Ia ki “Metereological Data” ha katei ka jaka la ioh ban peit thuh naduh ka 1

tarik u Nongprah, 2019 haduh ka 29 tarik u Rymphang, 2020 kaba dei ka por tlang.

3.3 Ka Jinglong ka Lyer (Ambient Air Quality)

Ia ka 'Ambient Air Quality Monitoring' (AAQM) la ioh ban peiththuh ha ki san jaka ha ka por tlang, kata, naduh u bnai Nohprah jong u snem 2019 haduh u bnai Rymphang jong u snem 2020. Ka level jong ka PM10 ba la lap ha katei ka jaka ka long hapteng 51.2 $\mu\text{g}/\text{m}^3$ bad 82.8 $\mu\text{g}/\text{m}^3$ ha kaba ka percentile ba 98 ka long hapteng 73.6 $\mu\text{g}/\text{m}^3$ haduh 80.3 $\mu\text{g}/\text{m}^3$. Ka jingdon jong u PM2.5 ha ka jaka ba la wad bniah ka long hapteng 17.3 $\mu\text{g}/\text{m}^3$ bad 34.5 $\mu\text{g}/\text{m}^3$ ha kaba ka percentile ba 98 ka long hapteng 25.3 $\mu\text{g}/\text{m}^3$ bad 33.4 $\mu\text{g}/\text{m}^3$. Ka jingdon jong ka SO2 ha katei ka jaka ka long hapteng 5.9 bad 12.2 $\mu\text{g}/\text{m}^3$ ha kaba ka percentile ba 98 ka long hapteng 6.5 $\mu\text{g}/\text{m}^3$ bad 11.3 $\mu\text{g}/\text{m}^3$. Ka jingdon jong ka NO2 ka long hapteng 9.7 $\mu\text{g}/\text{m}^3$ bad 20.4 $\mu\text{g}/\text{m}^3$ ha kaba ka percentile ba 98 ka long hapteng 12.8 $\mu\text{g}/\text{m}^3$ bad 19.2 $\mu\text{g}/\text{m}^3$. Ka jingdon jong ka CO pat ka long hapteng 0.260 mg/m³ bad 0.840 mg/m³ ha kaba ka percentile ba 98 ka don hapteng 0.280 $\mu\text{g}/\text{m}^3$ bad 0.780 $\mu\text{g}/\text{m}^3$.

La iohi lyngba ki resol ba ka jingthaw jong ka PM10, PM 2.5, SO2 bad NO2 ha katei ka jaka ka dang long kat kum ki standard jong ka National Ambient Air Quality (NAAQ) na ka bynta ki jaka ba don karkhana, jaka sahbriew bad kiba kum kita ki jaka.

3.4 Ka Jinglong jong ka Um

Ban tip ia ka jinglong jong ka um ha katei ka jaka la ioh ban shim nongmuna na san tylli ki tyllong um jong katei ka thain. La lap ba ka um hapoh khyndew ka don ia ka pH level kaba hapteng 6.93 haduh 7.94, ki 'dissolved solids' pat ki don hapteng 207.8 mg/l bad 244.82 mg/l, u 'chloride' pat u don hapteng 46.3 mg/l bad 52.7 mg/l, ka jingkhaw (hardness) jong ka um ka don hapteng 146.88 mg/l bad 126.42 mg/l.

Ki resol ba la lap ki kdew ba ka um ha ramew jong katei ka jaka (ground water) ka long kaba biang ban dih ban bam namar ka long kat kum ki 'standard' (IS: 10500) bad ka um ha ryngkew (surface water) pat ka long kat kum ki IS Standard-2296.

3.5 Ka Jingjam Jingsawa (Noise Levels)

Ban tip ia ka Jingjam Jingsawa (Noise Levels), la ioh ban thew ha san tylli ki jaka kiba don markhap bad katei ka jaka ha kaba yn tih mawshun. Ka jingjam jingsawa haba por mynsngi ka long hapteng 37.8 dB(A) bad 43.9 dB(A) katba ha ka por mynmied ka long hapteng 37.8 dB(A) to 43.9 dB(A). Ka jingjam

jingsawa (Noise Quality) ha 10 Km sawdong jong katei ka jaka ka long katkum ki 'standard jong ka tnat pynneh mariang (MoEF&CC) jong ka Sorkar Kmie.

3.6 Ka Spah mariang ha katei ka jaka

Da kaba pynshong nongrim na ki jingwad bniah bad ka jingiitbniah ia ki jingthoh ba la pynmih ha shwa, la lap ba kane ka jaka ka don kumba 2.49 Km na ka Narpuh Wildlife Sanctuary bad namarkata, ym donkam ia ka 'clearance'na ka National Board for Wild Life (NBWL).

3.7 Ka Jingdon briew

Katkum ka khana Samari jong u snem 2011, ka East Jaintia Hills District ka don ia ka jingpunpaid kaba 3,95,124 ngut na kiba ka jingdon jong ki Scheduled Caste (SC) ka long 1317 (0.33 %)ngut katba 3,76, 099 ngut (95.19 %) pat kidei ki Scheduled Tribe (ST). Ka jingdon jong kiba la nang thoh nang pule hapoh ka District ka long 1,87,527 ngut, na kiba 1,00,156 ngut ki dei ki kynthei bad 87,371 ngut pat ki dei ki shynrang.

4.0KA JINGKTAH IA KA MARIANG

4.1 Ka Jingktah ia ka jinglong ka Lyer

Haba don kano kano ka kam tih ia kino kino ki marpoh khyndew, la lap ba u PM₁₀ bad u PM_{2.5} ki ju wanrah ia ka jingpynjaboh ia ka lyer jong ka jaka ha kaba la tih ia ki marpoh khyndew. Ha kane ka projek, yn pyndonkam da ki mashin kiba bha bad kiba ia id da ka diesel bad ki kali kiba don ia ka syrnod pollution (PUC certificate) khnang ban pynduna ia ka jingmih jong ka Sulphur Dioxide (SO₂) bad ka Nitrogen Oxide (NO₂). Ki puipui bad ki pumpum ki long sa kiwei pat ki ban pynjaboh haba don kano kano ka jingtih marpohkhyndew bad ban tehlakam ia kane yn pyndonkam da ki mashin synreit um (water sprinkler)khngang ba ki puipui bad pumpum kin ym her mata madei. Lyngba ka jingpyndonkam ia ki mashin synreit yn lah ban pynduna kumba 70% - 80% ki puipui bad pumpum. Yn lah ban sngewthuh ia ka jingpynjulong ia ka lyer lyngba ka jingkiew jong ka jingdon u PM₁₀ bad u PM_{2.5} ha ka jaka ba la tyrwa ban tih mawshun bad kumjuh ha ki jaka kiba don kumba 10 Km sawdong jong ka.

Sa kiwei pat ki rukom kiba ki lah ban pynjaboh ia ka lyer ha ka jaka tih mawshun ki long:

- i. Ha ka por ba thep bad pynhiar ia u mawshun.
- ii. Ha ka por ba pynkit ia u mawshun.

4.2 Ka Jingktah ia ki Tyllong um:

Ki Wah bad ki Um

Ha ka por ba pyntrei ia kane ka projek, kan don ka jingiakhleh jong ka khyndew ba la tih bad ka umslap, namarkata, yn shna ia ki kynroh ha ki jaka ba don ki thliw tih mawshun (hadien ba lah dep tih) ia kiba la pyndap khyndew bad kumjuh ha kiwei pat ki jaka theh khyndew. Da kaba leh kumta, kan ym da don than kano kano ka jingkylla jong ka mariang sawdong jong katei ka jaka.

Ki Um hapoh Ramew

Ka 'water table' ha ki jaka ba long lum bad sharing ka ju long kaba jylliew bha, namarkata, ka jingtih marpoh khyndew ha kiba kum kita ki jaka lum kam da don jingktah than. Ka jingpyrshang ban pynbha bad kyntiew ia ka mariang kan pynthikna ba ia ka jingjulor, lada don, yn lah ban pynduna.

4.3 Ka Jingktah ia ki Umbam umdih

Ki ban ktah ia ki umbam umdih kin dei tang ki jaboh ba lang (suspended solids) na ka daw jong ka jingkhieh jong ka um ha ka por slap bad ban pynduna ia kane, yn shna ia ki kynroh ha ki jaka madan (toe wall) ki ban pakhang ia ka jingtuid jong kine ki jaboh ha ka por slap.

4.4 Ka Jingjam jingsawa bad Jingkhieh ka khyndew

Ynda la sdang ka projek, namar ka jingpyndonkam ia ki mashin ha kaba tih, sain bad kit mawshun kan don ka jingkiew ha ka jingjam jingsawa (Noise Level). Ha ka por mynsngi ka jingjam jingsawa kan long hapdeng 50.8 dB(A) bad 63.1 dB(A) bad ha ka por mynmied pat kan long hapdeng 37.8 dB(A) bad 43.9 dB(A). La shem ba kane ka jingkiew ha ka jingjam jingsawa kan ym da don jingktah than.

4.5 Ka Jingktah ia ka Khyndew

Ka jingktah jong ki kam khlong marpohkhyndew ia ka khyndew ka shong ha ka jingtih ia ka sla khyndew (top soil), hynrei ha kane ka projek, namar ba ia ka khyndew ban tih yn pynlang shi jaka na ka bynta ban pyndonkam ha kaba thung dieng, kan ym da don than ka jingpynjot pynjulor ia ka khyndew, la ka long ha sla lane shapoh jongka.

La antad ba kan ym da don kano kano ka ka jingsyntuid jong ka khyndew ha ki jaka ba markhap jong ka par, namar la pynkhreh lypa ia ki lad ban teh lakam ia kane kumba la kdew ha ka plan iada mariang (EMP).

4.6 Ki Jingthung jingtep bad ki Mrad ki mreng

La shem ba ym don kino kino ki jaka khlaw ha ka jaka pdeng jong kane ka projek, namarkata, kan ym don than kano kano ka jingktah ia ki jingthung bad ki syntiew ki skud kiba don markhap (buffer zone) bad katei ka par.

Na kadaw jong ka jingpynkhreh ia ki lad iada kumba la kdew shai ha ka plan iada mariang (EMP), kan ym da don than ka jingktah ia ki jingthaw ba im bad ia ki khlaw ba iakhap bad katei ka par mawshun.

Kumjuh, kan ym don than ka jingktah ia ki mrad ki mreng bad ki sim ki doh kiba don ha ki jaka ba markhap (buffer zone) jong ka par namar, ka jingiaithung ia ki dieng kan iarap ban pynduna ia ka jingjulong (lada don) jong ki mrad ki mreng bad ki sim ki doh ha katei ka jaka.

4.7 Ka Jingktah ia ka Jaka sawdong

Kano kano ka jaka kan shah ktah haba don kano kano ka jingtih ia ki mar pohkhyndew. La tyrwa ban don da ka Land Planning ka ban pynduna ia ka jingpynjulong jong ka kam tih mar poh khyndew ia ka mei mariang. Kane kan iarap ban kyntiew ia ki sawdong sawkun lyngba ka jingshna ia ki panpoh jyrngam (green belt) ha ki pud jong ka projek bad ki jaka ba marjan.

4.8 Ka Jingktah ia ki Nongshongshnong

Kane ka jaka kam dei ka jaka sah briew ha kaba ym don kino kino ki jingtei bad namarkata kan ym don kano kano ka jingphet shnong ne ka jingpynkynriah ia ki nongshongshnong.

Kane ka projek tih mawshun kan kyntiew ia ka ioh ka kot ha katei ka thain namar, ha kaba iadei bad ka thungkam thungjam, yn kham pyrkhat ia ki trai shnong bad da kumta kan kyntiew ia ka ioh ka kot jong ki.

5.0 KA PLAN IADA MARIANG (ENVIRONMENTAL MANAGEMENT PLAN)

Ka Table 3 ka pyni ia ka Plan ia da Mariang (EMP) ha katei ka jaka:

Table 3: Ka Plan iada Mariang

Ka jingjutor antad	Ki sienjam ba lah ban shim
Ka jingktah ia ka iaid ka ieng jong ki mrad ki mreng bad ki sim ki doh.	• Yn ai jinghikai ia ki nongtrei shaphang ka jingkordor jong ki khlaw ki btap bad ki jingthaw baroh hangta. • Yn ym thaw lynti thymmai na ka bynta ban iaid ki kali ne ki briew khnang ban pakhang ia ka jingpynjutor jong ki khlaw, ki mrad ki mreng bad ki jingthung jingtep. • Yn phikir bad yn pynthikna ba ka jingsawa (noise level) kaba mih na ki kali kiba kit maw kan long katkum ka level ba la shah. Ka jingsawa kaba jam kan ktah ia ki jingthaw ha ki khlaw ki btap kum ki mrad ki mreng bad khamtam haba ki donkam ban khot ia la ki paralok jong ki ne ki khun mrad jong ki. • Yn pynthikna ba kan ym don kano kano ka jingbehmrad da ki nongtrei nongbylla. • Lada don ki khep ba ki mrad ki iaid lyngba ka jaka pdeng (core zone) jong kane ka projek, yn ym pynwit ne pynthut ia ki. • Yn ym shah ia ki nongtrei ba kin ne bret pathar ia ki jingbam ne ki tiar plastic, namar kane kan khring ia ki mrad ki mreng ne ki sim ki doh ban wan sha ka jaka tih mawshun. • Tang ki kali kiba duna tдем ki lah ban kit ia ki maw bad mawshun. Baroh ki kali kiba rung ha jaka tih mawshun ki dei ban pynbiang ia ka Pollution Under Control Certificate (PUC) bad ia kane ka certificate kin hap pynthymmai man ka lai bnai. • Yn ym shah ban pynpah horn ha ki jaka khlaw bad ka jingsawa (noise level) kan long katkum ki pud ba la shah, kata 50 dB ha ka por mynsngi ha ki 'silent zone'.
Ka jingiada ia ki jingthung jingtep bad ki dieng ki siej.	• Yn ym shah ban ot ne shtah dieng ne phut bad jynrat ia ki kynbat ne kino kino ki jingthung. • Ia ki maw ne mawshun yn ym pynlang ha ki jaka ka 'Reserve Forest'. • Yn khang pyrshah ia ka jingpynkhyllan ne pynjutor ia ki dieng ne jingthung kiba rem dor kiba don ha katei ka jaka.

6.0 KIWEI DE KI JAKA TIH MAWSHUN

Ia u mawshun ha kane ka jaka la lap lyngba ka jingwad bniah da ki rukom wad bniah ka saians Geology, bad namarkata ym shym la wad jaka shawei pat. Ia ka par mawshun yn pyntreikam da ka rukum tih 'open cast' ka ban kynthup ia ka jingtreikam jong ki mashin bad kumjuh ruh da ka bor met (semi-mechanized method of mining).

7.0 KA JINGLUT ANTAD

Ia ka mang tyngka ba 5 (san) snem na ka bynta ban pyntreikam ia ka Plan Iada Mariang (EMP) bad kumjuh ka mangtyngka na ka bynta ka 'Corporate Environmental Responsibility' (CER) la bhah kat kum ki Table 4 bad Table 5 harum:

Table 4: Ka Mangtyngka na ka bynta ka Plan Iada Mariang (EMP)

Sl.	Ki Sienjam	Jinglut (Lak Tyngka)
1.	Ban pynduna ia ka jingjaboh ka lyer (Yn pyndonkam ia ki mashin synreit um ban ym sakma ki pumpum bad puipui)	1.50
2.	Ka jingthung dieng bad ka jingsumar iaki.	0.30
3.	Ka jingpyrman ia ka Mei mariang (Ka lyer, ka um, ka jingsawa bad ka khyndew)	0.15
4.	Ka jingshna bad ka jingmaramot ia ki Settling Tank, Garland Drain bad kiwei	0.75
5.	Ki tiar iada (Personal Protective Equipment kum ki Helmet, Juti ba kyrpang, ki Mask iada pumpum, ki jingdeng shkor bad kumta terter)	0.49
6.	Ka jingker sawdong ka jaka tih mawshun	0.10
7.	Ki kam lehbha (CSR) ha ki shnong ba marjan	1.15
8.	Ki kam CER kumba la bthah da ka SEAC	0.46
Kyllum lang		4.9

Table 5: Ka Mangtyngka na ka bynta ka Corporate Environmental Responsibility (CER) (Na ka bynta shi snem)

Sl. No.	Activities	Ka Bhah ba la mang
1	Ki Health Camp	13,000
2	Ka Jingpynbiang ia ka umbam umdih	8,000
3	Jingpynbha ia ka 'foot track'	15,000
4	U Synniang na ka bynta ban shna lingmane	5,000
5	U Synniang na ka bynta ki kam kyntiew kolshor ha ki jaka ba markhap	5,000
Kyllum lang		46,000

8.0 KIWEI DE KI JINGWAD BNIAH

8.1 Halor ka Plan ban iada ia ki jingjia aksiden (Risk Assessment and Disaster Management Plan)

Ia baroh kawei ka projek tih mawshun yn peit bad pyniaid da u Nongpyniaid Par (Mine Manager) u ba lah dep pyntbit ha ka kam tih mar poh khyndew bad uba la ioh ia ka syrnod 'Mines Manager Certificate of Competency'. Nangta yn phah ruh ia ki staff ban leit shah hikai na ka por sha ka por khnang ba kin kham tip bad kham tbit shuh shuh ha ka kam.

8.2 Ka Disaster Management Plan

Ka jingtip bad jinglong la khreh na ka bynta kino kino ki jingjia ba sngewsih kiba wanjia kyndit kynsan ka long kaba donkam bha ha ka ban pynkhreh ia ka Disaster Management Plan. Yn ai jinghikai ia ki nongtrei baroh halor kane ka bynta khnang ba kin long kiba husiar khnang ba kin lait na kino kino ki jingjia ba sngewsih.

9.0 KA JINGTWAD JINGMUT PAIDBAH

9.1 Ka Public Hearing

Kum shibynta ban bud ia ki jingbthah jong ka Notification EIA kaba ha ka 14 tarik u Nailar, 2006 katkum ka section 1 (a) kaba iadei bad ka Public Hearing, ia kane ka Kaiphot (Report) yn submit sha ka Meghalaya State Pollution Control Board (MSPCB) khnang ba yn ioh pynlong ia ka Public Hearing.

10.0 KI JINGMYNTOI NA KANE KA PROJEK

Hadien ka jingsdang jong kane ka projek, yn pynbiang ia ki jingdonkam 'First Aid' ha ka jaka tih mawshun bad ia kiba kum kine kijuh ki jingpynbeit yn pynioh ruh ha ki paidbah jong ki shnong ba marjan haba don kano kano ka jingdonkam ba kyrkieh.

- Ka jingiohkam iohjam bad ka jingkyntiew ia ka ioh ka kot;
- Ka jingmyntoi ia ka sorkar lyngba ka jingsiew 'royalty' halor u mawshun bad kiwei de ki khajna;
- Ki leit ka wan kaba kham biang;
- Ka jingaikam ia ki trai shnong kan dang kyntiew shuh shuh ia ka ioh ka kot jongki.

11.0 KI JINGKYNTHOH

Ka jingtih mawshun ha kane ka jaka kan long kat kum ki kyndon jong ka tnat iada mariang ka Sorkar Kmie (MoEF&CC).

Kane ka projek kan kyntiew ia ka ioh ka kot jong ki nongshongshnong ka thain;

- Ka jingbud pyrkhing ia ka Teknoloji kaba biang tam bad ki rukom ki bym pynjulor ia ka mariang; bad
- Lyngba ka jingpyntreikam pura ia ka Plan Iada Mariang (Environment Management Plan) kumba la kdew shai haneng, ka mei mariang kan ym da julor than na kane ka kam tih mawshun.