

## JINGBATAI LYNGKOT

### 1.0 JINGLAMPHRANG

Ka Meghalaya Cements Limited (Kharkhana Dewbilad) ka thmu ban tih ia ka par Mawshun kba don ha Moiong, Thlusniang (Ka jingheh ka long kumba - 26.50 ha) (ML Area) ka jingpynmih ia u Mawshun ka long kumba 1.007 Million (TPA) ha ka shisnem kane ka par mawshun ka don ha ka Shnong - Chiehruphi, Khliehriat, District - East Jaintia Hills, Meghalaya.

Kat kum ka ioh jingtib na ka EIA ha ka 14 tarik u Nailur, 2006, kumba la pynkylla na ka por sha ka por; kane ka project kaba hap hapoh ka kyrdan “B1” S. No. ‘1’ (Ka jingtih ia u Mar poh Khyndew), ka projek ne ka kam ‘1(a) -(4)’.

### 1.1 JINGPYNSHISHA IA KA PROJECT

- Ka Meghalaya Cement Limited (MCL) ka dei trai bad ka pyniaid ia ka lain pynmih dewbilad ka pynmih kumba 2600 TPD ha ka shisngi ia u klinker ryngkat bad u Dewbilad ka don ha kaba Shnong Thangska, Meghalaya. Ia ka jingshna ia ka Meghalaya Cement ka la sdang ha u snem 2004. Ha u snem 2006, la pynmih nyngkong eh ia u Klinker bad Cement. Ha kaba sdang, la shna ia ka Kharkhana Dewbilad ban pynmih tang kumba 900 TPD ha ka shisngi ia u Clinker rynkat bad Cement. Ban kham pynmih kham bun u dewbilad, ka MCL ka la sdang ban pynheh ia kane ka projek ha u snem 2009 bad la pyndep ha u snem 2010. Hadien ka jingpynheh ia kane ka project ka jingpynmih ia u clinker ka la poi na ka 900 TPD ha ka shisngi sha ka 2600 TPD. Kumba long mynta kane ka Kharkhana ka lah ban pynmih kumba 2600 TPD ha ka shisngi bad ka dang iai bteng haduh mynta.
- Kumba long mynta, ka jingdonkam ia u mawshun ha kane ka kharkhana la lah ban pyndap na ki parmau jong ka, kata ka Moiong Block -1 limestone mine (4.80 ha) bad South Khliehjari Limestone Mine (31.05 ha).
- Ia ka jingthmu ban pynheh ha ka Kharkhana Dewbilad na ka 2600 ha ka shisngi (TPD) sha ka 4500 (TPD) la pyntip sha ka MoEFCC, New Delhi lyngba ka shithi vide letter No. IA/ML/IND1/453620/2023 ha ka tarik 15.01.2024. Ka Environment Clearance kaba peit ia ka jinglong ka Mariang ka la ai ia ka jingbit na ka bynta kane ka jingthmu katkum ka shithi vide letter no. IA-J-11011/275/2022-IA-II (IND-1) tarik 08.05.2024.
- Ban pyndap ia ka jingdonkam mawshun (Shale) jong katei ka Kharkhana Dewbilad ba la kdew haneng, ka kompeni ka la tyrwa ban tih ia ka par mawshun (Shale) kaba don ha Moiong Thlusniang (Jingheh – 26.50 hektar) ka jinglah ban pynmih mawshun (Shale) kan long kumba 1.007 Million TPA ha ka shisnem ha ka shnong Chiehruphi, Khliehriat, District- East Jaintia Hills, Meghalaya.
- U nongkyrshan ban pyntreikam ia ka jingtyrwa ha ka rukom kaba iadei bad ka mariang un don ka jingkitkhlieh ha ka liang ka mariang ne imlang sahlang.
- Ym don jaka jngoh kai pyrthei kiba don ki tiar ialahkai pynbyrngia (National Park), Jaka ri jingri (Biosphere Reserve), Ka lynti iaid kjat jong ki mrad, ba la buh kyrapang ba la buh kyrapang kum ki Khla / Hati bad kiwei kiwei de (Wildlife Corridors, Tiger/Elephant Reserves etc.) kaba hap hapoh

ka jingjingai kaba 10 km kat kum ka jingthew da u radius na ka jaka tih Mawshun. Hynreia ka Narpuh Wildlife Sanctuary ka don ha (7.27 km in SSE direction).

- Ka projek kaba ba la thmu kan pynmih ia ki lad kamai kajih bad ki lad ioh kam ioh jam hapoh kane ka parmaleshun. Bad kan long ka jingmyntoi ia ki trai shnong trai thaw bad kata kan long kat kum ka rukom pule bapher bapher ne jingnang jingstad jong ki.

## 1.2 JINGTIP BA BNIAH SHAPHANG KA PROJEK

### Miej -1

#### Ka Jingbatai bniah ia ka Project

S. No.	Jingkdew	Jingbatai bniah
A.	<b>Ka jinglong jong ka Project</b>	Jingthmu ban tih ia ka par Mawshun da kaba sam thliew shapoh
B.	<b>Ka jingheh jong ka Project</b>	
1.	Jingheh ka jaka	26.50 ha (Ka jaka ki riew shimet)
2.	Jingthmu (Proposal)	Ka jingpynmih ia u Mawshun kan long 1.007 Million ha ka shisnem (TPA)
C	<b>Ka Shnong ha kaba kane ka Project ka don</b>	
1.	Shnong	Chiehruphi
2.	Tehsil	Khliehriat
3.	District	East Jaintia Hills
4.	State	Meghalaya
5.	Ka jingjingai (Latitude) & Ka jingjrong (Longitude)	Jingjingai (Latitude): 25° 12' 08.7999" N to 25° 12' 43.80" N Jingjrong (Longitude): 92° 23' 19.3283"E to 92°23' 44.7525" E
6.	Toposheet No.	G46O8_83 C8
D	<b>Ka jingiitbniah ia ka jinglong jingman ka mariang sawdong sawkun</b> (kumba ka jingjingai na suin na u pud u sam jong ka ML bad ka jingpyniaid na ka pdeng jong ka jaka ML)	
1.	Ka Shnong ba hajan tam	Chiehruphi (1.5 km in WNW in direction)
2.	Ka Skul ba hajan tam	➤ Chiehruphi Secondary School (1.5 km in NNW in direction) ➤ Govt. LP school Chiehruphi (1.5 km in WNW in direction)
3.	Ka Surok ba hajan tam	NH -06 (1.2 km in South-West direction)
4.	Ka lain rel ba hajan tam (Railway Station)	Karimganj Railway Station (38.0 km in South direction)
5.	Ka Liengsuin ba hajan tam (Airport Station)	Silchar Airport, (57.0 Km in SSE direction)
6.	Ki Sor ba hajan (Nearest City/ Town)	Khliehriat (16.5 km in North direction)
7.	Ka jaka ri mrad/ khlaw Jaka ri mrad kiba don hapoh ka 10 km kat kum ka jing peit bniah (Wild Life Sanctuary, National Park, Biosphere Reserves within 10 km radius study area)	Narpuh Wildlife Sanctuary (7.27 km SSE direction)
8.	Jaka khlaw/ Ia da ia ka Khlaw hapoh ka 10 radius (Reserve Forests (RF) /	Ym don (None)

Ka jingthmu ban khlong ia u Mar Poh Khyndew (ML) ka Par Mawshun kaba tip kum ka Moiong, Thlusniang, Ka jingheh ka jaka ka long kumba 26.50 Hektar ka ban pynmih mawshun 1.007 Million ha ka shisnem (TPA) kaba don ha ka Shnong Chiehruphi, District East Jaintia Hills, Khliehriat, Meghalaya.

**Ka Jingbatai Lyngkot shaphang ka EIA/EMP Report**

S. No.	Jingkdew	Jingbatai bniah
	Protected Forest(PF) within 10 km radius study area	
9.	Ki Wah ki ba don hapoh ka 10 km kat kum ka jingthew da u radius ha ka por pule bniah ia kane ka jaka	<ul style="list-style-type: none"> <li>➤ Wah Lubha (Lubha River) (3.0 km in ENE direction)</li> <li>➤ Wah Lukha (Sonapur River) (7.0 km in SEdirection)</li> <li>➤ Wah Seshyampa (Sechyampa River (7.0 km in NW direction)</li> </ul> <p>Nalor kata, ka don sa saw tylli ki Nala la shem ha ka</p>
10.	Ka jaka khiih jumai (Seismic Zone)	Zone-V as per IS:1893 (Part-I):2002
E.	<b>Ka Jingdonkam ia ka Um baroh</b>	30 KLD
F	<b>Ki jingbatai bniah shaphang ki jingpynlut (Cost Details)</b>	
1.	Ka Jingpynlut pynsep na ka bynta ka Project	15 Crores
2.	Ka Jingpynlut pynsep na ka bynta ka EMP	Capital Cost for EMP: Rs. 1.92 Crore/- Recurring Cost for EMP: Rs. 0.46 Crore per annum /-

Ka tyllong: Ka kaiphod jong ka jinglah ban pyntreikam shwa (**Source:** Pre- Feasibility Report)

Ka jingthmu ban khlong ia u Mar Poh Khyndew (ML) ka Par Mawshun kaba tip kum ka Moiong, Thlusniang, Ka jingheh ka jaka ka long kumba 26.50 Hektar ka ban pynmih mawshun 1.007 Million ha ka shisnem (TPA) kaba don ha ka Shnong Chiehruphi, District East Jaintia Hills, Khliehriat, Meghalaya.

Ka Jingbatai Lyngkot shaphang ka EIA/EMP Report

### 1.3 LOCATION MAP

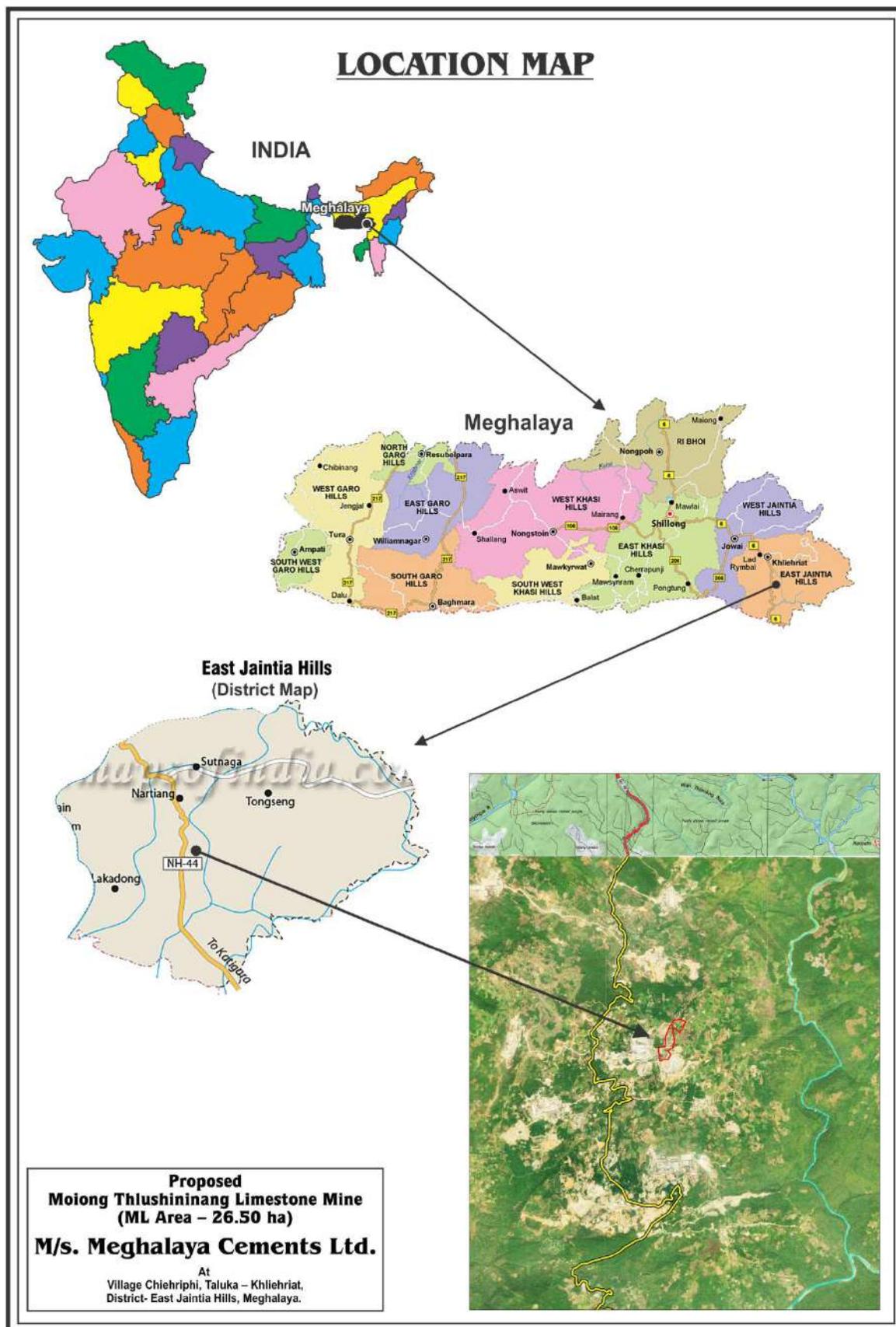


Figure 1: Location map (Ka jingpnyi ia ka jaka ba kyllum bad kumjuh ki jaka ba kyrapang jong ka jaka ba la tyrwa)  
(Showing general as well as specific location of the Proposed ML Area)

Ka jingthmu ban khlong ia u Mar Poh Khyndew (ML) ka Par Mawshun kaba tip kum ka Moieng, Thlusniang, Ka jingheh ka jaka ka long kumba 26.50 Hektar ka ban pynmih mawshun 1.007 Million ha ka shisnem (TPA) kaba don ha ka Shnong Chiehruphi, District East Jaintia Hills, Khliehriat, Meghalaya.

**Ka Jingbatai Lyngkot shaphang ka EIA/EMP Report**

## 1.4

### KI JINGTIP BA KHAM BNIAH SHAPHANG KA KAM TIH MAWSHUN (MINING DETAILS)

**Table -2**

**Ka jingbatai bniah ia ka rukom tih ia u Mar poh khyndew**

S. No.	Jingdew	Jingbatai
1.	Ki jingtih ba bniah (Method of Mining)	Ka rukom tih mawshun ba thymmai da kaba pyndonkam ban sam thilew da ki kor ki bor ka juk mynta
2.	Ki marpoh khyndew baroh (Total Geological Resources)	17.00 Million Tonnes
3.	Baroh ki marpoh khyndew kiba lah ban tih (Total Mineable reserves)	11.76 Million Tonnes
4.	Ka rta jong ka parmaleshun	~14 years
5.	Ka Jingjrong (Bench Height)	6 m
6.	Jingheh (Bench Width)	6 m
7.	Ka jingdon jong ki syrtap (No. of Benches)	10
8.	Ka jingjrong jong ka thliew kaba kut	45°
9.	Ka jingjrong (Elevation Range)	717 m AMSL to 765 m AMSL
10.	Ka um hapoh khyndew ka kyllum (General Ground Level)	741 m AMSL
11.	Ka jingdon jong ka um (Water Table)	185 m bgl
12.	Ka jingylliew jong ka jingtrei (Ultimate Working Depth)	683.7 mRL (57.3 m bgl)
13.	Ka jingkhein jingdiah ia ki mar poh kyndew ba long lyngkhot lyngkhai (Stripping Ratio Waste: Mineral (cum: cum.)	1:0.42
14.	Ka jingdon ki sngi trei	305
15.	Ka jingdon ki shift ha ka shisngi	1 (8 Hours)

**Ka tyllong:** Ka jingbishar bniah ba la mynjur ia ka rukom tih mawshun ka dang iaid rynkat shaphrang (Source: Approved Review of Mining Plan with Progressive Mine Closure Plan)

## 2.0

### KA JINGBATAI BNIAH SHAPHANG KA MARIANG

Katkum ka jingkhmih bniah ia ka jinglong ka jaka kaba la pynlong ha ka Aiom Lyuir (Lber (March) haduh Jymmang (May), 2023).

**Ka jinglong jong ka Lyer ha sawdong saw kun (Ambient Air Quality):** ka jingkhmih bniah ia ka jinglong jingman jong ka lyer bad la khein ba ka jingdon jong ka PM10 bad PM2.5 na ka bynta baroh ki o6 tylli ki AAQM stations, la lap hapdeng 28.7 haduh 70.9  $\mu\text{g}/\text{m}^3$  bad naduh 19.7 haduh 46.9  $\mu\text{g}/\text{m}^3$ . Ka jingkhuit jong ka SO<sub>2</sub> bad NO<sub>2</sub> la lap hapdeng 4.5 haduh 11.3  $\mu\text{g}/\text{m}^3$  bad 7.5 haduh 22.5  $\mu\text{g}/\text{m}^3$ . Katba ka CO pat lah shem ba ka don hapoh u pud u sam (Below detection limit) ha baroh ki jaka wadbniah jong ka jaka trei. Haba wadbniah ia ka jinglong jingman ki jaboh jakhlia lah ban pynkut hangne ba ka don hapoh u pud u sam bad la don ki kyndon jingiada ba la buh da ka NAAQMS.

**Ka Jinglong Ka Jingsawa lane ka Sur Sawa (Ambient Noise Levels):** La khmih thuh bha ia ka jingsawa ha ki o6 tylli ki jaka sawdong ka jaka tih maw. Ka jingsawa ka ia pher naduh 47.9 haduh 56.1 Leq dB (A) ha ka por mynsngi bad naduh 39.8 haduh 50.7 Leq. dB (A) ha ka por mynmiet. Haba pyrkhat ia jingsawa kaba heh tam ha kane ka jaka la shem ba ka don hapoh u pud u sam kat kum ba la btah da ka CPCB.

**Ka Jinglong ka Um halor ka sla Khyndew (Surface Water Quality):** Ban khmih thuh ia ka jinglong ka um la shim nuksa ha ki o3 tylli ki tyllong um, ka pyni ba ka pH ka ia pher naduh 6.98 haduh 7.11, ka turbidity ka don hapoh ka jingkhein ba la buh. Ka jinglong eh (total hardness) pat ka iapher naduh 89.4 haduh 195.16 mg/l mg/l, Alkalinity iapher naduh 76.6 haduh 136.0mg/l, kiba eh ba lah ban pynlong um pat ka long naduh 176.0 haduh 292.0 mg/l, BOD ia pher na ka 2.8 sha ka 4.6 mg/l, COD ia pher na ka 8.0 sha ka 14.3 mg/l. Ka jingbun jong u DO pat ka ia pher naduh 7.2 haduh 7.4 mg/l. Ka jingdon jong u Chloride, Sulphate, Magnesium, Calcium, Iron, Zinc bad Fluoride lah shem ba ki ia pher naduh 20.93 haduh 50.32 mg/l, 15.6 haduh 35.1 mg/l, 5.88 haduh 16.99 mg/l, 26.08 haduh 50.10 mg/l, 0.08 haduh 0.12 mg/l, 0.09 haduh 0.23 mg/l, 0.17 haduh 0.29 mg/l ha la ki jong.

**Ka Jinglong ka Um hapoh khyndew (Ground Water Quality):** La shim nuksa ia ka um, ha ki o2 tylli ki jaka, ka pyni ba ka pH ia pher naduh 6.90 haduh 7.24, ka jinglong eh (total hardness) ka ia pher naduh 124.4 haduh 146.4 mg/l & baroh ka jinglah ban pynum ia ka jinglong eh (total dissolve solids) ka long naduh 204.0 haduh 245.0 mg/l, Chloride na ka 26.42 sha ka 30.7 mg/l, Sulphate ia pher na ka 17.60 sha ka 20.72 mg/l, Calcium na ka 30.2 sha ka 42.9 mg/l, Magnesium ia pher na ka 9.51 sha ka 11.88 mg/l. Kumta, lah ban pynkut nia da kaba ong ba ki tyllong um hapoh khyndew kat kum ki nongmuna um ba ngi shim ki long kiba bha bad kiba bit ban pyndonkam kum ka um bam um dih kumba la pynshisha da ka (IS: 10500-2012).

**Ka Jinglong ka Khyndew:** La shim nuksa ia ka khyndew ha ki o6 tylli ki jaka bad ka jingmih na ka jingwadbniah na ka bynta ka khyndew ka pyni ba ka khyndew ka long pdeng khyndiat bad jem bad ka rong ka long kaba jyrngam (neutral to slightly alkine in nature) namar ba ka pH ka ia pher naduh 6.83 haduh 7.18. Ki nuksa jong ki khyndew ba lah shim ki long saw bthuh dum ha ka rong, rong jngem bthuh bad ka long dew shyiap. Ka jingbun jong ki kynja met ba kynsai ka long naduh 0.81 % to 1.16 %, ka Naitrogen la shem ba ka don ha ka jingbun kaba kham bha namar ka long naduh 211.2 to 314.49 kg/hec bad ka Phosphorous ka long hapdeng namar ka iapher naduh 8.32 haduh 17.02 kg/hec, katba ka Potassium la shem naduh 219.60 haduh 313.75 kg/hec.

### 3.0

### KA JINGSHAH KTAH KA MARIANG BAD KA JINGIALEH BAN PYNDUNA

#### ➤ KA JINGLONG KA LYER BAD KI SAWDONG SAWKUN

##### Jingshah ktah:

Ka jingpynmih lyer kaba kongsan na ka jingtih mawshun (ka jingsam thliew, pynbthei, ka jingpynkit bad shalan) ka jingher jong ki pum pum ne phngit barit, kum ki particulate matter Oxides jong ka Nitrogen ( $\text{NO}_2$ ) bad Sulphur dioxide ( $\text{SO}_2$ ). ki mihi na ka jingtreikam bad ka jingleit jingwan jong ki Mashin bad kiwei kiwei ki kali kitmar. Ka jingmih jong ki pum pum ka dei na ka jingpyntreikam ia ka parmau kum ha ka jingtih, jingkit, jinghiar bad ka jingshalan bad kiwei kiwei de ki kam kiba ia dei bad kane.

### **Ki Lad Ai Jingiada:**

- Yn shim khia ia ki lad jingiada kiba biang bad ban tehlakam kum ka jingpynbthei, ka jingsynreit um ha shwa ban sam thliew, pynbthei. Ngin ialeh ban thung ia ki dieng ki siej ban pynjyrngam ia ki sawdong sawkun (greenbelt/plantation) khnang ban tehlakam ia ka jingmih ka lyer jaboh (fugitive emission). Slurry/Emulsion Yn pyndonkam da ki tiar pynbthei kiba heh & ANFO bad ka jingpyndonkam kaba paka kan iarap ban pynduna ia ka jingjaboh ka lyer. Ka jinglah ban sumar bha ia ki kor, tiar ka iarap ruh ban pynduna ban pynmih tdem/ lyer jaboh. Yn pynlong ka jingpeit bniah ia ka jinglong jingman ka lyer man la ka por. Ka jingthung ia ki dieng ki siej (Green Belt) ha baroh sawdong jong ka jaka pdeng bad ka ka jingjrong ban jingheh ka jaka ka long 3300 m bad 7.5 m. (Baroh ka jaka 2.47 hektar yn thung da ki jingthung bajyrngam).
- **KA JINGLONG JINGMAN JONG KA UM BAD KA SAWDONG JONG KA**

### **Ka Um kaba don ka sla khyndew**

Ka don 3 tylli ki wah bad 4 tylli ki nala kita ki long ka Wah Lumbha (~ 3.3 km in ENE direction), Ka wah Sonapur (~ 7.0 km in SE direction), ka wah Seshyampa (~ 7.0 km in NW direction) bad ka Dongtongle Nala (~6.5 km in North direction), ka Latynger Nala (~ 9.0 km in NE direction), ka Wah Thaniang Nala (~5.5 km in North direction), ka Rashniang Nala (~9.0 km in North direction) ki don hapoh 10 km kat kum ka jingthew da u radius. Ia kane wah la ker da ki lum bad ki jaka na baroh arliang bad ka tuid shaduh ri Bangladesh. Baroh ki wah bad ki tuid na shaphang shathie. Haba ianujor bad une u mawshun bad kiwei pat ki jait maw kiba ia snoh lang bad u kim don ia ki jakhlia ne ki jaboh. Te kumta wat lada ngi tih ia ka par mawshun kan ym don kano kano ka jingma lane ka jingshah ktah ia ka jinglong ka um ne ki tyllong um.

### **Ka Um badon hapoh Khyndew:**

Ka jingjrong jong ka jaka tih mawshun ka long naduh 717 m AMSL haduh 765m AMSL. Yn ym don ka jingpyniasoh ia ka um bad ka kam tih mawshun namar ba ka um hapoh khyndew ka ia kynduh kumba 185 m bg! bad ka jingtih mawshun ka long halor ka sla um. Ym don um jakhlia ba la pynlait shabar jong u pud u sam. Kam don ka jingpynlait kulmar ia ka um shabar jong u pud u sam. Te kumta, kan ym don ka jingshah ktah kaba jur ia ka jinglong jingman jong ka um te kumta la thmu ban pyntreikam noh ia kane ka projek tih mawshun.

- **KA JINGSAWA & KA JINGKHIH**

### **Namar ka jingtih mawshun**

Ki tyllong kiba pynmih jingsawa kiba kongsan jong ka kam tih mawshun ki long ka jingtih, ka jingpynbthei bad ka jingiaid ki kali heh (HEMM) kiba pyndonkam na ka bynta ban kit ia u Mawshun.

Yn pyntreikam ia baroh ki kyndon ba la bthah da ka DGMS ka tnat trei kam ba dei khmih ia ka rukom tih maw kan pynduna ia ka jingsawa na ka jingpynbthei khnang ba kan ym ktah ia ki shnong ba marjan. Ia ki kali heh (HEMMS) yn pynbiang da ki kamra kiba la shna kyrpang na ka bynta ki nongniah. Ban tehlakam ia ka rukom pynbthei yn pyndonkam da ka tiar kiba biang khnang ba kan pynduna ia ki jingkhiih ha ki bynta ba iar. Yn pyndonkam da ki kor pynpra maw (Hydraulic rock breaker) ha ki jaka ban pynbthei biang. Yn pynbiang ia ki tiar iada (PPE) kum ki tiar iada ia ki shkor lane ki jingdeng shkor yn sa pynbiang na ka bynta ki nongtrei ha ki jaka kiba don jan bad ka par mawshun kaba pynmih jingsawa. Yn sa pynkhuid man la ka por iaki kor ki bor

bad ia ki kali kit jingkit da kaba pynkhuid ne sleh umphiang ia ki mashin. Yn pynbun shuh shuh ia ki dieng ki siej khnang ba kin iarap ban pynkhuid ia ka lyer kaba jaboh.

➤ **Ka Khyndew bad ka Sawdong Sawkun**

**Ka Jingshah ktah:**

Ka jingpyndonkam ia ka jaka tih mawshun kaba dei jong ka sorkar/jaka ki riew shimet yn pynkylla noh sha ka jaka tih mawshun kynthup ia ki jaka kida don thliew, ki jaka bret niut ba shipor, ki jaka thung dieng thung siej (greenbelt), ki jaka buh um bad kiwei kiwei hynrei kan ym don kano kano ka jingshahktah ia ka sla khyndew ne ki jaka marjan.

**Ki lad ban ai jingiada:**

Kat kum ka jingthmu ban tih ia u mawshun ba la mynjur, La don ka jingthmu, ba 24.034 ha yn tih. Na kine, 5.35 hektar pyndap bad pynwandur ia ka jaka da ki maw ha ki jaka ba don thliew, OB (Maw shyiap ba eh), 8.95 hektar jaka ban pyndap ne tap ka long 9.734 hakter ka jaka yn pyllang ia ka um (water logged area). Yn pynkham bun shuh shuh ia ka jaka thung jingthung (Greenbelt) ha ka jaka kaba don kumba 7.5 bad ka ba sah kan long 2.47 ha.

**Ka jaka rep:** Ka jaka kaba 7.5 m ka jaka ba la ai wai la antad ba ka long 2.47 ha hapoh ka jaka rep. (**Greenbelt:** Area of 7.5 m lease periphery is estimated 0.50 ha under greenbelt).

➤ **Ki jakhlia ba long eh**

**Ka khyndew ba shalor:** ka jingmih ka khyndew ba shalor ha ka por tih. Yn pynmih 2.39 million m<sup>3</sup> (2.1 Million Tonnes) ka jingbun jong ka khyndew ba halor yn pyndonkam na ka bynta ki jingthung jingtep ha baroh sawdong ka jaka (greenbelt/plantation).

**Ka khyndew Jaboh (OB):** Ha ka por ban pyntrei, 1.15 million m<sup>3</sup> (2.89 million tonnes) ka jingkit palad yn buh ha ka jaka ba kyrpang khnang ba ngin lah ban pyndonkam biang na ka bynta ban pyndap ia kaba donkam. Kumba 3.09 Million Tonnes ki jaboh yn pynmih ha ka por ba dangtrei, ia kaba yn pyndonkam na ka bynta ban pyndap pynbiang ia ka jaka ba la dep tih.

**4.0**

**KA JINGPYN IA KHLAD NE PHARIA (TECHNOLOGY & SITE)**

Kat kum ka jingpynbna da ka EIA tarik 14<sup>th</sup> Nailur, 2006, ka lynnong halor ka phang ia ka “Jingbishar bniah ia ka jinglut jingsep kaba ia dei bad ka mariang” (“Environmental Cost Benefit Analysis”) kan long kaba trei kam tang lada ai jingmut ia ka juh ka rukom thew. Kat kum ki ToR points ba la pynmih da ka SEIAA, Meghalaya vide file no. ML/SEAC/SEIAA/PP/EJH/28/2024 tarik 06.02.2025 na ka liang ka M/s. Meghalaya Cements Limited; ka bynta na ka kam tih mawshun ba la tyrwa, ka ‘Environmental Cost Benefit Analysis’ kam da donkam eh.

**5.0**

**KI PROGRAM NA KA BYNTA KA PROJEK HA KABA IA DEI BAD KA MARIANG**

Ia ki jingtip ba bniah jong ka jingpeit bniah hadien ka projek la ai ha ka table harum:

S. No.	Jingbatai	Ka jingpeit bniah man ka por
1.	Ka jingtip ba rit shaphang ka jinglong ka Suinbneng (Micro - Meteorological Data)	Man ka kynta

S. No.	Jingbatai	Ka jingpeit bniah man ka por
2.	Ka jingpeit bniah ia ka jinglong ka lyer sawdong (Ambient Air Quality Monitoring)	Ar sien ha ka shibnai bad Online CAAQMS
3.	Ka jingpeit bniah ia ka jinglong ka um hapoh Khyndew (Ground Water Quality & Level Monitoring)	Man la ka lai bnai
4.	Ka jingpeit bniah ia ka jinglong ka um hapoh khyndew (Surface Water Quality Monitoring)	Man la ka lai bnai
5.	Ka jingpeit bniah ia ka jingsawa (Noise Level Monitoring)	Man u bnai
6.	Ka jingpeit bniah ia ka jingkhiih ka Khyndew (Ground Vibration Monitorin)g	Ha man la ka jingbthei
7.	Ka jingpeit bniah ia ka koit ka khiah ki nongtrei	<p>3 haduh 5 snem ka jingiapher</p> <ul style="list-style-type: none"> <li>➤ Ka rta jong ki nongtrei &lt;45 snem: Hadien man la ka 5 snem</li> <li>➤ Ka rta jong ki nongtrei &lt;45 snem: Hadien man la ka 3 snem</li> </ul>

## 6.0

### KA JINGTHMU BAN MARAMOT IA KA JAKA BA LA DEP PYNDONKAM

La don jingthmu, ban tih ia ka jaka kaba ka jingheh ka long 24.034 ha. Na kine, 5.35 hektar yn pyndap ne tap da ki maw ha ki jaka thliew, OB (hard sandstone Maw shyiap ba eh), 8.95 hektar yn tap ne pyndap ne pynmadan da ki maw shyiap ba eh kiba shait pyndonkam haba shna iing bad 9.734 hakter yn sa pynshna ia ka jaka buh (water logged area). Ngin sa pynwandur ia ka jaka da kaba thung da ia ki jingthung jingtep ki ban pynjyrngam ia ka mariang (Greenbelt on 7.5 m) ha baroh sawdong saw kun kane jaka ka ba don kumba 2.47 ha.

## 7.0

### SA KIWEI PAT KI JINGPULE BA KHAM BNIAH

Ka jingpule ba kham bniah shaphang ka Um bad ka khyndew, ka kaiphod shaphang ki jingthaw ba im. Ka jingthmu ban pynbha bad pynkynriah jaka, ka jingpyndon kam ia ki jaka ki map ba la tap da ki metbneng satellite (Satellite Imagery), ka jingpule ia ka imlang sahlang ka ioh ka kot, ka jingthmu ban pynneh pynsah ia ki mrad khlaw bad kiwei de, ka jingpule ia ki marpoh khyndew bad ki dawai kynbat (Chemical Composition), ka jingkhein ia ka jingktah kaba la lum lang (Cumulative Impact Assessment), ka kaiphod jong ka (Langelier's Saturation Index) ka dei ka tiar ba iarap ban thew ia ka jinglong ka um kumba la thoh haneng ha ka EIA/ EMP Report kat kum ki kyndon ba la bthah da ka SEIAA.

## 8.0

### KA JINGWAD BNIAH IA KA RUKOM LONG KA UM (HYDRO GEOLOGY STUDY)

Ki jingdonkam um baroh na ka bynta kane ka project ba la thmu kan long 30 KLD ia ka ban shim na ka jaka pyllang um kaba don hajan ka Captive Power plant kaba don hapoh jong kane hi ka kharkana Dewbilad. Ka tynrai jong kane ka tyllong um kaba kongsan ka dei kaba mih na Wah Chyrtong. La

shim jingbit ia ka juh na ka tnad pynlang um (Irrigation Department) lyngba ka shithi jong ka vide NOC No. AID (J)223/2007-2008/ tarik 24.03.2008.

Ka jingjrong jong ka jaka ka ban tih mawshun ka long naduh 717 m AMSL haduh 765m AMSL. Yn ym don ka jaka mih um ka ban pyniasoh ia ka um ha ki ki jaka tih mawshun ne ha ha kano kano ka bynta tih mawshun namar ba ka um hapoh khyndew ka ia kynduh ha ka 185 m bgl bad ka jingtih mawshun ka long halor ka sla um. Yn ym pyntuid ia ka um jaboh shabar u pud u sam jong kane ka par nawshun. Kumta, la pynthikna ba kan ym don kano kano ka jingktah ia ka jinglong jong ka um ha ka ba ia dei bad ka kam tih parmawshun.

### KI JINGTHAW BA IM HA KA MARIANG

**Ki jingthung jingtep ba bun jait:** Baroh ki dieng ki don kumba 55 jait ki jjingthung, 30 jait kiwei pat ki jingthung kum ki dieng phyrngop, ki kynbat bad ki diengrit kiba don ki sla kiba sma iwbih, 13 jait ki jingthung kiba mih bad san ha khyndew kum ki dieng ba snoh bad 1 l phlang, u dieng Screw Pine, u dieng ba jrong ba kyllain (Laina) bad kiwei kiwei de, la buh jingthoh ha ki jaka pule katkum ka jingpeit bniah ba nyngkong bad kumjuh ruh katkum ka jinglum jingtip ba ar.

**Ki jait mrad:** Kat kum ka jingjurip kaba nyngkong bad ba ar la ioh lum jingtip, ia ki jait mrad ki kynthup ia u *Hystrix sp.* (Cape porcupine), *Varanus bengalensis* (Indian monitor), *Bufoidesmeghalayanus* (Khasi Hills toad), *Trachypithecuspileatus* (Capped Langur or Leaf Monkey), *Porcupine sp.* (Quill pig), *Pantherapardus* (Leopard), *Hoolock hoolock* (Hoolock gibbon), *Ursus thibetanus lanige* (Himalayan black bear), *Collosciuruserythraeus* (Pallas's Squirrel), *Manis crassicaudata* (Indian pangolin), *Lophuraleucomelanos* (Khalij pheasant), *Ketupa flavipes* (Bubo flavipes), *Bambusicolafytchiihokinsoni* (Mountain Bamboo Partridge) la buh jingthoh ia ki kat kum ka jingwad bniah ha ka por jurip; kaba wan ha ka Schedule - I ban ai jing'iada ia baroh ki mrad kiba don ha ka jaka ri mrad kum ka Wildlife (Protection) Amendment Act, 2022.

### 9.0 KA JINGPYNBHA PYNMIAT BAD KA JINGKYNRIAH JAKA

Ka jingthmu jong ka jingpynbha pynmiat bad ka jingpynkynriah jaka ka long ban pynioh ia hok bad ka jingmyntoi jong ki trai shnong trai muluk ban pynthikna ia ka jingioh kam ioh jam kaba biang ha kane ka projek bad kan wallam ka jingkiew ha ka ioh ka kot, bad ha ka imlang sahlang jong ka thain hi baroh kawai.

Ka jaka baroh ba la ai wai ban tih ia u mawshun ka long kumba is 26.50 ha kaba hap hapoh ka jaka jong ki riew shimet. Ym don ka jaka khlaw kaba hap ha ka jaka ai wai. Ka jingpule R&R kan ym trei kam namar baroh ka 25.60 ha ka jaka ka hap hapoh ka jingpyniaid jong ka MCL.

### 10.0 KA JINGMYNTOI NA KA PROJEK

**Ka jingtrei:** Ka jingdonkam briew baroh na ka bynta ka projek ba la tyrwa baroh kan long 135 ngut. Ki briew ki bym don ka jingnang jing stad ba pura /kiba don ka jingnang jingstad malu mala yn sa wad na kane hi ka thain bad ki briew kiba tbit/ tbit bha yn wad na shabar. Yn ai kam ia ki trai Shnong kat kum ka jingtbit jong ki. Nalor kane, ka projek kan wallam shibun ki lad kamai kajih kiba lah ban ai jingmyntoi ha ki rukom bapher bapher.

**Ka jingmyntoi ha ka imlang sahlang:** Ka kam tih mawshun kan pynmih khajna ha ka dur jong ka jingnoh synniang jong ki, ka khajna kan leit sha ka pla tyngka jong ka jylla kumba la pyntip da ka

Indian Bureau of Mines na ka por sha ka por, nalor kane, ka Royalty bad kiwei kiwei ki khajna kan long ka jingmyntoi ba kham bun, khamtam ha ka dur jong ka jingnloh synniang sha ka District Mineral Foundation (DMF). Ia ka DMF yn pyndonkam da ki bor synshar Shnong na ka bynta ka jingpynroi ia ki jingtei ha ka imlang sahlang bad ka jingbha jingmiat jong ki nongshong Shnong. Ki kam bapher bapher ba la tyrwa lyngba ka CSR bad ka jingkular ha ka imlang sahlang jong ki kompeni kin iarap ha kaba pynbha ia ki jingtei ba kongsan, ki jingdonkam.

**Ka jingmyntoi na ka bynta ka Mariang:** Ha ka por ba dang pyrkhat, ka jaka ba la tih kan long 24.034 hektar. Na kine, 5.35 hektar yn sa tap yn sa tap pyndap ia ki jaka ba long thliew da u mawshyiap uba eh OB (hard sandstone), 8.95 hektar yn sa tap da ki maw bilat ba la sniew (weathered sandstone) bad 9.734 hektar yn pyllang da ka um ka (water logged area) (Greenbelt on 7.5 m periphery) yn sa thung jingthung ha kane ka jaka kumba 2.47 hektar.

**Ka jingmyntoi ha ka ioh ka kot:** Ka project ba la tyrwa kan iarap shuh ia ka khajna sha Jylla bad ka sorkar pdeng ha ka dur jong ka Royalt, Cess bad kiwei kiwei ki khajna. La antad ba kane ka project kan pynmih khajna haduh 15.05 Klur ha ka shisnem da kaba pynmih ia u mawshun kumba 1.007 Million ha ka shisnem (TPA).

## 12.0

## KA JINGPYNKUT

Ka projek ba la tyrwa kan pynshisha ba ka long kaba myntoi ia ki nong shong Shnong namar kan mih ka lad kamai kajih kaba bun rukom. Kan don ka jingkiew ha ka jingpynmih khajna sha ka sorkar lyngba ka jingsiew khajna bad kiwei kiwei. Ka jingpynbha shuh shuh ha ki jingtei kum ha ki jaka pule puthi, ki Surok, ka jingdon jong ka um dih, ki jaka sumar ha ki Shnong ba marjan.

Kan Kan ym don ka jingpynjaboh ia ka lyer kaba jur, ka um, ka khyndew bad ka jingsawa. Yn leh ia ka jingpeit bniah man ka por ia baroh ki bynta jong ka mariang bad yn shim ia ki lad ki lynti ban pynduna ia ki jingma. Ka jingpynbun ia ki lad jingiarap ha ka imlang ka sahlang ba la shim da ka kompeni kan wanrah ia ka jingroi jingpar ha baroh kawei ha ki Shnong ba marjan. Na ka liang ka Kompeni kan ialeh ban kyntiew ia ka bha ka miat, ka ioh ka kot ha ka imlang sahlang bad kan wanrah ia ka jingjohnong ym tang ia ki trai shnong bad kumjuh ia kiwei ruh ki para marjan Shnong.

