

## KA PASOH

Ia kane ka projek la mang na bynta ban tih ia u maw Boulder na “Khrikshon Lyngkhoi’s Boulderstone Mine 4.45 ha”. Ka jingpynmih ba la mang ka long kumba 6, 43, 608 TPA da ka rukom jingtih najrong khyndew ryngkat bad ki kor ba la pyniaid lang da ki briew ban tih. Ka jingtih kan long ha ka jaka ba la shim wai.

|                                       |                                                                                                                                                    |                     |                      |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------|
| Ki Paia Jingthew                      | <b>Pillar</b>                                                                                                                                      | <b>Latitude (N)</b> | <b>Longitude (E)</b> |
|                                       | A                                                                                                                                                  | 26° 04’ 20.16”      | 91° 49’ 48.10”       |
|                                       | B                                                                                                                                                  | 26° 04’ 15.08”      | 91° 49’ 48.28”       |
|                                       | C                                                                                                                                                  | 26° 04’ 14.80”      | 91° 49’ 58.40”       |
|                                       | D                                                                                                                                                  | 26° 04’ 19.90”      | 91° 49’ 58.20”       |
| Kyrteng jong ka projek                | “Khrikshon Lyngkhoi’s Boulderstone Mine 4.45 ha”                                                                                                   |                     |                      |
| Shnong                                | Shnong Umduba, Killing, 9 <sup>th</sup> Mile, Raid Marwet                                                                                          |                     |                      |
| Tehsil                                | Umling                                                                                                                                             |                     |                      |
| District                              | Ri-Bhoi                                                                                                                                            |                     |                      |
| State                                 | Meghalaya                                                                                                                                          |                     |                      |
| Kyrteng bad Jaka sah jong u Applicant | Shri Khrikshon Lyngkhoi S/O Late S.Khardewsaw<br>Address: K.L. Complex, Maccabe Road, Demseiniong,<br>Shillong, East Khasi Hills-793001, Meghalaya |                     |                      |
| Station Rel ba jan tam                | Guwahati Railway Station, 14.70 Km, shaphang Shatei-Sepngi                                                                                         |                     |                      |
| Kad Liengsuin ba jan tam              | LBG International Airport Guwahati, 24.50 Km, towards West direction                                                                               |                     |                      |
| Ka surok ba kongsan ba jan tam        | NH-40, 4.16 km, shaphang Mihngi<br>NH-37, 4.40 km, shapahng Shatei-Mihngi                                                                          |                     |                      |
| Kyrteng u marpoh khyndew              | Maw Boulder                                                                                                                                        |                     |                      |
| Area (Ha) kat kum ka LoI              | 4.45 Ha                                                                                                                                            |                     |                      |
| Jinglong jingman jong ka jingtih      | 6.16 snem                                                                                                                                          |                     |                      |
| Jinglong jong ka jingtih              | Dang don                                                                                                                                           |                     |                      |

Ka projek ba la mang ka dei da ka jingtih na jrong khyndew ryngkat bad ki kor ba la pyntreikam lang da ki briew, haba ka ka jingtih ia u maw Boulder yn sa pyndep. Ki puh shilum kin sa don ban weng ia ka khyndew ba shong hajrong bad kaba shong ha tyngkap jong u maw. Ka rukom tih ia u maw kan long na jrong u khyndew da ki kor ba la pyntreikam lang da ki briew ba kynthup lang ka jingsam shapoh bad jing pynbthei. Ka jingtih kan long ha kato ka jaka ba la ai wai ha shnong Umduba, Killing, 9<sup>th</sup> Mile, Raid Marwet, Distirict- Ri-Bhoi, State - Meghalaya ia kaba ka jingtih ba bun tam ka long 6, 43, 608 TPA u maw Boulder ban tih. Ka Jingsam shapoh bad jingpynbthei la mang ha ka jingtih. Terms of Reference (ToR) ia ka projek ba la mang la ai da ka

Directorate of Environment, Meghalaya da ka shithi no. ML/SEIAA/MIN/RB/P-113/2020 dated, Shillong, the 15<sup>th</sup> January, 2021.

### Ka Mat Jong Kane ka Projek

| 1.     | Kyrteng u Nongshimwai bad jaka sah                      | Shri Khrikshon Lyngkhoi S/O Late S.Khardewsaw<br>Address: K.L. Complex, Maccabe Road,<br>Demseiniong, Shillong, East Khasi Hills-793001,<br>Meghalaya                                                                                                                                                                                                             |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
|--------|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------------|---------------|---|----------------|----------------|---|----------------|----------------|---|----------------|----------------|---|----------------|----------------|
| 2.     | Kyrteng jong ka Projek                                  | “Khrikshon Lyngkhoi's Boulderstone Mine 4.45 ha”                                                                                                                                                                                                                                                                                                                  |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
| 3.     | Jaka jong ka Projek                                     |                                                                                                                                                                                                                                                                                                                                                                   |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
|        | Kyrteng jong ka Shnong                                  | Shnong Umduba, Killing, 9 <sup>th</sup> Mile, Raid Marwet                                                                                                                                                                                                                                                                                                         |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
|        | Tehsil                                                  | Umling                                                                                                                                                                                                                                                                                                                                                            |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
|        | District                                                | Ri- Bhoi                                                                                                                                                                                                                                                                                                                                                          |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
|        | State                                                   | Meghalaya                                                                                                                                                                                                                                                                                                                                                         |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
| 4.     | Kyteng jong u marpoh khyndew                            | Maw Boulder                                                                                                                                                                                                                                                                                                                                                       |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
| 5.     | Ka jingheh ka jaka ba lah mang ban ai wai (Ha)          | 4.45 Ha                                                                                                                                                                                                                                                                                                                                                           |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
| 6.     | Ka jingheh ka jaka ba long ban tih ia u Mawshun         | 4,17 Ha                                                                                                                                                                                                                                                                                                                                                           |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
| 7.     | Ba heh tam bad duna tam ka mRL hapoh ka jaka ban ai wai | 368 mRL to 247 mRL                                                                                                                                                                                                                                                                                                                                                |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
| 8.     | Ki Paia Jingthew                                        | <table> <tr> <th>Pillar</th><th>Latitude (N)</th><th>Longitude (E)</th></tr> <tr> <td>A</td><td>26° 04' 20.16”</td><td>91° 49' 48.10”</td></tr> <tr> <td>B</td><td>26° 04' 15.08”</td><td>91° 49' 48.28”</td></tr> <tr> <td>C</td><td>26° 04' 14.80”</td><td>91° 49' 58.40”</td></tr> <tr> <td>D</td><td>26° 04' 19.90”</td><td>91° 49' 58.20”</td></tr> </table> | Pillar | Latitude (N) | Longitude (E) | A | 26° 04' 20.16” | 91° 49' 48.10” | B | 26° 04' 15.08” | 91° 49' 48.28” | C | 26° 04' 14.80” | 91° 49' 58.40” | D | 26° 04' 19.90” | 91° 49' 58.20” |
| Pillar | Latitude (N)                                            | Longitude (E)                                                                                                                                                                                                                                                                                                                                                     |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
| A      | 26° 04' 20.16”                                          | 91° 49' 48.10”                                                                                                                                                                                                                                                                                                                                                    |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
| B      | 26° 04' 15.08”                                          | 91° 49' 48.28”                                                                                                                                                                                                                                                                                                                                                    |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
| C      | 26° 04' 14.80”                                          | 91° 49' 58.40”                                                                                                                                                                                                                                                                                                                                                    |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
| D      | 26° 04' 19.90”                                          | 91° 49' 58.20”                                                                                                                                                                                                                                                                                                                                                    |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
| 9.     | Ka jingdon baroh u maw                                  | 39,64,950 Tons                                                                                                                                                                                                                                                                                                                                                    |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
| 10.    | Ka jingthmu ban pynmih                                  | 6,43,608 TPA                                                                                                                                                                                                                                                                                                                                                      |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
| 11.    | Ka por pyntreikam ba la ai wai                          | 30 snem                                                                                                                                                                                                                                                                                                                                                           |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
| 12.    | Ka jingpynmih ha ka shi sngi                            | 2,146 tons                                                                                                                                                                                                                                                                                                                                                        |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |
| 13.    | Ka rukom tih                                            | Ka jingtih na jrong u khyndew da ki kor ba la pyntreikam lang da ki briew ba kynthup lang ka jingksam shapoh bad jing pynbthei                                                                                                                                                                                                                                    |        |              |               |   |                |                |   |                |                |   |                |                |   |                |                |

|     |                                                                                             |                                                                                                                                                                                            |
|-----|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14. | Ki sngi ba treikam                                                                          | 300                                                                                                                                                                                        |
| 15. | Ka jingpyntreikam ha ka shi sngi                                                            | 8 kynta ba bun tam ha ka por mynsngi                                                                                                                                                       |
| 16. | Ka jingdon ki nongtrei                                                                      | 91                                                                                                                                                                                         |
| 17. | Ka jingiaid ki kali ha ka shi sngi                                                          | 215 Truck (kawei ka liang)                                                                                                                                                                 |
| 18. | Jait Jaka                                                                                   | Jaka riew shimet                                                                                                                                                                           |
| 19. | Ba jylliew tam ban tih                                                                      | 323 mRL (45 m na ka jaka ba jrong tam)                                                                                                                                                     |
| 20. | Ka surok ba jan tam na kane ka jaka                                                         | NH-40, 4.16 km, shaphang Mihngi<br>NH-37, 4.40 km, shaphang Shatei-Mihngi                                                                                                                  |
| 21. | Jingdonkam Um                                                                               | <u>JINGDONKAM UM</u><br>1 – Um dih bad Um ling Um sem – 3.2 KLD<br>2 – Um synreit pum pum – 0.90 KLD<br>3 – Jingthung Jingtep – 0.90 KLD<br>Ka jingdom lut ia ka um ka long kumba – 5. KLD |
| 22. | Kyrteng jong u QCI Accredited Consultant bad u QCI No. bad ka por pyntreikam                | GEOGREEN ENVIRO HOUSE PVT LTD,<br>LUCKNOW<br>NABET/EIA/1720/IA0023<br>3 Tarik Jymmang, 2021                                                                                                |
| 23. | Lada don mukutduma ei ei pyrshah ia kane ka jaka lane ka projek ha kano kano ka ing thawain | Em                                                                                                                                                                                         |
| 24. | Ka jingmang pisa ia ka CER                                                                  | Rs. 1,90,000/-                                                                                                                                                                             |
| 25. | Ka jingmang pisa ia ka EMP                                                                  | Rs. 3,92,000/-                                                                                                                                                                             |
| 26. | Ki dieng ban thung                                                                          | 500 tynrai                                                                                                                                                                                 |

Ia ka jingwad jingtip shaphang ka jingling jingman bad jingdon jingem ka ne ka thain ba nyngkong la sdang ha u Nohprah 2020 haduh u Rympang 2021 ha ka jaka ba 10km.

Ka jingbuh dor baheh tam ia u **PM<sub>10</sub>** la shem kumba 87.3 µg/m<sup>3</sup>, katba hapoh ka 24 kynta kiba ki lah ban pyndonkam, ka dei 100µg/m<sup>3</sup> ia ki kharkhana bad ki jaka ba ia khleh. La iohi ba ka jingdon jong ka **PM<sub>10</sub>** ha katei ka jaka kadei naduh 40 µg/m<sup>3</sup> – 87.30 µg/m<sup>3</sup>.

Ka jingbuh dor baheh tam ia u **PM<sub>2.5</sub>** la shem kumba 36 µg/m<sup>3</sup>, katba hapoh ka 24 kynta kiba ki lah ban pyndonkam, ka dei 60 µg/m<sup>3</sup> ia ki kharkana bad ki jaka ba ia khleh. La iohi ba ka jingdon jong ka **PM<sub>2.5</sub>** ha katei ka jaka kadei naduh 16.0 – 36.0 µg/m<sup>3</sup>.

Ka jingbuh dor baheh tam ia u **SO<sub>2</sub>** la shem kumba 6.9 µg/m<sup>3</sup>, katba hapoh ka 24 kynta kiba ki lah ban pyndonkam ka dei 80µg/m<sup>3</sup> ia ki kharkana bad ki jaka ba ia khleh. La shem u **SO<sub>2</sub>** ka shong naduh 3.1-6.9 µg/m<sup>3</sup>.

Ka jingbuh dor baheh tam ia u **NO<sub>2</sub> la shem kumba** 10 µg/m<sup>3</sup>, katba hapoh ka 24 kynta kiba ki lah ban pyndonkam ka dei 80µg/m<sup>3</sup> ia ki kharkana bad ki jaka bai a khleh. La shem u **NO<sub>2</sub> ka shong naduh** 6.0 -10.0 µg/m<sup>3</sup>. La shem ba ha baroh ki shnong ka jingbuh dor ka long kat kum ba la buh.

Ka jingdon ka jingsawa la thew ha ki 8 (phra) jaka sawdong jong ka jaka ba la mang ka projek. Barit bad baheh duh ka jingsawa ba la shim ha ka por mynsngi ka long naduh 12.6 Leq dB bad 15.0 Leq dB, bad barit bad baheh duh ka jingsawa ba la shim haka por mynmiet ka long 10.1 Leq dB bad 11.3 Leq dB.

**Ka jingpynkhreh na ka bynta ban pyniaid beit ia id ryntih ia ka mariang:**  
**Environmental Management Plan (EMP)**

Kine ki dei ki jingpynkhreh na ka bynta ban pyniaid beit ia id ryntih ia ka mariang khnang ban pynduna ia ki jingktah kiba lah ban mih na kane ka jingtih ia une u mawshun.

- Ban nym don kano kano ka jingtei ingsah ia ki nongtrei ha ka jaka ban treikam.
- Ban nym don kano kano ka jingthang dieng lane ka shet ka tiew ha ki rud ki kiar marjan bad kane ka jaka.
- Shuwa ban sdang ia ka kam tih mawshun, dei ban don ka jingialang pynsgewthuh bad ki nongtrei ia ki rukom trei bad ki lad jingiada kiba ki dei ban shim. Kum kane ka jingialang pynsgewthuh dei ban pynlong man ka por.
- Lada don kano kano ka jing mynsaw lane ka jing iap noh ki mrad khlaw, dei ban ai jingsumar bad pyndep pynkhuid ia ka met iap ha ka rukom ba dei.
- La mana ban pom bad die ia ki dieng ki siej bad ban phut ia ki jingthung ki kynbat.
- Ka jingtih mawshuh kan hap ban kiar lada don ki kynti ia id jong ki mrad khlaw.
- Dei ban pyntikna ba ka jingsawa ba mih na ka jingiaid ki kali kit mawshun kan long hapoh jong ki kyndon ba la shah da ka sorkar.
- La mana ban pynlang ia ki maw ba la dep tih ha ki jaka ba marjan.
- Haba iohi ia ki mrad khlaw ba ki ia id lyngba kane ka jaka ym bit ban beh ne pynthut ia ki hynrei ki nongtrei ki dei ban kiar sharud na ka lynti ia id jong ki.

**Ka prokram ban peit bniah ia ka jinglong ka mariang**  
**(Environment Monitoring Program)**

| S.No.                                           | Activity                                                                                                                               | Schedule                              |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| <b>Ka jingpeitbniah ia ka jingjaboh ka lyer</b> |                                                                                                                                        |                                       |
| 1.                                              | Ban peit bniah ia ka jingkhuid ka lyer katkum ki kyndon ba lah buh da ka MoEF (PM <sub>10</sub> , SO <sub>2</sub> & NO <sub>2</sub> ). | Arsien shi snem lait noh ka por lyiur |
| <b>Ka jingpeitbniah ia ka jingbha ka um</b>     |                                                                                                                                        |                                       |
| 2.                                              | Ban peit bniah ia ka ka sla um na ki wah                                                                                               | Arsien shi snem lait noh ka por lyiur |
| 3.                                              | Ban peit bniah da kaba shim nuksa na kawei na ki tyllong thliew um hapoh jaka tih lane                                                 | Arsien shi snem lait noh ka por lyiur |

|                                                     |                                                                                               |                                                                       |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
|                                                     | hajan. Ki kyndon ban peit bniah kin dei kiba kongsan tam katkum IS: 10500:1991.               |                                                                       |
| 4.                                                  | Ban peit bniah ia ka jing donkam ban synreit um                                               | Dei ban don ka jing buh jingkhein ia ki jingsynreit um ba man ka sngi |
| <b>Ka jingpeitbniah ia ki jingsawa kiba mih</b>     |                                                                                               |                                                                       |
| 5.                                                  | Ka jingsawa kiba mih na kane ka jaka ba lah shim wai                                          | Arsien shi snem lait noh ka por lyiur                                 |
| <b>Ka jing pynbit pynbiang ha ki jaka Greenbelt</b> |                                                                                               |                                                                       |
| 6.                                                  | Ka jingpeitbniah katkum ka jingpynbeit ia ka jingroi jong ka Greenbelt kat kum ka mining plan | Man u snem                                                            |
| <b>Ka jingpeit bniah ia ka jinglong khyndew</b>     |                                                                                               |                                                                       |
| 7.                                                  | Ka jingpeitbniah ka khyndew ha ki hynriew tylli ki jaka                                       | Arsien shi snem lait noh ka por lyiur                                 |

Lyngba kane ka projek ba la tyrwa, la khmih lynti ba kan ai kam ai jam ia ki nongshong shnong ha ki jait kam bapher bapher kum ka tingtih, ka jing jied, ka jing pynpoi ki mar ryngkat ka jingthung ki dieng ki siej ban sumar ia kane ka jaka. Lah khmih lynti ba ka jingmih na kane ka jingtih bad jingdie ia une u maw kan pynheh ia ka jingioh jong ka sorkar kaba lah ban iarap bad kyntiew ia ka ioh ka kot jong ka jylla baroh kawei. Ka jingtih ia une u marpoh khyndew kan pyndap ruh ia ka jingdawa jong ki karkhana ba shna ba tei ha Meghalaya bad ki jylla ba marjan. Ia kane ka projek la khmih lynti ba kan nym don kano kano ka jingktah ba sniew ia ka mariang bad kino kino ki jingktah kaba la khmih lynti lyngba ka EIA yn lah ban pynduna.