

KA JINGBATAI LYNGKOT

IA KA

MADAN PYRDA (BLOCK 2)

Shnong Chiehruphi, Tehsil Narpuh Elaka, District East Jaintia Hills,
State Meghalaya

Ka jinglahbor ban pynmih mawshun 4, 00,602 ton shi snem

TOR No. : ML/SEIAA/MIN/GVL-BI: 2/P-01/2020/6/1678 tarik 02.02.2021;

Ka Jinglut naka bynta kane ka Jingpyntrei: Rs 2.70 Klur

Ka Kyrdan kat kum ka notice jongka EIA, 2006: S.no 1 (a) Cat "B"

Jaka ba la iohjingbit: 10.71 Ha

Ka Nongaplai

M/s Green Valliey Industries Limited. (GVIL)

Shnong Nongsning, Tehsil Chiehruphi, Distt East Jaintia Hills,
Meghalaya - 793210

Environmental Consultant

Perfact Enviro Solutions Pvt. Ltd. (PESPL)

NABET Registered List of Accredited
Consultant Organisations/9th

June 2021/S.no 122)

Email – info@perfactgroup.in

Website – www.perfactgroup.cpm

Phone - +91-11-49281360

KA JINGBATAI LYNGKOT SHAPHANG KA **JINGPYNTREI KAM**

Ka Jinglamphang

Ka jingthmu ban tih mawshun haka par Madan Pyrda (Block 2) kaba dei jong ka Kompani Green Valliey Industries Limited (GVIL) ryngkat ka jingmang ban pynmih mawshun kumba 400602 TPA. Iaka rukom tih mawshun yn pyntrei kam purada ka buit treikam kaba yn plied shwa iaka khyndew najrong bad nangta yn sa khlong bad sei ia u maw da ka jingiarap jongki kor ki bor thymmai jong ka juk mynta (Fully Mechanised Opencast Method) haka jaka (Lease Area) kaba heh 10.71 ha.

Ka Kompani kadon ia ka karkana pynmih clinker kaba lah ban pynmih haduh 1300 TPD ryngkat bad ka jingthmu ban pynheh sha ka 2600 TPD kat kum ka jingdon ne jingioh ia ki mar pohkyndew ne mawshun kiba don haka shnong Nongsning P.O Chiehruphi, District East Jaintia Hills, Meghalaya kaba jngai kumba 7.0 km naka jaka par. Ka nongaplai kalah don ka jingtbit ne ka jingtip bha haki kam tih mar pohkyndew. Ka par Madan Pyrda (Block 2) kan longka tyllong jong ka jingioh mawshun naka bynta ka Green Valliey Industries Limited (GVIL) naka bynta ka jingpynmih Dewbilat.

Ka Jingbatai shaphang kane ka jingtrei (Projek)

Kane ka jingtrei (Projek) ka don haka shnong_Chiehruphi, P.S.Khliehriat, District East Jaintia Hills, Meghalaya. Kane ka jaka ka hap haka Survey of India Topo sheet 83 C/8 (Restricted), latitude ka long $25^{\circ}12'29.57''N$ haduh $25^{\circ}12'39.62''N$ bad longitude ka long $92^{\circ}22'52.74''E$ haduh $92^{\circ}23'12.91''E$.

Ka Sorkar Meghalaya ka lah dep ai iaka order ban shah tih maw (Mining Lease) haka jaka kaba heh 10.71 ha naka bynta ban tih mawshun haka 4 Tarik Kyllalyngkot 2018 kat kum ka order No.MG.86/2012/170 naka bynta ban tih mawshun ha kane ka par kaba heh 10.71 ha.

Kane ka par kaba mut ban tih mawshun ka hap ha kata ka jaka khlaw kaba shu long malu mala kum ka khlaw (Deemed Forest Land) bad iaka forest Clearance kaba don iaka Proposal No.FP/ML/MIN/40422/2019 la dep ban aplai.

Iaka Mining Plan lah dep mynjur ha kane ka jaka kaba 10.71 ha naka bynta ka jingpynmih mawshun kaba 400602 TPA kat kum ka shithi No. IBM/GHY/MEG/EJNH/LST/MP-92 tarik 03.10.2019.

Iaka rukom tih mawshun yn pyntrei kam pura daka buit treikam kaba yn plied shwa iaka khyndew najrong bad nangta yn sa khlong bad sei ia u maw da ka jingiarap jongki kor ki bor (Fully Mechanised Opencast Method) da kaba pyndonkam da ki kor ki bor kiba khlain bor

jongka juk mynta (Heavy Earthmoving Machinery) da kaba samthliew shapoh bad sa pynbthei daki bom pynbthei kiba ryngkat ka bor.

- Ka jingpyntrei daki kor ki bor bad da kaba shu plied shwa ia ka khyndew na jrong da kaba samthliew bad pynbthei.
- Ki jaboh jabain kiba mih na kane ka par ki kynthup tang iaki khyndew shyiap bad mawshyiap.

Kumba 278638.89 cum/shisnem ka jaboh jabain kynthup ruh iaka khyndew kaba na jrong yn pynmih ia kaba yn sa Shna Pynkhreh kyrpang laka jong haka jaka ba la buh kyrpang naka bynta ka plan period kaba nyngkong. Nangta shuh shuh yn pan jingbit ruh naki bor kiba dei peit jongka Sorkar ban ioh pyndonkam ia kine ki jaboh jabain h

- Ka jingjylliew ka jingjrong (bench height) kan long haduh 6 m ryngkat bad ka jingiar ka thliew kumba 15 - 20 m.
- Ka sharing jong kawei kawei ka thliew (bench) kan long 80° haduh 85° katba ka jinglong sharing kyllum kan long kumba 45°.
- Ka jingjrong jong kane ka jingtih kan long kumba 704 mRL.
- Kumba 7280.06 m³ jongka khyndew kaba najrong (top soil) yn sa pynmih haka plan period kaba nyngkong ia kaba yn sa pyndonkam naka bynta ban pynjyrngam iaka jaka kaba don hapoh kane k par mawshun (ML area).
- Iaki mawshun ba lah dep khlong yn pynkit sha ka jaka tylliat (Crusher) kaba don haka kharkhana dewbilat da kaba pyndonkam daki kali trok dumper kiba 14 m³.
- Ki sngi ban trei kam kin long 300 sngi.
- Baroh ki nongtrei direct kin long 30 ngut.
- Ym don kino kino ki kynja tyllong um ha kane ka par maw (MLarea).
- Iaki tyllong um kiba don shapoh yn ym pyntuid eiei ruh em haka par ba khlong ia u mawshun.

Ka jingdonkam um baroh naka bynta kane ka kam tih mawshun kan long kumba 10 KLD. Naka bynta ban synreit bad ban pynjhieh ia u pum pum. Yn donkam kumba 6 KLD, 1 KLD naka bynta ban dih, 2 KLD naka bynta ka jingpynjyrngam iaka jaka ba la mang kyrpang (Green Belt) bad 1 KLD naka bynta kiwei kiwei pat ki jingpyndonkam. Iaka um kaba lah dep pyndonkam bad kaba lah dep pynkhuid yn sa wanrah naka kharkhana dewbilat jongka GVIL lyngba ki kali kit kum.

Yn donkam kumba 750 liter ka diesel haka shisngi iaka ba yn wanrah naki Petrol Pum kiba don marjan.

Ka jingbatai shaphang ka mariang bad ki sawdong sawkun.

Iaka jinglum jingtip kaba nyngkong lah dep lum daka jingai jingbit naka ophis jongka MoEF&CC naduh u bnai Risaw 2020 haduh u bnai Nohprah 2020. Ia ki jingbatai la ai hangne harum:

Ka jinglum jingtip shaphang ka jinglong ka suinbneng:

- (i) Jingshit jingkhriat: Ka jingshit jingkhriat jong kane ka jaka ka iapher naka 15°C shaka 34°C .
- (ii) Ka jinglong sngem: Ka jinglong sngem ka iapher nak 45 shaka 98%.
- (iii) Ka Jingsted jongka lyer: Ka jinglong sted jongka lyer mala ka long ha u pud kumba 7 m/s ha u bnai Naiwieng baduh 15 m/s ha u bnai Risaw. Ka jinglong jingman jongka lyer kaba man ka por ha kane ka jaka kaba lah lum jingtip la dep peit thuh bad ka phang ba ka lyer ka shait beh barabor ka pyni na NE-SW bad shatei shaduh shattie.
 - Ka jinglong khuid long suba jongka lyer: La dep lum ia ki nuksa naki 8 tylli ki jaka lum nuksa jingtip.

Ka jaka treikam pdeng tynrai (Core Zone): Ka jingdon jong ki phngit lyer barit (PM_{10}) ka iapher naka ($67.08\text{--}69.06 \text{ ug/m}^3$) bad ki phngit lyer barit PM_{25} ka iapher naka ($27.72\text{--}28.54 \text{ ug/m}^3$), SO_2 ka iapher naka ($7.34\text{--}7.55 \text{ ug/m}^3$), ka NO_2 ka iapher naka ($12.69\text{--}13.06 \text{ ug/m}^3$) bad ka CO ka iapher naka ($0.628\text{--}0.29 \text{ mg/m}^3$) kiba don hapoh u dak ne u pud jongka jinglong khuid long suba jong ka lyer ha baroh kawei ka ri (National Ambient Air Quality Standards lane NAAWQS). Kat kum u pud jingbuh dak jong ka CPCB kaba ia dei bad ka jingkhuid jingsuba jongka lyer, ka jinglong khuid jongka lyev ha kane ka jaka treikam pdeng tynrai (Core Zone) la shem ba ka long kaba biang hun bha haki aiom ba lah kut ka lyiur lane ki bnai tlang.

Ka jaka iada pyniakhlad (Buffer Zone): Ka jingdon jongki phngit lyer barit PM_{10} ka iapher naka ($71.03\text{--}78.92 \text{ ug/m}^3$), bad ki phngit lyer barit PM_{25} ka iapher naka ($29.35\text{--}32.61 \text{ ug/m}^3$), ka SO_2 ka iapher naka ($7.77\text{--}8.63 \text{ ug/m}^3$), ka NO_2 ka iapher naka ($13.43\text{--}14.93 \text{ ug/m}^3$) bad ka CO ka iapher naka ($0.29\text{--}0.33 \text{ mg/m}^3$) kiba don hapoh u dak ne pud jongka jinglong khuid long suba jongka lyer haba khein kyllum ha baroh kawei ka ri (National Ambient Air Quality Standards lane NAAWQS). Kat kum u pud jingbuh dak jong ka CPCB kaba ia dei bad ka jingkhuid jingsuba jongka kyer ha kane ka jaka ai jingiada kyrpang (Buffer Zone) la shem ba ka long kaba biang hun bha haka por ba lah shim ia ki nuksa test (Sampling Campaign).

- **Ka jingshem ia ka kyrdan jingsawa:** La shim ia ki nuksa test naki 10 tylli ki jaka ba iapher.
- **Ka jaka treikam pdeng tynrai (Jaka Kharkhana) N1 & N2.** U pud sur jingsawa haka por mynsngi haka jaka ban pyntreikam ka iapher naka 51.7 dB (A) sha ka 51.9 dB (A) kiba don hapoh u pud ne jingbuh dak kaba la buh naka bynta ki jaka kharkhana 75 dB (A). Haka por mynmiet u pud sur jingsawa ha kane ka jaka treikam ka iapher naka 44.4 dB (A) shaka 44.6 dB (A) kiba don hapoh u pud jingbuh dak naka bynta ki jaka kharkhana 70.0 dB (A).
- **Ka jaka iada pyniakhlad:**
 - **N3:** U pud sur jingsawa kaba don haka shnong Chiehruphi ka long 56.2 dB (A) kaba long kham heh ban iaka ka sur jingsawa por mynsngi kat kum u dak pud ba lah buh naka bynta ki jaka shong briew kaba long $\sim 55.0 \text{ dB (A)}$. Haka por mynmiet ka sur jingsawa kaba lah dep shim rekod ka long 46.8 dB (A) kaba long ruh kham heh ban ia ka sur jingsawa kaba mynmiet kat kum u pud ba la buh $\sim$

45.0 dB (A). Ka jingheh jong ka sur jingsawa kaba malu mala haba ia nujor bad u dak pud ba lah buh. Ka lah ban dei naka daw jongka jaka shong briew lane kiwei kiwei pat ki jingsawa ba mih na ki jingtrei kam trei jam jongki briew kiba don hapoh jong kane ka shnong.

- **N4:** U pud sur jingsawa haka shnong Wahiajer ka long 55.5 dB (A) kaba long kham heh ban iaka sur jingsawa por mynsngi kat kum u dak pud ba lah buh naka bynta ki jaka shong briew ka long ~ 55.0 dB (A). Haka por mynmiet ka sur jingsawa kaba lah dep shim rekod ka long 46.4 dB (A) kaba long ruh kham heh ban iaka sur jingsawa kaba mynmiet kat kum u pud ba lah buh ~ 45.0 dB (A). Ka jingheh jong ka sur jingsawa kaba malu mala haba ia nujor bad u dak pud ba lah buh ka lah ban dei naka daw jongka jaka shong briew lane kiwei kiwei pat ki jingsawa ba mih naki jingtrei kam trei jam jong ki briew kiba don hapoh jong kane ka shnong.
- **N5:** U pud sur jingsawa ha ka shnong Thangskai ka long 55.4 dB (A) kaba long kham heh ban ia ka sur jingsawa por mynsngi kat kum u dak pud ba lah buh naka bynta ki jaka shong briew kaba long ~ 55.0 dB (A). Ha ka por mynmiet ka sur jingsawa kaba lah dep shim rekod ka long 48.9 dB (A) kaba long ruh kham heh ban ia ka sur jingsawa kaba mynmiet kat kum u pud ba lah buh ~ 45.0 dB (A). Ka jingheh jong ka sur jingsawa kaba malu mala haba ia nujor bad dak pud ba lah buh ka lah ban dei na ka daw jong ka jaka shong briew lane kiwei kiwei pat ki jingsawa ba mih na ki jingtrei kam trei jam jong ki briew ki ba don hapoh kane ha shnong.
- **N6:** U pud sur jingsawa ha ka shnong Umbadoh ka long 60.3 dB (A) kaba long kham heh ban iaka sur jingsawa por mynsngi kat kum u dak pud ba lah buh na ka bynta ki jaka shong briew kaba long ~ 55.0 dB (A). Haka por mynmiet ka jingsawa ka ba lah dep shim rekod ka long 52.6 dB (A) kaba long ruh kham heh ban iaka sur jingsawa kaba mynmiet kat kum u pud ba lah buh ~ 45.0 dB (A). Ka jingheh jong ka sur jingsawa kaba malu mala haba ia nujor bad u dak pud ba lah buh ka lah ban dei na ka daw jong ka jaka shong briew lane kiwei kiwei pat ki jingsawa ba mih na ki jingtrei kam trei jam jong ki briew ki ba don hapoh kane ka shnong lane na ka jingsawa jong ki kali ki ba iaaid ba ieng na ka surok kaba don marjan.
- **N8:** U pud sur jingsawa ha ka shnong Umrasong ka long 55.7 dB (A) kaba long kham heh ban iaka sur jingsawa por mynsngi kat kum u dak pud ba lah buh na ka bynta ki jaka shong briew kaba long ~ 55.0 dB (A). Haka por mynmiet ka jingsawa ka ba lah dep shim rekod ka long 46.5 dB(A) kaba long ruh kham heh ban ia ka sur jingsawa kaba mynmiet kat kum u pud ba lah buh ~ 45.0 dB (A). Ka jingheh jong ka sur jingsawa kaba malu mala haba ia nujor bad u dak pud ba lah buh ka lah ban dei na ka daw jong ka jaka shong briew lane kiwei kiwei pat ki jingsawa ba mih na ki jingtrei kam trei jam jong ki briew ki ba don hapoh kane ka shnong.

- **N9:** U pud sur jingsawa ha ka shnong Lumshnong ka long 56.9 dB(A) kaba long kham heh ban iaka sur jingsawa por mynsngi kat kum u dak pud ba lah buh na ka bynta ki jaka shong briew kaba long ~ 55.0 dB (A). Haka por mynmiet ka jingsawa ka ba lah dep shim rekod ka long 47.2 dB (A) kaba long ruh kham heh ban ia ka sur jingsawa kaba mynmiet kat kum u pud ba lah buh ~ 45.0 dB (A). Ka jingheh jong ka sur jingsawa kaba malu mala haba ia nujor bad u dak pud ba lah buh ka lah ban dei na ka daw jong ka jaka shong briew lane kiwei kiwei pat ki jingsawa ba mih na ki jingtrei kam trei jam jong ki briew ki ba don hapoh kane ka shnong.
- **Ki Jaka Iew**
- **N7:** U pud sur jingsawa ha ka NH6 ka long 67.8 dB (A) kaba long kham heh ban iaka sur jingsawa por mynsngi kat kum u dak pud ba lah buh na ka bynta ki jaka khaii ne jaka iew ka ba long ~ 65.0 dB (A). Haka por mynmiet ka jingsawa ka ba lah dep shim rekod ka long 54.2 dB (A) kaba long ruh hapoh u dak pud sur jingsawa kaba mynmiet kat kum u pud ba lah buh ~ 55.0 dB (A). Ka jingkieh jong ka sur jingsawa ha ka por mynsngi haba ia nujor bad u dak pud ba lah buh ka dei na ka daw jing ka jingiaid jingieng jing ki kali khlen sangeh haka surok bah kaba marjan ha ka por mynsngi katba ka jinghiar jong ka sur jingsawa ha ka por mynmiet ka dei na ka jingduna jong ki kali ki ba iaid ba ieng ha kane ka surok bah.

Ka jaka Kharkhana

N10: U pud sur jingsawa ha ka kharkhana dewbilat ka long 66.4 dB(A) kaba long hapoh u pud buh dak joing ka sur jingsawa ha ka por mynsngi kat kum u dak pud ba lah buh naka bynta ki jaka kharkhana kaba long ~ 75.0 dB (A). Haka por mynmiet pat ka sur jingsawa ba lah dep shim rekod ka long 61.4 dB(A) kaba long ruh kham hapoh u pud ba lah buh dak naka bynta ka sur jingsawa ha ka por mynmiet kaba long ~ 70.0 dB(A).

Ka jinglong khuid longsuba jong ka um

Ia ki nuksa (Sample) jong ka um lah shim na ki 3 tylli ki tyllong um kiba don ha jrong bad 9 tylli na ki tyllong kiba shapoh khyndew. Ka jinglap ia ki tyllong um kiba don shapoh khyndew.

Ka jingkhuid jingsuba jong ki tyllong um kiba don shapoh khyndew

Ka jingkhuid jingsuba jong ki tyllong um kiba don shapoh khyndew jongki jaka markhap ha ki pung (Kiba don markhap), ki pung um ba shu tih (Borewell), kiba don ha ka shnong Wahiajer, ki umpohliw kiba don ha ka shnong Umbadoh, Thangskai, Lumshnong, Umrason, Chiehruphi, bad ka shnong Mynkre ki pyn ishai ba baroh ki dak jingkhuid ki don hapoh u dak pud u ba bit ia ka ban pyndonkam na ka bynta ka um bam um dih (IS:10500) lait noh na ka jinglong jngut na ki nuksa ba lah shim na ka shnong Thangskai kaba don khydiat ha jrong jong u pud ba lah buh kata ka long 1.19 NTU.

Te kumta lah shim bad pynkut ba kine ki um ki long kiba bit ban pyndonkam na ka bynta ka um bam um dih bad kiwei kiwei pat ki jingpyndonkam ha ing ha sem.

Ka jinglap naki tyllong um kiba ha jrong khyndew kiba don ha ka jaka khappud sawdong jong ka jaka treikam (Buffer Zone)

1. Ka jinglong khuid long suba jong ka um kaba don shaneng jong ka Wah Lukha (SW1) ka pyni ba baroh ki dak jingkhuid ki don hapoh u dak pud ba lah buh kyndon da ka CPCB naka bynta ki um kiba don shajrong khyndew. Ka BOD level ka long 7.1 mg/l bad ka DO level ka long 4.9mg/l. Kane ka jingwad bniah ka pyni ba ka um ba lah dep shim nuksa na ki jaka bapher bapher kaba don shajrong khyndew lah ban buh kyrdan ia ka ha ka klass "D" kaba mut kaba bit naka bynta ki mrad khlaw bad bad ki dohkha dohum kat kum ka kyndon ba lah buh daka CPCB.
2. Ka jinglong khuid long suba jong ka um kaba don sharum jong ka Wah Lukha (SW2) ka pyni ba baroh ki dak jingkhuid ki don hapoh u dak pud ba lah buh kyndon da ka CPCB na ka bynta ki um ki ba don shajrong khyndew. Ka BOD level ka long 2.5 mg/l bad ka DO level ka long 4.9 mg/l. Kane ka jingwad bniah ka pyni ba ka um ba lah dep shim nuksa na ki jaka bapher bapher kaba shajrong khyndew lah ban buh kyrdan ia ka ha ka Klass "C" kaba mut ka um bam um dih kaba bit ba biang ban pyndonkam hadien ba lah dep pynkhuid da ki rukom pynkhuid ba ju pyndonkam man la ka por bad da kaba pyndonkam da ki dawai pyniap khniang kat kum ba lah buh kyndon da ka CPCB na ka bynta ki um bam um dih kiba don shajrong khyndew.
3. Ka jinglong khuid long suba jong ka Wah Lubha (SW3) ka pyni ba baroh ki dak jingkhuid ki don hapoh u dak pud ba lah buh kyndon da ka CPCB naka bynta ki um kiba don shajrong khyndew. Ka BOD level ka long 3 mg/l bad ka DO level ka long 4.1 mg/l. Kane ka jingwad bniah ka pyni ba ka um ba lah dep shim nuksa na ki jaka bapher bapher kaba shajrong khyndew lah ban buh ia ki ha ka kyrdan "C" kaba mut ka um bam um dih kaba bit ba biang ban pyndonkam hadien ba lah dep pynkhuid da ki rukom ba ju pyndonkam man lah ka por bad da kaba pyndonkam da ki dawai pyniap khniang kat kum ba lah buh kyndon da ka CPCB na ka bynta ki um bam um dih kiba don shajrong khyndew.

Ka Jinglong jingman jong ka khyndew

La shim nuksa ia ki khyndew (Sample) na ki 8 tylli ki jaka

Ka jaka treikam pdeng tynrai (Core Zone): Ki nuksa test jong ka khyndew ba lah shim na ka jaka pdeng tynrai ka pyni ba ka jingkhleh jong ka khyndew ha kane ka jaka ka kynthup ia ka dewbyrtha, ka PH ka long hapdeng 5.2. ka jingdon jong ki kynja sbob kum ki kynja sbob met baim ka long 0.73%, ka jingdon ka Nitrogen ka long 54.4 mg/kg, ka long kaba duna bad ka jingdon Pottassium ka long 12.8 mg/kg, ka long kaba duna katba ka jingdon jong ka

Phosphorous ka long 11.6 mg/kg ka long kat ban biang. Narmar kata lah ban pynkut ba ka khyndew ka long ka ba duna ha ka jingdon sbob ha kane jaka treikam pdeng tynrai.

Ka jaka iada pyniakhlad (Buffer Zone): Ia ki nuksa khyndew (samples) ba la shim na kane ka jaka ka pyni ba ka jingkhleh jong ka khyndew ha kane ka jaka ka khythup ia ka dewbyrtha, ka lynnong dewbyrtha, bad ka dewbyrtha ba lam khleh shyiap. Ka rong khyndew ka long saw bthuh, saw bthuh jngum bad rong stem blad. Ka PH ka iapher naka 6.9-8.2 ka jingdon jong ki kynja sbob kum ki kynja sbob met im ka long 0.56-1.3%, ka jingdon ka Nitrogen ka long 47.4 mg/kg haduh 155 mg/kg ka long kaba duna. Ka jingdon jong u Pottassium ka long 4.5 mg/kg haduh 15.9 mg/kg ka long kaba dang duna bad ka jingdon jong u Phosphorous ka long 11.2 mg/kg – 20.3 mg/kg ka long pdeng haduh kaba
heh Kat kum ki dak ka jingdon sbob ka pyni ba ka khyndew ka long pdeng ha ka jinglong sbob dei na ka daw ka jingdon duna jong ka nitrogen and u potassium katba ka jingdon u phosphorous ka long kat ban biang.

Ki kynja baim bad ka jinglong jingman jong ki.

Ki dieng ki siej bad ki syntiew ki skud (Flora): Ha ka jaka trei kam pdeng tynrai (Core Zone) dei namar ka jingtih bad jingkhlong maw haki jaka ba markhap ym shym la don eh shibun jaid ki jaid syntiew ki skud. Ki jaka ba marjan ki don tang 3 haduh 4 jaid, ki jaid bapher bapher. Ka kyrteng jong ki jaid syntiew ki skud kiba la lap haka por ba leit jngoh ia kane ka jaka ki long kum Thysanolaena maxima, Cocos nucifera, Morinda citrifolia, Citrus indica, Musa acuminata, Psidium guajava, Ficus elastic bad kiwei kiwei.

Ki mrad ki mreng bad ki sim ki doh (Fauna): Ki don 3 tylli ki jaid schedule – II (ki Bsein bam Khnai, ki Bsein Kobra bad kynja Risang bthuh) la lah ban iohi ha kane ka jaka treikam pdeng tynrai. Tang khyndiat jaid eh ki mrad ba ai buin khun bad ki mrad ba par ki don ha kane ka jaka pdeng.

Ka jaka iada pyniakhlad (Buffer Zone): **Ki dieng ki siej bad syntiew ki skud ha kane ka jaka iada pyniakhlad (Flora of Buffer Zone):** Ha kane ka jaka pdeng ki don shibun jaid ki dieng, ki dieng phyrngop, ki kynja kynbat, ki jingthung shna syntiew, ki jyrmi bad ki phlang lah ban shem hange. Iaka list ba bniah la dep ai haka lynnong 3.13 haka biological environment section.

Ki mrad ki mreng bad ki sim ki doh haka jaka iada pyniakhlad (Fauna in Buffer Zone): Kane ka jaka iada kyrpang ka dap da ki bun jaid bha ki jaid sim bad ki mrad. Ka kynthup haduh 10 km sawdong bad ka kynthup ruh ia ka khlaw reserve, ki khlaw ba la iada kyrpang, ki jaka rep jaka riang bad ki jaka thylli namar kata ka daw la lap bad shem shibun eh ki jaid mrad bad ki sim ki doh.

Ki jaid sim jaid mrad ba la jan duh jaid:

La lap ba ki don tang 8 jaid kiba hap haka thup scheduled I ha kane ka jaka iada pyniakhlad (Buffer Zone) kum ki Lophura leucomelanos (Syiar Khlaw), Elephas maximus (Hati), Canis lupus pallipes (Suri India), Python molurus (Bsein Len Pula), Melurus ursinus (Dngiem Khlaw), Nycticebus (Shrieh Suki), Manis pentadactyla (Tyrapud), bad Hoolock hoolock (Shrieh

Huleng). La lap ruh iaki katto katne ki jaid kiba hap ha ka thup Schedule II kiba don ha kane ka jaka iada pyniakhlad (Buffer Zone).

Ka jingpule iaka ImlangSahlang bad ka ioh ka kot:

Ki don haduh 22 tylli ki shnong kiba hap haka jaka iada pyniakhlad (Buffer Zone): la kane ka jinglum jingtip la pyndep lyngba ka jinglum jingtip kaba nyngkong bad ka jinglum jingkhein kaba ar kaba la pynshong nongrim naka khana samari jong ka ri India 2011.

Ka jaka treikam pdeng tynrai (Core Zone): Ym don briew ne shnong ba shong ba sah hapoh jong kane ka jaka treikam pdeng, namar kata ym don kano ka jingpynkynriah jaka iaki briew ha kane ka par mawshun.

Ka jaka iada pyniakhlad (Buffer Zone): Ka jingpule iaka jaka iada pyniakhlad ka kynthup iaki 22 tylli ki shnong kat kum ka khana samari jong ka ri India kaba 2011. Ka jindon briew baroh hapoh kane ka jaka lum jingtip ka long 8920 ngut. Ka jingdon antad jong ki shynrang naki khynthei kat kum ka khana samari 2011 la shem ba ka long 986. Baroh ki longing kiba don ha kane ka jaka lum jingtip ki long 1582 tylli. Ka jingpyniahap kyrdan jaid ka long ki Schedule Caste (SC) ki bun briew kumba 0.11% bad ki riwulum (ST) ki don kumba 98.11%

Ka jingpule shaphang ki surok bad ka leit ka wan (Traffic Study Results):

Surok Bah No.6	Ka jingthew	Ba Lah Don Lypa		Ban Shna Thymmai
	Ka Jingiar (m)	14		
	Ka Jinglah bor ban Kit (PCU/Hr)	2143		
	Ki Kali (PCH/Hr)	410		2
	LOS	0.19 i.e Cat "A"		0.19 i.e Cat "A"

Narmar ka jinglah bor jong ka NH-6 ka kham khlain ban iaka jingbun jong ki kali ba iaid ba ieng, narmarkata ka daw ka jingiaid jingieng jong ki kali ha kane ka Par mawshun kaba don ha Madan Pyrda (Block 2) kan nym wanrah ia kano kano ka jngdheng kali ha kane ka surok.

KI JINGEH KIBA LAH BAN MIH NE BAN KTAH IA KA MARIANG SAWDONG SAWKUN BAD KI LAD KI LYNTI BAN PYNDUNA BAD PYNJEM IA KI JINGSHAH KTAH.

Ka jingpynbha ia kane ka jaka treikam (Land Environment):

- ❖ Kane ka jaka ba mut ban pyntrei ka dei ka jaka bym long khlaw ka bym lah ban kyrshan ia kano kano ka kam rep kam riang. La dep pynpoi iaka aplikation naka bynta ka forest clearance.
- ❖ Kat kum ka mining plan ba la dep mynjur ka jingheh jong ka jaka ban tih ne khlong maw ka long 9.6 ha. labaroh kane ka jaka kaba la dep sei ne tih maw yn sa

pynjyrngam biang daka ba thung jingthung ne dieng haba kut jong ka por ia kut ban trei (lease period).

- ❖ Iaka khyndew kaba ha jrong yn pyndonkam naka bynta ka kam ban pynjyrngam biang ia kaba yn buh shipor haka jaka kaba shaphang shathie.
- ❖ Iaka kam ban pynjyrngam biang yn pyntrei kam naka khyndew kaba mih na shajrong kaba mih haka por ba tih haka jaka kaba kham shngain kumba 7.50 m ha marjan u pud u sam ba lah buh bad mynjur ban trei yn thung daki jaid dieng kiba shait mih eh ha kine ki jaka.

Ki kynja um pohkhyndew bad ka jinglong jong ki kynja mawsiang bad ki maw kiba don shapoh khyndew:

- ❖ Kan ym don kano kano ka jingpynthud iaki kynja umpohliw shapoh khyndew haka por ba tih bad pyntrei namarba ka jaka shong jong ki umpohkhyndew yn ym iakynduh haduh 700 mRL kat kum ka jingpule bniah iaki thliw ba la sam bad ka jingtih kaba duna tam kan long haduh 704 mRL.
- ❖ Ki mar pohkhyndew lane mawshun kim shym don ne kynthup ia kino kino ki kynja dawai ba lah ban mih ne um noh naki maw.
- ❖ Khnang ban iada naka jingpynjakhlia ne jingpynjaboh ia ki tyllong um kiba don shalor, yn shna 3 tylli ki tank kynshew um kiba ka jingheh jong ki kan long 10m X 5m X 2m. Yn shna ruh ia ki kynja nur um, ki ban ia id lyngba ia kine ki tank kynshew um ha shwa ba kin tuid sha ki nala um kiba la don lypa.
- ❖ Haka por ba pynkhuid iaki kor ki bor mashin kiba heh, katto katne ki umphniang bad kynja umphniang ba rben (grease) kin tuid lang bad ka um shaka jaka kynshew pynkhuid (filtration tank). Ia kine yn sa pyniakhlad da ki kor ki bor ne da ka bor briew bad hadien nangta iaka um kaba khuid yn sa lah ban pyndonkam naka bynta ki kam thung jingthung.
- ❖ Iaka jingtuid jong ka umphniang naki kor ki bor yn sapyllang bad lum thikna bad yn sa aiti iaki sha ka tnad treikam ba lah dep ioh jingbit.

Ka Jingpynkhuid iaka lyer:

Ia kane ka jingpyntrei yn trei haka jaka kaba heh kumba 10.71 ha. Iaka jingtrei ne tih khlong maw yn pyntrei daka buit treikam kaba plied bad tih shwa iaka jaka haka dur sawdong lyngba ka jingiarap jongki ki kor ki bor bad kane ka kam kan kynthup ia shibun ki jingpyntreikam kum kaba samthliw, pynbthei, ban shan ia ki ryndan, ban kit, ban pynhap, ka jingtih bad jingkit ki dei ki tyllong ba kongsan jong ki kynja phngit bad jingpynmih lyer (SO₂ bad NO_x). Ka jingmih jong ki kynja lyer (gaseous) ki dei kongsan eh naka daw jong ka jingpyndonkam iaki kor ki bor mashin ban tih ne khlong maw (excavator), ki kali trok dumper bad kiwei kiwei ki kali ban kit ban bah.

Kine harum ki long ki lad jingiada kiba yn sa pyntreikam.

- ❖ Iaki kor ki bor samthliw yn sapyndait ryngkat ki tiar synreit um.
- ❖ Iaki kor pynpait maw yn pyndonkam naka bynta ban pynpait iaki maw kiba khamheh khnang ban pynduna iaki pum pum ne ban pynduna iaka bor jingsawa.
- ❖ Yn pynduna katba lah ia ka jingpynbthei bad ka jingpynduna iaka bor ki tiar pynbthei ka iarap shibun iaka jingpynjaboh iaka lyer.

- ❖ Yn pyndonkam iaka jingsynreit um haman la ka por haki surok kiba don hapoh par, haki surok kiba donkam naka bynta ban kit bad ban pynhap bad haki jaka ia kyliang khnang ban pynduh ne pynduna iaka bor pynmih ia u pui pui. Yn peit bniah bad pynbiang man la ka por iaki kali bad ki kor ki bor.
- ❖ Yn pynbiang iaki tiar iada met (PPE) kum ki mask iada khmut shabaroh ki nongtrei.
- ❖ Yn peit bniah bha iaka jinglong khuid long suba jong ka lyer ha man la ka por.
- ❖ Yn sa thung jingthung ne ki dieng ki siej ha baroh shilynter kane ka jaka iada kyrpang jong kane ka jaka trei kam kaba don 1.11 ha. Nalor kane iaka jaka ka ban sa tih ne khlong maw kaba long 7.0 ha ruh yn sa pynim biang da kaba thung dieng thung siej ynda la kut kane ka por trei kam.

Ka jingsawa kaban sa mih:

Ka jingmih jong ka jingsawa ki dei naka daw ka jingsawa kaba mih naka jingtreikam ki kor ki bor, ka jingsamthliew, ka jingpynkit maw bad jingpynhap maw, bad ruh ka jingsawa kaba mih naka iaid ka ieng jong ki kali. Ka jingpynmih iaka jngkhynniuh kaba shapoh ka dei namar ka jingpynbthei. Kine harum ki long ki lad jingiada kiba yn sa shim:

- ❖ Yn sumar bad pynbiang bha iaki kor ki bor da kaba ai umphniang bad umphniang rben (greasing) ha man la ki por ban pynduna iaka jingpynmih jingsawa.
- ❖ Yn sa pynbiang bad pyndait ia ki tiar pynduna jingsawa naka bynta baroh ki enjin diesel.
- ❖ Iaka jingsamthliew yn sa leh da ka jngiarap jong ki tiar samthliew ki ba nep bha, kane kan iarap shibun eh ha ka ban pynduna ia ka sur jngsawa.
- ❖ Yn pynduna ia ka bor pynbthei daka ba pynduna antad bha iaka jingjingai, bad pynduna iaka por jingsamthliew.
- ❖ Ki kor pynpait maw yn sa pyndonkam ban pynpait ia ki maw kiba heh.
- ❖ Iaka ka jingpynbthei yn sa leh ha ka por ba ka jinglong jong ka Suinbneng ka biang bha haka por mynsngi.
- ❖ Ki synduk jingtap kiba la pyndait ha ki kor ki bor ba khlain bor ha ki mashin bad ki kali ki iada shibun eh ia ki nongpyntreikam ba kin lait na ki jingsawa kiba jur.
- ❖ Yn sa thung shibun bah ki jingthung bad ki dieng ki siej sawdong kane ka jaka par tih maw bad ka ban long ruh kum ka jingiada ban pynduna ia ka jingsawa.
- ❖ Iaki jingpynbthei yn ia leh ban pynduna khnang ban ioh iaka jngpynduna ha ka jingsawa bad ka jngkhynniuh jong ka khyndew.
- ❖ Yn pyndonkam da ki jngpynbthei ki bym dei daka bor ding elektrik (Non–Electric Detonators) khnang ban pynduna iaka bor khynniuh jong ka khyndew.
- ❖ Yn pynbiang iaki tiar iada met (PPE) kum ki mask jingiada pui pui, ki jingset skhor bad kiwei kiwei shabaroh ki nongtrei.
- ❖ Yn peit bad eksamin bha iaka koit ka khiah jong baroh ki nongtgrei haman la ka 6 bnai.

Ka jingsumar ia ki um ki wah:

- ❖ Ym don kino kino ki kynja tyllong um ha kane ka par tih mawshun. Ia ka jingtrei ban tih ne khlong maw yn pyntrei tang shajrong ki jaka ba shong um.
- ❖ Ka jingjylliew tam jong ka jingtih maw naka bynta kane ka por kaba nyngkong kan long 740 mRL. Iaka jaka shong ne tyllong um ym shym la shem haduh 704 mRL katkum ka jing eksamin bniah iaka thliw ba lah sam shapoh. Yn ym don kano kano ka jingtyngkhuh ne jingpynthud iaki tyllong um kiba don shapoh.
- ❖ Yn shna iaki nala rit bad ki kynroh iada ban khanglad iaka jingtuid ka um bad ka jingtuid jong ki jaboh jabain. Iaka um kaba la pyllang haki thliw yn pyndonkam naka bynta ban synreit iaka par maw bad ban pyndonkam ha ka ban pynjyrngam biang iaka jaka ba lah mangkyrpang.

Ka jingsumar iaki kynja baim:

- ❖ Yn thung ia ki dieng ki siej bad ki jingthung ha kane ka jaka treikam kaba don 1.11 ha. Nalor kane iaka jaka ne ka par ka ban tih ne khlong maw kaba don 7.0ha ruh yn sa pynbha bad pynjyrngam biang da kaba thung jingthung bad ki dieng ki siej haba kut jong kane ka por trei kam.
- ❖ Yn sa synreit um haman la ka por khnang ban khang lad ne pynduna iaka jingher u pui pui.
- ❖ Yn shna ia ka jingker ka ba biang baroh sawdong ia kane ka jaka par maw khnang ban khang lad iaki mrad ki mreng kiba shu iaid kulmar.
Ka plan ban sumar bad pynneh pynsah iaki mrad ki mreng naka bynta ki mrad kiba hap ha ka thup Schedule I kiba lah lap ha kane ka jaka ba la wad bniah bad la pynkhreh ruh iaka mangtynka naka bynta kane ka kam.

Ka imlang sahleng bad ka ioh ka kot:

- ❖ Kane ka jingtreikam kan pynkhlain bha iaka jingaikam aijam ha kane ka thain. Narmarkata kan don ka jingkieu bha ha ka liang ka ioh ka kot ha baroh ki liang hadien ba kane ka jingtreikam ne projek ka la sdang.
- ❖ Kane ka jingpyntreikam (Projek) kan wan rah iaki lad ki lynti ioh kam ioh jam naka bynta ki nongbylla. Kan don ka jingkylla kaba biang bha ha ka liang ka imlang sahleng bad ka ioh ka kot jong ki briew ha kane ka thain.

Ka jingktah kaban mih naka daw jongka kit kabah:

Ka jingktah ha ka laing jong ka Liang kabah kan long kaba duna bha narmarba ia ki mar ne ki mawshun yn pynkit bad pyndonkam da ki kali trok kiba heh 14 cum ban pynpoi sha ka kharkana dewbilat kaba jngai kumba 7 km naka par tih mawshun. Ka jingsynreit um lyngba ki kali kit um yn leh khnang ban pynduna ia u pui pui. Nangta shuh shuh iaki kali trok kiba pyndonkam naka bynta ban kit ia u maw yn sa pynbiang bad peit bha ba kin ym pyntuid ia kino kino ki kynja pui pui ne phngit haka por ba kit ba bah.

Ki prokram kiba ia dei bad ka jingpeit pyrman bad peit bniah bha iaka mariang bad ki sawdong sawkun

Ka jngpynpeit bniah ha ki bun tylli ki jaka kiba don hapoh kane ka jaka par tih maw bad haka jaka peit bniah kaba don 10 km sawdong yn sa pyntreikam man la ka por. Ladep pynkhreh ruh ia shibun tylli ki lad jingiada naka bynta ka jingpeit bniah ia ka mariang. Lada dep jied iaki jaka ban shim ia ki sample nuksa kat kum ka jaka ba ka jingpynjaboh ba mih na ka daw jong kane ka kam tih mawshun, ka rukom long jong ki nala, ka dur ka dar jong ka jaka bad ka jinglong jingman jong baroh ki kynja ba don jingim.

Kiwei kiwei pat ki jinglum jingtip

Ka jinglum jingtip bad ka jingpule lypa ia ki jingma jingmynsaw ki ban sa mih bad ka plan ne jingpynkhreh lypa ban iada na kano kano ka jingjia ba sngewsih.

Ia kane ka kam tih ne khlong maw yn pyntreikam da kata ka buit treikam da kaba yn plied shwa iaka khyndew na jrong bad nangta yn sa khlong bad sei ia u maw da ka jingiarap ki kor ki bor mashin jong ka juk mynta ha ryngkat ka jingsamthliew bad jingpynbthei. Yn pyndonkam ruh iaki tiar ki tar bad ki kor ki bor ban tih ne khlong maw kum ki puh shilum (excavator), ki kali trok dumper bad kiwei kiwei de. Ia kane ka kam tih bad khlong maw yn leh hapoh ka jingpeit bniah peit pyrman kaba bniah bha, narmarkata ka daw ka jingdon jong kano kano ka jingma jingmynsaw kan long kaba duna bha. Iaka plan ban iada na kano kano ka jingshleis um ha ryngkat bad ka plan ban ai jingiada. Yn pynkhreh shwa ia ka plan na ka bynta ka jingpynbthei bad kumno yn pynwandur ia ki sharing ne kyrdanlum ha shwa ba kane ka jngtreikam kan sdang.

Ki lad ai jingiada ha kaba iadei bad ka jingkoit jingkhiah bad jingshngain jong ki nongtrei:

Ka kompani kan shim ia ka jingkit khlieh naka bynta ka jingiada ia ki nongtrei bad kan wan rah ruh ia ki lad ki lynti ban ai jingshakri haka liang ka koit ka khiah bad ban wanrah ruh iaka jaka treikam kaba koit ba khiah bad ba shngain. Kine ki lad ai jingiada harum yn sa pyntreikam ha kane ka jaka par maw khnang ban wanrah ia ka jingkoit jingkhiah bad jingshngain.

- Ka jingithuh lypa bad ka jingpynkhreh lypa ia kano kano ka jingma ka ba lah ban mih naka jingkoit jingkhiah ha kane ka jaka trei.
- Yn bud pyrkong bha iabaroh ki kyndon ban lait na kino knio ki jingma da baroh ki nongtrei.
- Yn sa eksamin bad peit bniah iaka jingkoit jingkhiah jong baroh ki nongtrei hamana la ka por katkum ki kyndon ba lah buh da ka DGMS khnang ban lait na kino kino ki jingjia ba sngewsih bad ruh khnang ban bud ryntih iaki kyndon jingiada ba lah buh.
- Yn ai bad pynbiang sha baroh ki nongtrei da ki tiar iada met kiba donkam kum ki juti, ki jingiada khlieh, ki tiar set iada shkor, ki jingiada kti, ki ñt iada khmat naka bynta ki nongkynthah welding, ki tyllai iada naka bynta ki nongtrei kiba dei ban trei shajrong bad kiwei kiwei.
- Yn pynbiang iaki lad ai jingiarap dawai dashin iabaroh ki nongtrei. Yn pynlong iaka jingeksamin ei ia ka koit ka khiah jong baroh ki nongtrrei hamana la ka por.
- Yn peit bad eksamin bniah thik pa thik iaka jinglong ka met ka phad bad ka koit ka khiah jong baroh ki nongtrei.

- Kan don ka jingeksamin shwa ia ka koit ka khiah jong baroh ki nongtrei.
- Yn pyllong iaka jingai jinghikai bad ka jingpynsgewthuh shaphang kumno ban sumar naka jingmysaw bad ka jingkoit jingkhiah.
- Yn buh jingkybmaw ne rekod nakabynta uwei pa uwei u nongtrei bad yn pynthymmai iakane ka thup lum jingtip haman la ka por ban peit bniah bad tip iaka jingshitom jong uwei pa uwei u nongtrei.

Ka jingiarap ban pynbha biang bad ka jingpynkynriah jaka.

Kane ka kam Jingpyntrei lane ka projek kam donkam ia kano kano ka plan ban ai jingsumar pynbha ne ka plan pynkynriah jaka thymmai namarba kam don kano kano ka shnong ne jaka shong briew ha kane ka jaka par.

Ki jingmyntoi ki ban sa mih na kane ka jingpyntreikam (projek)

Kan don ka jingkylla kaba bha bad donkamtam ka ban mih na kane ka jingpyntreikam ha ka liang kaba ia dei bad ka imlang sahang bad ka ioh ka kot jong ki briew bad kane kan iarap ban pynneh pynsah iaka jingkylla ha baroh ki liang ha kane ka thain. Kane ka kam pyntrei kan noh synniang shibun eh sha ka jinkyntiew ia ka ioh ka kot da kaba ai kam ai jam sha ki 30 ngut ki briew bad kiwei kiwei ki lad jingbylla ne kamai kajih ha kane ka jaka. Yn thung kam da ki briew trai shnong naka bynta kane ka kam pyntrei. Ka jingioh kam ioh jam jong ki briew kan kyntiew iaka ioh ka kot bad ka roi ka par jing ki ing ki sem jong ki bad ka ban ai kam ai jam kylla pat sha kiwei kiwei pat ki long ing long sem da kiwei pat ki rukom kamai kajih bad ki lad shakri khnang ban ioh jingkamai bad kane kan wan rah bad kyntiew ia ka rukom im ha kane ka thain. Ka jingpynlong iaki prokram ban ai jingeksamin ei ia ka koit ka khiah, ka jingai jinghikai pynsgewthuh shaphang kumno ban kyntiew iaki shnong nongkyndong jong ki briew ha ka liang pule puti, ban sumar khuid iala met ka phad ha ka liang ka koit ka khiah bad ki jingai jinghikai ia ki kam shna jingshna, kine baroh kin kyntiew ia ka rukom im jong ki briew ha kane ka thain.

Ka plan lane ka jingpynkhreh kyrpang ban iada bad sumar ia ka mariang

Ka plan jingpynkhreh kyrpang ban iada iaka mariang da kaba wanrah iaki lad ki lynti ban sumar iaka mariang khnang ba lah ban pyndep iaki kyndon katkum ba lah buh jong ka IBM/MoEF&CC.

Ka rukom pynkhreh ka ban treikam bha kaba kynthup iaka jingpeit bniah haman la ki por iaki dkhot bad bynta jong ka mariang khnang ba kan wanrah ia ka jingbha ka ban iaineh iaisah. Katkum ka jingpynshong nongrim na kane ka kam trei ne projek bad kiwei kiwei pat ki kam ki jam kiba ia dei, la dep pynkhreh ia ka plan ai jingaida naka bynta ia baroh ki bynta kiba donkam, bad ka jingmang tyngka naka bynta kane ka long Rs.15.07 Lakh kum ka jingpyllut bad Rs. 12.47 Lakh ka jingpyllut kaba dei ban pyllut man la ka por ne man la u snem. Ia kine ki jingmang tyngka la dep pynkhreh daka kompani Green Valliey Industries Limited (GVIL). Kan don ruh ka jingpeit bniah kaba thikna bha iaka jinglong jingman jong ka mariang haman la ka por. Iaki jingbuh jingkybmaw ne rekod yn sa buh ha ki standard phorm. Iaki jaka na ka bynta ban shim jingkhein iaki jaka shim nuksa yn sa jied. Ha kane ka por jingtreikam yn sa peit pyrman bad peit bniah bha iaka mariang haman la ka 3 bnai ne ka 6 bnai.

Ka jingpynkut

Narmarkata, lah ban pynkut hangne ba ka sur kaba biang lane kaba bha tam ba ynda hadien ba la pyntreikam iaki lad ban pynduna iaki jingeh bad iaka plan pynkhreh iada kyrpang iaka mariang, ka jingpyntreikam ia kane ka projek kan wanrah tang khyndiat eh ki jingktah iaka mei mariang.