

KA EXECUTIVE SUMMARY

NA KA BYNTA BAN PYNMII MAWSHUN

6.88 LAK TON SHI SNEM

JONG KA PAR MAWSHUN

HA

UMSOO-MOOTANG LIMESTONE MINE (BLOCK-III)

UMSOO-MOOTANG AREA, THANGSKAI, NARPUH ELAKA,

P.O. LUMSHNONG, EAST JAINTIA HILLS DISTRICT,

MEGHALAYA

KA CAPTIVE LIMESTONE MINE

(JINGHEH : 4.90 HA)

JONG KA

M/s. ADHUNIK CEMENT LIMITED

(KA TNAD JONG KA DALMIA CEMENT (BHARAT) LTD.)

August, 2016

KA EXECUTIVE SUMMARY

1.1 INTRODUCTION

(Ka Jinglamphrang)

Ka **M/S ADHUNIK CEMENT LIMITED (ACL)**, kaba long ka tnad jong ka Dalmia Cement (Bharat) Ltd. (DCBL), ka la pynkhreh ban tih bad ban pynmih mawshun kumba 6.88 lak ton ha ka shi snem na ka par mawshun ba shu wai lane ka Mining Lease area kaba heh kumba 4.90 hectare (Block III) kaba don ha Umsoo-Mootang Area, Thangskai, Narpuh Elaka, P.O. Lumshnong, East Jaintia Hills District, Meghalaya.

Kane ka Mining Lease ka dei kawei na ki par mawshun (Captive Limestone Mine) kaban pyndap ia ka jingdonkam jong ka kharkhana pynmih dewbilat, ka Adhunik Cement Ltd., kaba lah ban pynmih haduh 1.3 million ton shi snem u clinker. Ka Ministry of Environment and Forest & Climate Change (MoEF&CC), New Delhi, ka la dep ban ai ia ka Environmental Clearance na ka bynta ban pyntreikam ia kane kharkhana pynmih dewbilat. Kat haduh kine ki sngi, ka kharkhana ka dang hap ban tih ia u mawshun tang na ki par Block-I, Block-II, bad Block IV ha kaba kawei kawei ka heh 4.9 hectare bad ha kine ki par ka rukom tih ia u mawshun ka dei beit da ka opencast mining. Nalor jong kine, la don ruh ka jingthmu ban sdang pyntreikam noh ia ka Block III kaba heh 4.9 hectare bad ka Block V kaba heh 128.52 hectare ia kaba dang ap ban ioh jingbit.

Ka jingheh jong ka Block III ka long hapoh 5.0 hectare, bad katkum ki kyndon ba la kdew ha ki mat S.O. 1533 dt. 14th Sept, 2006, bad S.O. 3067(E) dt. 1st Dec, 2009, bad S.O. 2731 (E) dt. 9th Sept, 2013, ym donkam satia ia ka Environmental Clearance na ka bynta ka Mining Lease ia ki jaka kiba ka jingheh ka long hapoh 5.0 hectare. Lah ban kdew ruh ba katkum ki kyndon ha ka S.O. 2601 (E) dt. 7th Oct, 2014, ia ki jaka kiba duna ia ka 50 hectare, lait noh ki par dewiong, la pynhap hapoh ka EIA Notification, 2006. Kumta, katkum kane ka kyrwoh, kane ka jingthmu na ka bynta ka mining lease kaba heh 4.90 hectare, la pyniasoh ha ka Category-‘B’ lane Kyrdan ‘B’ ha kaba yn hap ban ioh ia ka Environmental Clearance na ka State Environment Impact Assessment Authority (SEIAA), Meghalaya.

Ka sorkar Meghalaya katkum ka kyrwoh FO:128/2013/20 dt. 10th June 2014, ka la pynbna ba ia ka Narpuh reserved forest ne ka 'lawkyntang yn tip noh kum ka Wild Life Sanctuary. Ka MoEF&CC ka la pynskhem ruh ia ki pud ki sam jong kane ka Wild Life Sanctuary lyngba ka kyrwoh SO: 3124 (E) dated 20th Nov. 2015. Une u pud u long kumba 6.18 km – SSE na u paia no. NP-13 jong ka Narpuh Sanctuary bad 6.06 km –SSE na u paia no. 6 jong ka Eco-Sensitive Zone Narpuh WLS. Kumta, katkum ka kyndon ha ka EIA Notification, 2006 vide SO 1599 dt, 25th June 2014, ia kane ka projek la pynhap ha ka Kyrdan 'B'(Category 'B').

1.2 PRESENT PROPOSAL

(Ka Jingthmu)

Ka ACL ka don jingthmu ban pynmih haduh 6.88 lak ton shi snem u mawshun na ka par mawshun Block III kaba don ha Umsoo- Mootang, Thangskai, East Jaintia Hills District, Meghalaya, ban pyndap ia ki jingdonkam ha ka kharkhana shna dewbilat ka jong ki. Kane ka par mawshun ka don ha ka jaka ba la shu shimwai, kaba heh kumba 4.90 hectare. Ka sorkar Meghalaya ka la ai ia ka LOI lyngba ka kyrwoh MG/2/2009/141 dated 22nd June 2009 bad ia ka mining plan la dep mynjur da ka Indian Bureau of Mines lyngba ka kyrwoh 314(3)/2009-MCCM(CZ)/MP-21 dated 3rd Dec. 2009. Kane ka jaka ban tih wai lane ka Mining lease area ka hap hapoh jong ka 'lawkyntang bad ia kane lah dep ban ioh jingbit ban tih mawshun (Stage II approval) lyngba ka kyrwoh 3-MGB 059/2012-SHI/6632-33 dated 5th March 2014. Lah ban kdew ruh ba la siew Rs. 35,77,000/- na ka bynta ka Net Present Value (NPV), Rs. 2,59,263/- na ka bynta ka Compensatory Afforestation (CA), bad Rs. 68,190/- na ka bynta ka Safety Zone CA, sha ka Adhoc CAMPA jong ka Forest Department.

Yn tih ia u mawshun da ka rukom 'open cast' mining da kaba shu drill, pynbthei bom, bad kiwei kiwei ki rukom kat kum ka juk ba mynta.

Na ka bynta ban wai bad ban tih ia kane ka par mawshun , la mang pisa kumba Rs. 150 lak. La mang ruh ban pynlut kumba Rs. 100 lak eiei ban pyntrei ha ki par kiba don ha ki Block I, II, III, IV, bad V bad kumba Rs. 17 lak shisnem kum ka recurring cost. Nalor kane, lah mang kyrpang kumba Rs. 232 lak na ka bynta ban pynlut ha kaba iadei bad ka jingiada ia ka mariang bad Rs. 58.098 lak na ka bynta ba pynneh ia ki jingthung jingtep bad ki kynja mrad ba kyrpang kiba im ha kane ka buffer zone. Kumta, haba kyllum lang

baroh, lah mang kumba Rs. 390 lak eiei ban pynlut ha kaba iadei bad ka Environmental Management Plan (EMP) bad kiwei kiwei ki lad iada mariang.

1.3 DESCRIPTION OF ENVIRONMENT

(Ka Jinglong Ka Mariang Ha Kane Ka Thain)

Ka jaka ha kaba la iit jingtip bniah bha (study area) ha kaba iadei bad ka jinglong jong ka mariang ha kane ka jaka ban tih ia u mawshun ka saphriang haduh kumba 10 kilometer radius na ka par mawshun kaba don ha Umsoo- Mootang, Thangskai, East Jaintia Hills District, Meghalaya.

Kum shi bynta jong ka Environmental Impact Assesment, ia ki kam jurip halor ka jinglong jingman jong ka mariang ha kane ka jaka, la sdang ha ki aiom lyiur jong u snem 2016 naduh ki bnai March 2016 haduh May 2016.

Ka jinglong jong ka jing beh lyer (Meteorology):

Ka jingshem ha kaba iadei bad ka jingbeh lyer ka long kummne:
Ha kine ki bnai, la shem ba ha kiba bun ka por, ka lyer ka ju beh na shaphang Shathie sha Sepngi - Shathie – Sepngi (SSW to SW). Ka jingbeh lyer sha kane ka phang ha ka jingsted kaba duna ia ka 1.0 kmph ka long 50.27% , bad ha kine kipur ka jingsted jong ka lyer ka don hapteng 1 – 15 kmph. Hynrei don pat hateng hateng ba ka jingsted ka poi haduh 15 kmph.

Ka jinglong jong ka lyer ba ngi ring mynsiem (Air Environment):

Ha kaba iadei pat bad ka jingdon ki pui-pui (Particulate Matter, PM10 and PM 2.5) bad ki lyer bih kum ka Sulphur dioxide (SO₂) bad Nitrogen dioxide (NO_x), la buh 8 tylli ki Ambient Air Quality station ban jurip ia ka jinglong jingman jong kitei ba la kdew haneng ha kane ka thain ba don ka par mawshun.

Ka jingshem ka long kummne harum:

La shem ba kine baroh ki long kiba biang katkum ki kyndon ba la buh da ka National Ambient Air Quality (NAAQ).

Ka jinglong jong ka lyer ba ngi ring mynsiem (Ambient Air Quality)

Code No.	Jaka	98th Percentile values			
		PM10 ($\mu\text{g}/\text{m}^3$)	PM2.5 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
A1	Mine site	53.5	25.4	9.1	10.9
A2	Plant Site	54.0	26.8	9.7	11.8
A3	Thangskai	48.3	22.9	8.4	9.7
A4	Lumshnog	45.9	21.0	9.5	10.2
A5	Pynurkha	49.7	20.6	10.3	11.0
A6	Umswng	47.8	21.7	7.9	9.1
A7	Wahkmar	51.2	24.2	8.1	9.3
A8	Mynkree	46.2	19.8	8.9	10.0
NAAQ Standards for Industrial, Rural and Other Areas. 		100	60	80	80

Note : CO values are observed less than 1 ppm during study period.

Ka jinglong jong ka jingsawa (Noise Environment):

Ia ka jingsawa (Noise level), la shim ha ki 8 tylli ki jaka kiba don marjan bad ka par mawshun.

Ka jingshem ka long ba ka jingsawa ka long hapdeng 50.6 – 61.3 dB (A) ha ka por mynsngi, bad 40.8 – 55.1 dB (A) ha ka por mynmiet.

Ka jinglong jong ka um (Water Environment):

Ha kaba iadei pat bad ka jinglong jingman jong ka um (Water quality), la ioh lum na ki 6 tylli ki tyllong um ba shu tih (ground water), bad 2 tylli pat na ki wah kiba don marjan jong kane ka par mawshun ban test ia ki. La shem ba ka jinglong jingman jong ka um ka biang ha baroh ki liang katkum ka drinking water Standards of IS 10500.

Ka jinglong jong ka khyndew (Soil Environment):

Ia ka jinglong jong ka khyndew ha kane ka jaka , la shem ba ka khyndew ba la ioh ban lum na ki 8 tylli ki jaka kiba don hapoh ka 10km radius, kim don ki jakhlia ba pynsniew.

Ka jinglong jong ki jingthung bad ki mrad (Biological Environment):

Ha kane ka jaka, la shem ba ym don kino kino ki jait jingthung ne ki jait mrad ba hap ban pynneh ne pynim kyrpang.

Katkum ka Biodiversity Conservation Plan ba la pynkhreh bad ithuh da u Chief Wildlife Warden, Meghalaya, Shillong, la pynthikna ba ym don kino kino ki jait jingthung ne ki jait mrad ba hap ban pynneh ne pynim kyrpang lait noh tang ia kawei ka jait sim ba kyrteng ka Assam Bambo Partridge (*Bambusicola fitchi hapkinsoni*) kaba la iohi hapoh ka 10km radius ba don ka par mawshun. Kumba la kdew haneng, la mang kyrpang Rs. 58.098 lak ban pynlut na ka bynta ba pynneh ia ki jingthung jingtep bad ki kynja mrad ba kyrpang kiba im ha kane ka buffer zone katkum ka jingai jingmut jong ka Forest Department, Govt. of Meghalaya.

Lah ban pyntip ruh ba baroh ki par mawshun ryngkat bad ka kharkhana shna dewbilat ki don bad hap hapoh kane ka buffer zone, kumta kane ka Biodiversity Conservation Planka treikam lang na ka bynta baroh ar jait.

1.4 ANTICIPATED ENVIRONMENTAL IMPACTS & MITIGATION MEASURES (Ka jinglong jingman bad ki jingantad kiba lah ban ktah ia ka mariang & ki lad jingiada)

Ka Adhunik Cement Limited (ACL), ka don jingthmu ban pynmih kumba 6.88 lak ton shi snem u mawshun na kane ka par. Ka ACL ka pyniaid ia ka 1.5 million ton shi snem Kharkhana pymih dewbilat, ka 25MW Power Plant, bad ki par mawshun (Captive Limestone Mines) Block I kaba pynmih 1.5 lak ton shi snem , Block II kaba pynmih 2.83 lak ton shi snem, bad Block IV kaba pynmih 7 lak ton shi snem bad kiba heh kumba 4.9 hectare kawei kawei.

Ka jingpynkhreh ban ioh ia ka Mining Lease na ka bynta ka Block V (128.52 hectare, kaba lah ban pynmih 2.0 million ton shi snem) bad ka Block III, ka dang ia id shaphrang.

1.4.1 AIR ENVIRONMENT

(Ka jinglong jong ka lyer ba ngi ring mynsiem)

La antad ba kan don ka jingmih ki pui-pui na ka jingtih ia u mawshun ha ki kyrdan bapher bapher kum ha ka por tih, pynbthei, bad kiwei kiwei.

Katkum ka jingiohi ia ka jingmih ki pui-pui na ki par na Block I, Block II, bad Block IV, ka la don ka jingantad lypa ba haduh kumba katno lehse ba ka jingmih ki pum-pum na ka Block V bad Block III kin long ynda lah sdang ban pyntreikam ia ki.

Production Details

(Ka jingtih bad jingpynmih ia u mawshun)

	Lak Ton Shi Snem (LTPA)	
	Block III	Block V
Limestone	6.88	20.0
Soil	4.28	22.5
Overburden (sandstone)	3.15	
Total Material Handlling	14.31	42.52

Haba iadei bad kane, la pyndonkam da ka AERMOD ban khein bad ban antad ia ka jingmih bad jingdon ki pui-pui ha ka lyer ba ngi ring mynsiem ynda la sdang ban treikam ha kine ki par mawshun.

OVERALL SCENARIO, $\mu\text{g}/\text{m}^3$

(Sources: Emissions of limestone mine-Block III & Block V)

	PM10 $\mu\text{g}/\text{m}^3$
Baseline Concentration (max)	54.0
Predicted Concentration (max)	22.0
Overall Scenario	76.0
NAAQ limit for Rural and Residential area.	100

Note: max of 98th percentiles values

Values in parenthesis are National Ambient Air Quality (NAAQ) standard limits

1.4.2 NOISE ENVIRONMENT

(Ka jinglong jong ka jingsawa)

Ka jingsawa ka mih naba pyndonkam ia ki machine ha ka jingsam thliw, pyn bthei, compressors, ka jingiaid ki kali bad kiwei kiwei. Yn nym don kano kano ruh ka jingktah ia ki jaka ba don hajan ka par. Hynrei kane ka jingsawa kan dei tang ha ka jaka trei ba marjan bad ka machine.

1.4.3 WATER ENVIRONMENT

(Ka jingpyndonkam jong ka um ka wah)

Katkum ka jingkhein, la antad ba ka jingdonkam ia ka um ha kaba iadei bad ka jingtih ia u mawshun na ki par kan long kumba 20m^3 eiei ha ka shi sngi.

1.4.4 LAND ENVIRONMENT

(Ka jinglong jong ka khyndew ka shyiap)

Ka jingpynmih ia u khyndew u shyiap na ki par mawshun ynda la sdang ban tih ia ki tad haduh ban da lut u mawshun kan long kumba 10.21 lak ton eiei, kata 4.28 lak ton u khyndew bad 5.93 lak ton u shyiap. Ia kine ki khyndew ki shyiap ki bym lah ban pynleit kam, yn theh noh ia ki ha ki jaka ba la pynkhreh lypa. Kine ka jaka theh ki don 2 tylli bad kiba jylliew kumba 6 meter kawei kawei ha ki 2 kyrdan (terrace), bad yn thung dieng thung siej pat ha kine ki jaka hadien ba la dep pynsboh ia ki.

Ka rukom long jong ka jaka ba don ki par mawshun ia mynta hi ki long ki bym seisoh seipai. La khmih lynti ba hadien ba la kut ka jingtih ia u mawshun kan don ka jingkylla ha ka rukom long ka jaka kummne harum:

Post Mining Land Use Pattern of the Mining Lease Area

Sl. No.	Land Use	Area in HA
		Block III
1.	Mined out area with terrace reclamation	4.21
2.	Area under barrier zone/greenbelt	0.69
3.	Roads & Infrastructure	-
Total		4.90

Ka ACL ka don jingthmu ban thung dieng bad kiwei kiwei ki jait jingthung katba dang tih artad ia u mawshun kummne harum:

- i) Ha statutory barrier zone kaba 7.5 m - 0.68 hectare
- ii) Ha jaka ban pyndap khyndew kaba don shabar jong ka jaka wai – 1.50 hectare

Ka ACL ka don jingthmu ruh ban thung da ki dieng bad kiwei kiwei ki jait jingthung katba dang tih mawshun bad hadien ba la dep tih ia u mawshun na kine ki par. La khmih lynti ban thung kumba 2180 tylli ki dieng met bad ki diengsoh ha kine ki 5 snem katba dang tih artad ia u mawshun na kine ki par bad ki briew jong ka company kiba dei peit ia ka kam thung dieng soh dieng pai (Horticulturist) kin peit khmih bha ba kane ka jingthmu kan urlong.

1.4.5 GROUND VIBRATIONS

(Ka jinglong jong ka jingpynbthei ha ki par)

Kan don ka jingkhynniuh ne ka jingkhii ha ka sla khyndew ha ki por ba pyndonkam ia ki jingpynbthei (blasting). Ka company kan peit bniah bad shim ki lad ki lynti baroh bad bud ia ki kyndon ba la buh da ka DGMS khnang ban ym mih kano kano ruh ka jingsyier ne jingmysaw iano iano ruh ha ka por ba pyndonkam ia kum kine ki jingpynbthei.

1.4.6 IMPACT ON FLORA & FAUNA

(Ka jinglong jong ki jingthung jingtep bad ki sim ki doh)

Ka rukom long jong ka mining lease area ha Block III ka heh 4.90 hectare, bad ia mynta hi ka long ka jaka ka bym seisoh seipai bad bym i don ki mrad ki mreng ne ki sim ki doh kiba pynlong jaka sah hangta.

1.4.7 ENVIRONMENT MANAGEMENT PLAN

(Ka plan pynneh mariang)

Kan don ka plan na ka bynta ban pynneh ia ka mariang katba dang tih bad hadien ba la dep tih ia u mawshun na ki Block III bad Block V. Namar ba ka Block IV ka don marjan bad ki Block III & V, kumta yn pyntreikam da kajuha ka plan na ka bynta kine ki par mawshun bad kita ki long kummne harum:

Common EMP for proposed ML Block III & Block V and existing ML Block IV

Sl. No.	Environmental Component (Ki jinglong ka mariang)	Proposed EMP (Ka jingthmu ne plan)
1.	Air Pollution (Ka jinglong jong ka lyer ba ngi ring mynsiem)	• Da kaba pyndonkam da ki wagon drill kiba don ki tiar ba ring ia ki pui pui (dust collectors). • Ban pyndonkam da ki drill kiba nep ban sam thliaw ha ki maw. Bad ban pyndonkam da ki bom kiba dei ki millisecond delay detonator. • Yn synreit um ha baroh ki lynti iaid ha man la ka por. • Yn pynbha ki surok na ka por sha ka por ban lait na ki jing pum pum. • Yn ym pynbthei bom bad tih mawshun ha ki por jur lyer. • Ia ki nongtrei baroh ha ka jaka trei yn pynbiang da ki jingda ne ki masks. • Ia ki kali bad ki machine baroh yn peit bad sumar bha ban pynduna ia ki jingmih tдем na ki. • Yn thung dieng thung siej sawdong ka par ban iarap pynduna ia ka jing pum pum.
2.	Noise (Ka jinglong jong ka jingsawa)	• Ia ki kali bad ki machine baroh yn peit bad sumar bha ban pynduna ia ki jingsawa na ki. • Ia ki nongtrei baroh ha ka jaka trei yn pynbiang da ki jingset shkor ne ki ear plugs. • Yn pyndonkam ia ki jingpynbthei tang ha ka por mynsngi • Yn pynduna ia ka por trei ia ki nongtrei ha ki par. • Yn pyndonkam da ki rukom pynbthei bom katkum ka juk mynta. • Ban pyndonkam da ki bom kiba dei ki millisecond delay detonator bad proper stemming ban pynduna ia ka jingsawa. • Yn thung dieng thung siej sawdong ka par ban iarap pynduna ia ka jing sawa.
3.	Water Pollution (Ka jinglong jong ki um ki wah)	• Yn tei da ki check dam ha manla ki jaka ba i donkam khnang ban pynduna ia ka jingtuid ka khyndew, kaba mih na ka jingtih mawshun, na ka jingshah rong noh ha ka um kum ha ka por slap. • Yn shna da ki kynroh ban iada ia ka jingshah rong noh ka khyndew (erosion) bad ki nala ban tuid ka um. • Yn ym tih ia u mawshun tad haduh ban pyn duh ia ka tyllong um. • Yn pynkhuid shua ia ka um ba jaboh kaba mih na ka kharkhana ha shua ban pyntuid ne pyndonkam biang pat ia ka.

Sl. No.	Environmental Component (Ki jinglong ka mariang)	Proposed EMP (Ka jingthmu ne plan)
4.	Ground Vibration (Ka jinglong jong ka jingkhieh ne khniuh ka sla khyndew)	- Ban pyndonkam da ki short delay detonator ha ki thliw ban pynbthei bom. - Yn pyndonkam da ki tiar pynbthei kiba kat kum ka juk ba mynta - Yn bishar bniah bha ia ka rukom pynbthei khnang ba kan ym don kano kano ka jingktah iano iano ruh ha kano kano ruh ka liang khamtam ha kaba iadei bad ka jinglong jingman jong ki jingtei kiba don marjan bad ka par.
5.	Safety in Blasting (Ka jinglong jong ka rukom pynbthei)	- Yn pyndonkam da ki siren ne ki jingpynsawa ha shua ban sdang ki jingpynbthei. - Yn rah da ka lama saw ha shua ban sdang pynbthei bad da kaba jyrngam hadien ba la dep pynbthei. - Yn pynieng da ki notis board ban batai ia ka por ban pynbthei bad ki jingmaham.
6.	Solid Wastes (Ka jinglong jong ki khyndew ki shyiap bym longkam)	- Ia ki khyndew ki shyiap ki bym lah ban pynleit kam, yn theh noh ia ki ha ki jaka ba la pynkhreh lypa. - Yn shna da ki nala heh ha trai jong kitei ki jaka bad kumjuh ruh ha kylleng ki jaka ba don ki par mawshun. - Yn thung da ki dieng bad kiwei kiwei de ki jait jingthung ha trai jong kitei ki jaka khnang ban iada ia ka jingtuid ka khyndew.
7.	Landscape (Ka jinglong jong ka jaka ba don ki par)	Ban ioh ban pyndonkam biang ia ki jaka hadien ba la dep tih ia u mawshun, yn pyntreikam da ka Progressive Mine Closure plan ba la mynjour da ka IBM.
8.	Greenbelt (Ka jinglong jong ki jingthung jingtep)	Yn thung dieng thung siej ha kylleng ka par katkum ka jingbthah jong ka IBM Mining Plan.
9.	Flora & Fauna (Ka jinglong jong ki syntiew ki skud bad ki sim ki doh)	Yn pyntreikam katkum ki kyndon ba la buh da ka Forest Department, Meghalaya.

Sl. No.	Environmental Component (Ki jinglong ka mariang)	Proposed EMP (Ka jingthmu ne plan)
10.	Occupational Health and Safety (Ka jinglong jong ka kam ba iadei bad ka koit ka khiah)	• Ki tiar ki tar kum ki mashin tih maw bad kiwei kiwei kin long kiba suk bad ba shngain ban pyndonkam • Yn ai ia ki nongtrei ban pyndonkam da ki jingtap bad jingsop ban iada ialade. • Yn don ka jingpeit man ia ka jinglong ka koit ka khiah jong ki nongtrei baroh • Yn ai ruh ka jinghikai ba paka ia baroh ki nongtrei. • Yn don ki dawai dashin ba la buh kyrpang ha ka mines ofis. • Yn pynbiang da ki sem ba don AC ia kiba niah ia ka HEMM. • Yn pynbiang ki jingtbeh jingshai ha kylleng ki par maw. • Yn pynbiang ruh ki um bam umdih bad ki jaka shongthait ha ki par maw.
11.	EMP Budget (Ka mang tyngka jong ka kam pynneh mariang)	
A	EMP	• La mang ban pynlut kumba Rs. 100 lak eiei eiei ha kaba iadei bad ki kam iada mariang ha ki par kiba don ha ki Block I, II, III, IV, bad V bad kumba Rs. 17 lak shisnem kum ka recurring cost.
B	Mitigative Measures	• La buh kylluid ruh ban pynlut kumba Rs. 232 lak ha kaba iadei ban pynduna ia ka jingpynjot ia ka mariang ha baroh ki par mawshun.
C	Conservation of Biodiversity	• La mang kyrpang ruh Rs. 58.098 lak na ka bynta ba pynneh ia ki jingthung jingtep bad ki kynja mrad ba kyrpang kiba im ha kane ka buffer zone.

1.4.8 SOCIO ECONOMIC ENVIRONMENT (Ka jinglong ka imlang sahleng bad ka jingioh jingkot)

La shem ba ym don satia ki nongshnong shnong ne ki ing ki sem ne ki jingtei nam ha ka jaka ba don ka par mawshun Block III. Kumta kan ym mih kano kano ruh ka jingkyndria shnong iano iano ruh bad ka company ka don jingmut ruh ban pyntreikam ia ki mat kiba la kdew ha ka section 1.8 jong ka “Project Benefits and Socio-Economic Environment”.

1.5 ANALYSIS OF ALTERNATIVES (TECHNOLOGY & SITE) (Ka rukom tih ia u mawshun)

Ka ACL ka don jingthmu ban tih ia u mawshun da ka rukom tih 'open cast mining' da kaba pyndonkam da ki kor ki bor kiba kat kum ka juk mynta naduh kaba tih bad haduh kaba pynkit ia ki maw.

1.6 ENVIRONMENTAL MONITORING PROGRAMME (Ka rukom iada bad pyn neh ia ka mariang)

Ha kaba iadei pat bad ka kam iada bad pyn neh ia ka mariang, ka ACL kan bud beit ia ka jingbatai kumba la kdew da ka Meghalaya State Pollution Control Board, bad ka CPCB/IBM/MoEF&CC. Ia ka jingjurip ha kaba iadei bad kane, yn shimti hi da ka Environmental Cell jong ka company.

Ban peit bad ban jurip ia ka jinglong jingman jong ka mariang, ka ACL ka la pynkhamti ia ka Environmental Management Cell kaba long kawei na ki tnat treikam jong ka ACL kaba la don lypa ha ka kharkhana pynmih dewbilat, ban leh ia kaba donkam baroh.

Ia kane ka tnat, la khlieh da u Plant Head ne u Khlieh duh jong ka kharkhana. Ki nongtrei ha kane ka tnat ki long kiba la pyntbit ialade ha ki kam pyn neh mariang, kum ki Environmental Engineer bad ki Environmental Manager.

Kane ka tnat treikam kan pyniaid bad pyntreikam ia ka pisa ba la mang kyrpang kumba Rs. 100 lak eiei eiei ha kaba iadei bad ki kam iada mariang ha ki par kiba don ha ki Block I, II, III, IV, bad V bad kumba Rs. 17 lak shisnem kum ka recurring cost.

Estimated Cost Of Environmental Protection Measures For Entire Area Covering Mining Lease Blocks I, II, III, IV, and V

Sl. No.		Capital Cost (Rs. Lakhs)	Recurring Cost (Rs. Lakhs)
1.	Air Pollution Control	45	4
2.	Water Pollution Control		
3.	Noise Pollution Control		
4.	Environment Control and Management	12	4
5.	Reclamation borrow/mined out area & greenbelt	22	4
6.	Occupational Health	9	2
7.	Others, Community development measures	12	3
Total		100	17

1.6 PROJECT BENEFITS AND SOCIO ECONOMIC ENVIRONMENT (Ki jingmyntoi na ka projek)

Kum shi bynta ha ka jingiadei jong ka kompani bad ka imlang sahlang, ka Dalmia Cement (Bharat) Limited, kaba long ka kmie jong ka ACL ka kwah ban don ka jingiadei kaba jan eh hapteng ki nongshong shnong (local communities), ki nongtrei mon sngewbha (NGO), ka sorkar (Govt.), bad baroh kiba ia don kti ne don bynta bad ka company.

Ka kompani ka don jingthmu ban iarap bad ban iatrei lang khamtam bad ka shnong lyngba ka Corporate Social Responsibility (CSR) ban kyntiew ia ka imlang ka sahlang bad ka roi ka par.

Employment (Ka lad ioh kam ioh jam)

Ka ACL ka plie lad plie lynti ia ki nongshong shnong ha ki thain ba marjan ban trei ban ktah ha kitei ki par mawshun. Don baroh 44 ngut ki briew kiba ioh kam ha ka ACL ban trei ha ki par maw kiba rim bad 66 ngut kiwei pat ki don bynta ha ki jingtrei watla kim dei ki briew kiba la thung kam da ka ACL.

Socio-economic measures (Ka jinglong jong ka imlang sahlang bad ka ioh ka kot)

Ka jinglong jong ka jingioh jingkot bad ka imlang ka sahlang ruh ka la kham kiew naduh ka jingwan seng ia ka kharkhana pynmih dewbilat ha katei ka jaka.

Ka kompani ka thrang ruh ban kyntiew ia ka ioh ka kot lyngba ka jing iadei jong ka bad ka shnong khamtam kito kiba ia trei bad ka lyngba ka Corporate Social Responsibility (CSR) ba la pyniaid da ka Dalmia Bharat Foundation (DBF).

Ka kompani ka la pynlong ia ka jingwad jingtip ha kaba iadei bad ka jinglong jingman bad ka ioh ka kot ha kiba bun ki shnong khnang ban ioh jingtip ia kaei ba ki nongshongshnong ki donkam eh lane kaei ka bynta ba ki donkam jingiarap ban kyntiew ia ka jinglong briew man briew. Ki shnong kiba la pyndep ia kum kane ka wad jingtip lyngba ka DBF ki long kummne: Mynkree, Lumshnong, Moosianglamarenew, Moosianglamare old, Chiruphi, Thangskai, Nongsning, Wahiajer, Umstein, bad Umlong.

Hadien ba la pyndep ia kane ka jing wad jingtip ha u bnai March 2014, ka Participatory Rural Appraisals, la sngewthuh ba ki mat ba kham kongsan ba ai jingiarap

ki long ha kaba ia dei bad ka um bam um dih, ka kam rep, ka rukom tyngkai bording, bad ka jingdonkam ia ki jinghikai halor ki kam shna jing shna (skill training).

Ha ka snem mang tyngka 2014-15, ka company ka la pynlut kumba Rs. 42 lak bad ha u snem 2015-16 la pynlut kumba Rs. 46 lak na ka bynta ki kam bapher bapher ha kaba iadei bad ka imlang sahlang.

Cumulative Projected Budget Proposed For Next 5 Years

(Ka jing mang pisa na ka bynta ki 5 snem ban wan)

Dei halor kine ki jingtip, hadien ba la dep wad bniah, ba ka company ka la mang kyrpang Rs. 245 lak na ka bynta ban pynlut ha kine ki 5 snem ban wan ha baroh kawei ka projek (kharkhana dewbilat, Power plant, bad ki par Block I, II, III, IV, bad V).

CUMULATIVE PROJECTED BUDGET PROPOSED FOR NEXT 5 YEARS (in Rs.)						
CSR Program Area	2016-17	2017-18	2019-20	2020-21	2021-22	2022-23
Soil and Water Conservation	540000	594000	617760	636293	674470	714939
Energy Conservation & Climate Change Mitigation	808000	888000	924352	952083	1009208	1069760
Livelihood Skill Training	234000	257400	267696	275727	292270	309807
Social Development	1842000	2026200	2107248	2170465	2300693	2438735
Program Execution Cost	76000	83600	86944	89552	94925	100621
Total CSR Budget	3500000	3850000	4004000	4124120	4371567	4633861

CONCLUSION

(Jingpynkut)

Ka ACL ka don jingthmu ban pyntreikam ia ka Environment Management Plan bad ban kyntiew ruh ia ka imlang sahlang bad ka roi ka par ha ki shnong kiba don marjan bad kane ka par tih mawshun.