

Executive Summary
for
Public Hearing
of
Ferro Silicon Plant
(8940 Metric Tonnes Per Annum)
&
Captive Power Plant of 10 MW
at

**Vill: Riwiang BPO Seinduly, Nongngstoin,
West Khasi Hills, Meghalaya**

of
Shree Shakambari Ferro Alloys Pvt. Ltd.
**Vill: Riwiang BPO Seinduly, Nongngstoin,
West Khasi Hills, Meghalaya**



Ecomen Laboratories Pvt. Ltd.

FlatNo8, 2nd Floor
Arif Chamber-V Sector-H
Aliganj Lucknow

Ka Executive Summary

Jong

Ka Jingpynsngew Paidbah

Halor

Ka Ferro Silicon Plant

(8940 Metric Tonnes Per Annum)

&

Ka Captive Power Plant ba 10 MW

Ha

Vill: Riwiang BPO Seinduly, Nongstoin,

West Khasi Hills, Meghalaya

Jong ka

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1.0 KA JINGBATAI HALOR KA PROJECT

1.1 Ka lamphrang

Ka Shree Shakambari Ferro Alloys Pvt.Ltd (ba la ju tip mynshuwa kum ka Shree Shakambari Coke and Mining Pvt. Ltd) ka pynpaw ia ka jingkwah ban seng ia ka karkhana Ferro Alloys-Ferro Silicon ka ban pynmih 8940 metric tonnes man la ka snem da kaba pyndonkam ia ka 10 MVA submersible arc furnace bad ka Captive Power Plant ba 10 MW ha ka shnong Riwiang hajan Riango ha West Khasi Hills district.

Ka West Khasi Hills district ka don ha bynta ba pdeng jong ka jylla Meghalaya. Kane ka district ka long kaba sahdien haba phai sha ki karkhana. Ka jingwan jong kane ka karkhana ba la kdew haneng kan kyntiew ia kane ka district ha kane ka bynta.

Ia ki artylli ki marpoh khyndew ba donkam jong u Ferro Alloy-Ferro Silicon la lap ba ki don bunbah ha ka jylla Meghalaya bad Assam bad ha kiwei ki jylla ka thain lam mihngi. Hynrei namar, ka jingduna ha ka bording kaba lah ban pyndonkam kata ka Meghalaya State Electricity Board (MeSEB), ym thikna ban ioh bording kaba iaineh na ka bynta ki karkhana Ferro Alloy-Ferro Silicon kiba dei ki karkhana kiba donkam bha ia ka bording kaba iaineh khlem jingthut. Nalor kane, u dewion uba dei u marpoh khyndew uba donkam ban pynmih bording ha ka Captive Power Plant u don shibun ha ka shnong Nirang ha West Khasi Hills district, Meghalaya.

1.2 Ka jingiaid adkar bad ka kyndon ain (Statutory Compliance)

Kane ka project ka long kaba thymmai bad ki bor pyniaid ki long kiba kloie bad kiba kitkhia ban wanrah ia ka roi ka par ba iaineh bad ban tem ia ka jingpynmih jaboh ha ka mariang bad ban ia id adkar katkum ka kyndon ain ka State Pollution Control Board bad ka jingbthah jong ka MoEF's.

Da kaba ia id ryntih bad ka Environmental Assessment Notification 2006 jong ka Ministry of Environment and Forest, ka long kaba donkam ban ioh ia ka jingbit halor ka jingbym ktah ia ka mariang da kaba ai ia ka Form-1 ban seng bad pyntrei ia ka project. Ka presentation ia ka TOR la leh ha u Bnai Nailar (September) 2008 hakhmat ka EAC (Industry) bad ka TOR ba la bthah da ka EAC la iohpdian ha u bnai Risaw 2009.

Ka M/s Shree Shakambari Ferro Alloys Pvt.Ltd ka la pyntrei ia ka M/s Ecomen Laboratories (P) Ltd., Lucknow kaba dei ka laboratory kaba la ithuh da ka MoEF, New Delhi ban pynkhreh ia kane ka juh. Ka M/s Ecomen Laboratories (P) Ltd ka la leit jurip halor ka mariang bad jingpeit pyrman ia ka mariang naduh u bnai Risaw-Nohprah ha ka snem 2010 bad lum ruh ia ki jingtip na kiba bun ki tyllong bad kane ka long ka nongrim jong kane ka kaiphod draft EIA/ EMP.

1.3 Kaba kdew ia ka jaka (Site Location)

Ka jaka na bynta ka project ka don ha ka shnong Riwiang, BPO: Seinduly, hajan ka shnong Riango, lyngba ka Nongstoin, West Khasi Hills district, Meghalaya . Ka jing jngai jong kane ka

jaka na ka nongbah Shillong ka long 208 km, bad 190 km na Guwahati. Ka surokbah NH-44 E ka pyniasnoh ia ka shnong Riwiang bad ka nongbah Shillong. Kane ka jaka la pyniasnoh ruh lyngba ka surok bad ka Nongstoin, kaba don 25 km na kane ka jaka project. Ka jingthohdur kaba kdew ia kane ka jaka ka don ka **Exhibit No: 1.1.**

1.4 Ka jingbatai shaphang ka jaka bad ka nala um (Topography and Drainage)

Kane ka jaka ka don ha ka them wah kaba don ia ki jingat ki bym ryntih ba la mih na ka bor jong ka mariang ha ka them wah. Namar kata la donkam ban ot bad pynryntih ia kane ka jaka na ka bynta ban tei ia ka karkhana. Ki don ki wahduid ha kane ka bynta ba at phyllung kiba tuid sha ka wah Riwiang.

1.5 Jingbatai ia ka rukom treikam (Process Detail)

A) Ferrosilicon Plant

Ki marpoh khyndew ban pyndonkam ha kane ka karkhana ban pynmih ia u Ferrosilicon ki dei u maw Quartz, Petrocoke, Mill Scale.

Kine ki marpoh khyndew ba la khleh lang la leit buh ha ka lawer ding kaba duna bording bad la pyniaid ia ka bording kaba khlain lyngba ki Electrodes. Baroh ki process parameter la pyniaid katkum ka PLC system. Hapoh ka lawiar ding, ia u basic ore la pyniaid lyngba ka oxidation ha ka jingkhluid kaba hapdeng 1550 haduh 1750 C bad la pynduna lyngba u Petrocoke. Ia ki tдем ba mih na kane la pyllait lyngba ka rukom kaba bniah bha kaba pynduna ia ka jingtah sha ka mariang (highly sophisticated pollution control system) bad ia ka pumpum la pyllang ha ki filter bags. Ia u nar Ferro Alloys uba la um bad ka slag la pyllang bad pynwandur kum ki cake ha ka karai Cast iron kaba heh. Ia ka jingbatai halor ka rukom treikam la pyni ha ka Exhibit No 1.2.

B) Captive Power Plant

Ka Captive Power Plant ka ba la thmu ban tei ha kane ka jaka kan pynmih 10 MW ka bording. Kane ka plant kan don ki boiler ba la pyndonkam da u dewiong kaba lah ban kit 45 TPH bad kan don kawei ka extraction cum condensing Turbo-generators kiba lah ban pynmih 10 MW lyngba ka steam cycle.

Ka steam cycle ka dei ka jingbatai ia ka jingkylla jong bor jong ka jingkhluit sha ka bor jong ki kor ha ka turbine shaft, lyngba ki thermodynamic processes ki bapher bapher kiba don ia ka jinglah ban pynmih ia ka net heat flow lane ka bor treikam haba buh hapdeng tyllong jong ka bor bad ka energy sink. Ia ka bor jingkhluid la ioh da kaba thang ia u dewiong. Kane ka cycle ka donkam ia ka working fluid bad la shem ba ka jinghaw bakhluid ka dei ka working fluid kaba biang duh namar ka don ia ka bor jingkhluid kaba khlain, ka high critical temperature, la lah ban shem suk bad ha ka dor ba tad bad kam long bih. Ka bor jingkhluid kaba khlain jong kane ka working fluid ka wanrah ia ka jingmih ha ki kor kiba barit na ka bynta ka jingdonkam bording lane ka heat transfer. Ka jingbatai ia kane ka rukom treikam la ai ha ka **Exhibit No 1.3.**

1.6 Jingdonkam bad jingpynlut ia ki mar ki mata

A) Na ka bynta ka Ferrosilicon Plant

S.No	Mar ba dang rew (RAW MATERIALS)	UNIT	Ka jingpynlut ban pynmih shi ton u nar
1.	Quartz	Ton	1.600
2.	Petro coke	Ton	1.500
3.	Mill Scale	Ton	0.350
4.	M.S Rounds	Ton	0.025
5.	Lancing pipes	Ton	0.005
6.	Casing sheet	Ton	0.003
7.	Electrode carbon paste	Ton	0.060
8.	Oxygen cylinders	Cum	4.000
9.	Power	KWH	8000

B) Raw Material na ka bynta ka CPP

Dewiong: 2000 MT kaba yn ryngkat bad ka jingpynlut hapdeng ka 10 sngi

Mawshun: 600 MT kaba yn ryngkat bad ka jingpynlut hapdeng ka 10 sngi

LDO-10KL ban buh ha ka storage tank

Yn buh ia u dewion bad u mawshun ha ka jaka ba la tap na ka bynta ka jingpynlut ba 10 sngi.

1.7 Ka jingdonkam ia ka Um

La antad ba yn donkam 250 KLD ka um na ka bynta ka CPP bad 62 KLD na ka bynta ka karkhana Ferrosilicon bad kiwei kiwei ki jingdonkam. Ka tyllong um na bynta kine ki jingdonkam ka dei ka wah Riwiang.

1.8. Ka jingbatai halor ki nongtrei

Ka karkhana Ferrosilicon bad ka Captive Power Plant kan treikam ha ki lai bynta. Ka jingdon jong ki nongtrei (construction workers) ha ka por ba bunkam bha kan long 125 ngut.

1.9. Ka dor jong ka Project

a. Ka karkhana Ferroalloy Silicon: Ka jingbei tyngka baroh kan long Rs.3017.00 lakh

b. Captive Power Plant: Ka dor baroh kan long 5678.00 lakh

1.10 Ka jingshim por ban tei

Ka jaka kaba don 11.47 acre ka jingheh na ka bynta ka karkhana la dep thied lypa. Kan shimpor 14 bnai ban tei ia ka karkhana Ferrosilicon bad ka CPP.

1.11 Ka Bording

Ka jingdonkam bording na ka bynta ka karkhana ka long 11 MVA. Ka Captive Power Plant kan shalan bording ia ka karkhana.

1.12 Fuel

Yn pyndonkam da u dewiong ba lah ban ioh na ka shnong Nirang ha West Khasi Hills, Meghalaya na ka bynta ka power plant.

2.0 KA JINGBATAI HALOR KA MARIANG

Ia kane ka karkhana yn tei ha ka jaka kaba don 11.47 acre ka jingheh. Ka jingpeit pyrman ia ka jinglong jingman ka mariang la pynlong na ka bynta ban lum ia ki jingdkew base line naduh u bnai Risaw haduh u bnai Nohprah ha ka snem 2009 ha kaba la shim por 12 taiew. Ka Micrometrology, ka jinglong jingman jong ka lyer, ka jinglong jingman jong ka um, ka jingthew ia ka rukom tuid um, ka Noise Level, ka jinglong jingman jong ka khyndew, Socioeconomic & Biodiversity studies la pynlong ha ki jaka 10 km pyllun ka jaka ba la thmu ban tei ia ka karkhana.

2.1 Ka Metrological Study:

Sr.No.	Ki Jingkdew (Parameters)	Risaw	Naiwieng	Nohprah
1.	Max. Temperature (°C)	25.1	21.6	18.5
2.	Min. Temperature (°C)	13.9	8.5	5.9
3.	Max. Relative Humidity (%)	77	78	75
4.	Min. Relative Humidity (%)	41	39	35

2.2 Ki Jinglong Jingman jong ka Lyer (AAQ):

Kerteng Jaka	SPM (µg/m3)		RPM(µg/m3)		SO2(µg/m3)		NOx(µg/m3)	
	Max	Min	Max	Min	Max	Min	Max	Min
Hapoh Project site	75.0	65.0	28.0	21.0	8.0	5.0	17.0	12.10
Shnong Riwiang	77.0	58.0	32.00	21.00	7.4	5.6	12.5	10.6
Shnong Mobergaon	76.0	65.0	45.0	32.0	9.0	7.5	16.2	14.3
Sor Seinduly	98.0	90.0	45.0	35.0	8.80	6.60	18.10	16.00
Shnong Umjaru	67.0	55.0	35.0	25.0	7.50	6.0	14.10	11.10
Mawiongdep	99.0	83.0	46.0	35.0	8.20	5.80	18.0	16.60
Klangrin	71.0	65.0	37.0	25.0	8.30	6.90	17.0	15.0
Tar	69.0	64.0	27.0	22.0	7.0	5.40	12.0	9.50

Katkum ka jinglap jong ka jingjurip ia ki jingkdew ha ka jinglong jingman jong ka lyer la lap ba ka long iahap bad ka kyndon jong ki jaka nongkyndong/ jaka sah briew jong ka National Ambient Air Quality standards jong ka CPCB.

2.3 Ambient Noise Level

Station Code	Noice Level in dB(A)				
	Maximum	Minimum	Day (leq)	Night (leq)	
Ambient Noise Level (dBA)					
Core Zone					
N-2	Hapoh ka kut jong ka Project Site	48.0	41.0	45.9	43.9
Buffer-Zone					
N-2	Riwang (Ka shnong hajan ka Project Site)	43.5	38.5	41.1	39.6
N-3	Ka shnong Mobergaon	45..7	39..4	40.2	38.7
N-4	Ka Sor Seinduly	56.4	42.2	44.2	41.4
N-5	Ka Shnong Umjaru	44.6	39.2	42.6	38.7
N-6	Mawiongdep	46.6	39.0	45.5	41.4

Baroh ki jingkdew ki long hapoh ki pud 55dBA bad 45dBA na ka bynta ki shnong sah briew ha ka por mynsngi bad mynmiet.

2.4 Jinglong jingman ka Khyndew:

Kaktum ka jinglap lah ban ong ba ka pH jong ka khyndew ka long kumba long ha kiwei ki jaka kata naduh 5.6 haduh 5.8. Ka jingdon jong u Nitrogen ka long naduh ba khyndiat bad hapteng (245.6 to 337.9 kg/ha), ka jingdon u potassium ka don hapteng (230 to 254 kg/ha). Ka jingdon jong u phosphorus ka long hapteng (10.7 to 15.4 kg/ha). Ki jingim barit ha ka khyndew ka long kaba biang. Ka jingkdew jong ka heterotrophy per grams ka long hapteng 3.0×10 to 5.0×10

2.5 Water Quality

Ka um ba la shim na neng ka wah Riwiang (W-1) bad sharum ka wah Riwiang (W-2)

Code No	pH	TDS (mg/1)	Chloride (mg/1)	Flouride (mg/1)	Nitrate (mg/1)	Iron (mg/1)	Total Coliform (MPN)
W-1	7.10	22.0	10.0	0.58	0.24	0.42	54
w-2	7.30	29.0	12.0	0.54	0.18	0.38	45

Ka um ba la shim na ka nala najan ka shnong Riwiang (W-3), ka nala najan ka shnong Marucsain (W-4), ka nala hajan ka shnong Mayo (W-5) bad ka nala hajan ka shnong Urkali.

Code No	pH	TDS (mg/1)	Chloride (mg/1)	Flouride (mg/1)	Nitrate (mg/1)	Iron (mg/1)	Total Coliform (MPN)
W-3	6.9	28.00	12.01	0.54	0.44	0.60	Nil
W-4	7.8	14.00	10.01	0.51	0.56	0.34	Nil
W-5	6.7	12.00	16.02	0.55	0.12	0.50	Nil
W-6	7.1	16.00	20.02	0.52	0.10	0.41	Nil

3.0 Ka jingtah ia ka mariang

	Existing	Ka jingtah lada thaw ia ka karkhana	Ka rukom pyniaid ia ka mariang
Ka jinglong ka suinbneng	Ki daw kiba wanrah ia ka jingkylla ha ka suin bneng ki long ki bapher bad ba jylliew ha ka pyrthei baroh kawei	Ki kam ban pyntrei ha ka karkhana kan don jingtah ba duna ha ka jinglong ka suin bneng.	Ki bor pyniaid ka project kin shim ia ki lad ki lynti ban tap ia ki mar ban tei jingtei ha ka por ba tei ia ka karkhana. Ki bor pyniaid ia ka project kin shim ruh ia ki lad ki lynti ban iada ia ka mariang na ki jaboh kiba mih ha ka por ba tei ia ka karkhana.
Jingpyndonkam ia ka khyndew	Ka project bathymmai	Ka jingdonkam jaka na ka bynta ka project ka long 11.47 ha.	Ka project proponent ka pyndonkam ia ka jaka kaba thylli. Ka project kan ym wanrah jingkylla ha ka rukom pyndonkam ia ka khyndew.
Ka Jinglong Khyndew	Project Thymmai	Ym yn don ka jingkylla ne jingtah kaba jur ia ka khyndew ha ka thain lait noh tang ia ki jingtei kiba rit ha ka thain.	Ki bor pyniaid kin pynthikna ba kan ym don kano kano ka jingpyntuid ne ka jingpyllait ia ki dpei ne ki pui pui na ka karkhana. Kan ym don kano kano ka jingpyndap khyndew. Yn die noh ia ki Slag bad ki dpei.
Ka Jinglong ka Lyer	Project Thymmai	Ha ka por ba pyntrei ia ka kam tei, ki particulate matter SO ₂ , NO _x kiba mih na ka jingtei/	Ka jingai um kan long thikna bad biang por. Da ki Bag filters la buh ha ki kudam ba thep ia ki mar rew, ka jingpynkhreh ia ki raw meal bad ka jingtyllait

		<p>jingshna bad ka jingiaid ki kali.</p> <p>Haba la sdang treikam, ia ki tyllong jong ki er'bih la set bad pynngam lyngba ka Electric Arc System. Ki kudam ia ki mar rew bad ka jingmih jong ki tdem na ki Boiler System.</p>	<p>ia ki dewiong. Yn pyndait da ki ESP ha CPP.</p> <p>Ki nongpyniaid jong ki project kin pynlut 655.09 lak tyngka naka bynta ka APCS bad 80 lak kum ka Recurring Cost.</p>
Ka Jingjam ka Jingsawa	Project Thymmai	<p>Ki jaka ne tiar ba pynmih palat ia ka jingsawa ki dei ki Ferrosilicon mill, ki kor tyllait bad ki power plant. Ha ka CPP, ki tyllong jong ka jingsawa ki dei naka Turbine generator, high pressure boiler bad ki compressor.</p>	<p>Ia ki jingsawa ba la pynmih, yn pynduna/pynduh da kaba buh jngai ia ki kor/tiar. Ki kor/tiar ba pynmih jingsawa palat yn tap bad set bha bad shim ruh ia kiwei kiwei ki lad ban tem ia ki jingsawa.</p> <p>Da ki Earmuffs ne ki jingset shkor yn ai sha ki nongtrei kiba trei ha ki jaka ba don jingsawa jur.</p>
Ka Um Jakhlia na ki iing/jaka sah	Project Thymmai	<p>La antad ba ka jingpynmih ia ka um jakhlia na ki iing ki sem kan long kaba duna namar yn tei tang khyndiat tylli ki jaka sah</p>	<p>Yn shna/tei ia ka Soak Pit na ka bynta kane.</p>
Ka Rukom khmih ia ki Soild waste	Project Thymmai	<p>Ha ka por ba pyntrei ia ka kam tei, ki jakhlia bad ki jingmih na ki kudam yn thep bad lumlang ha ka thliew/nan bad yn set da ka kynja umphniang bad yn ym ailad ban tuid.</p>	<p>Yn buh da ka jaka kaba don kumba 2000 sq.mt na ka bynta ban thep bad pyllang ia ki jakhlia ne ki tiar sniew bad ia kane ka jaka yn tap da ki tin.</p>

		Ka jingpynmih ia ki solid waste kan long kaba duna bha ha ka power plant ba thmu ban shna.	Yn die noh ia ki Ferro-silicon. Ia ki Fly Ash yn die sha ki karkhana dewbilat.
Ka Jingdheng kali	Project Thymmai	Kane kan dei na ka daw ba palat 35 tylli ki trok kin leit sha ka power plant ba thmu ban shna. Ka jingpyniaid kali kan long ha ka rukom kabym ktah ia ka leit ka wan ne wanrah ka jingdheng kali.	Ka jingkit ia ki tiar bad ka rukom kit ia ki kor/machine heh yn leh ha ka rukom kaban pynduna ia ka jingsahkut kali khamtam ha ka por ba pyntrei ia ka kam tei/shna. Ynda la sdang treikam ka power plant, yn shim bad pynbiang baroh ki lad ki lynti ban pynduna ia ka jingsahkut kali.
Ki Flora & Fauna	Ym don khlaw, ne ki jaka ba sah ki mrad ha ka thain	Ka jingktah ia ki jingim khlaw ka long kaba duna. Kane ka jaka ka dei ba mih/sop da ki phlang bad ki nuit. Ym don ki jingthung, ki mrad ne ki jingim khlaw ba kham pher ha ka thain.	Ki bor pyniaid jong ka Project kin pynlong ia ka jingthung dieng/syntiew ha ka jaka kaba long 3.65 acres ha ka jingheh.
Soci Economic	Katkum ka jing-wad bniah ha kane ka thain, ki don haduh 39 tylli ki shnong bad ka jingdon paid ka long 20127 Ym don kawei ruh ka shnong kaba hap hapoh ka core zone jong ka Shri	Lyngba ka jingwanpoi jong kane ka project, kan don ka lad ioh kam ioh ioh jam ia ki nongshnong shnong ka thain. Ki shnong kiba marjan ruh kin ioh jingmyntoi lyngba ki	Ki nongpyniaid jong ka Project kin noh synniang bad treilang na ka bynta ban pynbha ia ki lad ai jingsumar, ka koit ka khiah, ka jingpynneh pynsah ia ki riti dustur bad ai jinghikai ia ki nongshong shnong kiba hajan ba kin kyntiew ia la ka roi ka par bad ka bha ka miat lyngba ka Self help group ne ki

	Sakhambri Ferro Alloys.	surok rong bad kiwei kiwei ki jingtei kiban wanrah jingmyntoi.	kynhun trei lade.
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4.0 KI PROGRAME BAN KHMIIH IA KA MARIANG.

Ban tip ia ka jingtreikam jong ki programme iada mariang, kan don ka jingkhmih ia kine ki programme na ka por sha ka por lyngba ki lad ki parameter kiba paka. Ka jingtreikam, ka por bad ka rukom khmih kan long kumne harum.

Sl.	Ka Jingbatai ia ki Parameters	Ka por bad ka rukom khmih
1.	KA JINGLONG KA LYER	
	Yn buh/pyndait haduh lai tylli ki station hapoh ka karkhana ban khmih ia ka jinglong jingman jong ka lyer bad kumjuh ruh yn buh ia kine ki station shabar na ka bynta ka SPM, RPM, SO ₂ , NO _x bad Co. Ia ki station yn buh katkum ka meteorological data, ka jinglong jong ka jaka bad kumjuh ruh ha ki jaka kiba donkam jingiada. Ia ki jaka ban buh ia kiwei pat ki station yn jied ynda la iamir jingmut bad iapynbeit bad ka State Pollution Control Board.	Kawei ka sample (man ka 24 kynta) ha ka shi sngi lyngba kawei ka parameter ha ka shi sien shi bnai.
2.	KA JINGLONG KA UM	
	Ka khmih thikna ia ka jinglong jong ka um. Ka jingjied ia ki station kmih um (ym duna ia ka 3 tylli) kan long lyngba ka jingiapynbeit bad ka State Pollution Control Board bad ia kine ki station yn buh hajan ki shyngiar um bad ha ka wah Riwing	Ha ka shisien shi bnai yn khmih ia ka Physico-chemical, biological bad toxic metals.
3.	Ka rukom khmih ia ki Stact	Da ki Boiler bad kiwei kiwei man la u bnai.
4.	Ka Fugitive Emission	Ka jingkhmih man la ka por
5.	Ka Jingjam ka jingsawa	Yn khmih man la ka por
6.	Ka jinglong jong ka khyndew	Man la ka snem ha ka por ba dei ka aiom rep bad ha baroh ki jaka thung jaka tep.

7.	Ia ki Jingim khlaw	Shisien ha ka 3 snem
8.	Socio-Economic	Shisien ha ka 3 snem.

5.0 KI JINGMYNTOI NA KA PROJECT

Ka project ba thmu ban pyntreikam kan long ka lad ai kam ai jam ia 250 ngut ki briew. Kan don ruh ka jingmyntoi ia ki nongshong shnong ka thain ban ioh kam ioh jam. Nalor kata, bun ngut ki briew kin ioh ia ka lad kamai kajih ha kiwei pat ki rukom bad kane kan iarap shibun ha kaban kyntiew ia ka roi ka par bad ka bha ka miat jong ki paidbah ka thain.

Kine harum ki long katto katne ki lad ba ka Shri Shakambari Ferro Alloys Pvt. Ltd kan pyntreikam na ka bynta ban kyntiew ia ka thain.

Ki lad ai kam ha ki thain nongkyndong, ki surok, ki jaka ap bos bad ki community hall, ka pule puthi, ka jingkyntiew ia ka jingnang jingstad, ka jingkynshew bad jingpyllang ia ka um slap, ki lad ai jingsumar, ka jingrat dyngkhong ia ka jingpynshakri bad jingpynbylla ia ki khyllung khynnah, ki jaka buh kot pule, ki jingialehkai bad ki kam ban pynneh pynsah bad kyntiew ia ka riti dustur.

Ki nongpyntreikam ia ka project kila mang haduh 40.6 lak tyngka ha ka san snem na ka bynta ban wanrah ia kiwei pat ki jingdonkam jong ki paidbah. Ia kine ki programme yn iatai sanai ha ka jingialang bad ka dorbar shnong ha shuwa ban shim ia kano kano ka rai khatduh.

6.0 KI LAD IADA MARIANG

6.1 Ha ka por ba pyntrei ia ka kam tei/shna

i). **Ka Air Pollution**

Ia ki khyndew/shyiap ba la tih yn theh bad pyndap ha ki jaka ba long them, yn pynkhuid lut ia baroh ki jakhlai bad pynbha/pynneh ia ka jaka kumba ka long. Yn synreit um man la ka por bad ki kali kin don ia ki certificate kum ka jingithuh ba ki long kiba biang bad bym don jingktah bad ia ki mar/kor ba kit la tap bad sop bha.

ii). **Ka Jingsawa:** Ha ka por mynmiet yn ym pyntrei ia ki kam kiba sawa jur (10 pm haduh 6 am) bad ha ki jaka trei yn pynbiang da ki jingset skhor ia ki nongtrei.

iii). **Ka Jinglong ka Um:** Ki iing ba la tei ban pyndonkam shipor ryngkat bad ki canteen bad ki jaka leit bar/painkhana yn pynbiang bad shna na ka bynta ki nongtrei. Ia ki jakhlia ne khyndew ba mih na ki jaka leit bar/painkhana, yn set bha khnang ba kan ym tuid sha ka wah khamtam ha ka aiom slap.

iv). **Ka rukom bret/buh ia ki Solid Waste:** Kan don ka jaka kaba bym duna ia ka 2000 sq.mt na ka bynta ban buh/bret ia ki mar/tiar jot bad ia kane yn tap da ki tin bad ia ka jaka yn ker kynroh bha khnang ba kan ym tuid ne khleh lang bad ka um khuid.

v). **Ka koit ka khiah jong ki nongtrei:** Ki nongbylla/nongtrei kin ioh ia ka um dih kaba khuid bad yn pynbiang ruh ka jaka leit bar/jaka pynjhieh kaba paka bad kaba khuid.

6.2 Ha ka Por ba la sdang treikam ka Project

Ka Air Pollution:

- 1). Da ki song/pla filter yn pyndiat ha ki jaka trei ban khmih ba ka tdem/lyer sniew ka long kaba duna ia ka 50 mg/Nm³.
- 2). Ia ki hooper jong ka gas coller bad ki pla filter yn thep ha ki thliew bad set bha ia ka.
- 3). Ka CPP kin don da ki ESP set kiba paka bad treikam haduh 99.95% bad ia kine ki set yn pyndiat khnang ban pynduna ia ka SPM level, kata, hapoh ka 50mg/Nm³.
- 4) Ha ki jaka ba don u dewiong, yn pyndiat da ki kor bad ki tiar kiban khanglad ia ka jingher ki pui pui. Ka Fugitive Emission ka mih na ka jingtreikam ki kor/mashin, na ka phyllaw ba don ka kudam mar rew bad na ka jingkit ia ki tiar/kor bad ia kane ka Fugitive Emission yn khanglad da kaba synreit ha kine ki jaka.

Ka Water Environment

- 1) Ka jingdonkam um ka long tang na ka bynta ka shlem. Ym donkam um naka bynta ka kam Processing. Yn tei ia ka jaka ban pynpjah ia ka um khluit bad ia kane ka um yn pyllait ha kawei ka top ynda kala pjah.
- 2) Ha ka CPP, 20% na ka um kaba donkam yn pynbiang lyngba ka um slap, bad ia kaba duna yn shim/tan na ka wah Riwiang.

Ia ka Um Jakhlia

Kan ym don ka jingpynmih um jakhlia, lait ka um kaba khlain haka TDS bad ki suspended matters.

Ka um sniew ne kino kino ki jakhlia ba mih na ka DM Plant yn pyllang bad set ha ki thliewba la shna kyrpang bad ia kine baroh yn thep lang pat ha kawei pat ka thliew heh kaba la tip kum ka Guard Pond. Ha kane ka Guard Pond yn pyndiat da ki kor kum ki Boiler Blow Down bad ki Cooling Tower Blow Down. Ia ka um ba la pynbha nangne, yn pyndonkam ha kaba synreit ia ki pui pui, ha ki phyllaw jong ki jaka trei, haba shna surok bad kumjuh ruh ha kiwei pat ki jingdonkam.

Ia ki Solid Management

- i). Ka jingpynmih ia ki jaboh bad ki tiar sniew naka Ferro Silicon plant ka long kaba duna (kata 10MT ha ka shi bnai). Kine kim long kiba ktah bad ia ki tiar sniew yn die noh sha kiwei pat ki agency.
- ii). Ki jaboh bad ki tiar sniew kiba kham mih na ka CPP ki dei ki Bed Ash bad ki flyash. Ia ki Bed Ash yn pynbha bad pyndonkam noh ha kaban pyndap ia ki bed materials jong ki boiler bad ia kiba tam yn pyndonkam pat haba shna surok.

Ia ki Fly ash yn pyndonkam pat kum ki mar rew ha ki karkhana dewbilat kiba hajan. Shuh shuh ia kine ki flyash yn pyndonkam haba shna surok khamtam haba pyndap khyndew ha ki jaka ba long them.

Ka Noise Environment

Ha ki kor/tiar kiba pyndonkam ha ka power plant yn sop da ki silencer ne ki jingset bad ia kane ka yn shna ha kata ka rukom khang ba kan lah ban khang bad tem ia ka jingsawa hapoh ka 85 haduh 90 decibel bad kane kan long katkum ka kyndon jong ka koit ka khiah.

Ki Flora bad Fauna

Ki bor pyniaid jong ka project kin shim khia ban pynlong ia ka jingthung dieng bad ki syntiew ha ka jaka kabym duna ia ka 3.65 acres. Ki dieng bad kiwei kiwei ki jingthung harud surok kin iarap ban pyndunaia ka SO₂, ki airborne lead abd ki pui pui. Da ki dieng jyrngam, ki phlang jrong, ki tiar iada iada mariang bad ki jingthung yn thung bad buh ha ki jaka trei khnang ban iada ia ka mariang.

Ka Koit ka khiah jong ki nongtrei

Ha ka por ba pyntrei ia ka kam tei, ki nongtrei kin ioh ia baroh ki lad iada kum ka PPE bad ki jaka ai jingsumar haba ki ioh jingpang na ki jaka trei ha ki par.

Kan don ka jingsynreit um ha ki kudam buh mar rew bad ha kiwei kiwei ki jaka ba jur ka jngmih ki pui pui bad yn shim lut baroh ki lad ki lynti ban khang bad tem ia ka jingmih pui pui na ka power plant.