Table of Contents

1.1 EXECUTIVE SUMMARY ........................................................................................................ 2
1.2 INTRODUCTION OF THE PROJECT / BACKGROUND INFORMATION .......................... 3
1.3 IDENTIFICATION OF PROJECT AND PROJECT PROPOSENT ................................... 3
1.4 PROJECT PROPOSENT ........................................................................................................ 3
1.5 BRIEF INFORMATION ABOUT THE PROJECT ................................................................. 3
1.6 NEED FOR THE PROJECT AND ITS IMPORTANCE TO THE COUNTRY OR REGION .... 4
1.7 DEMAND - SUPPLY GAP .................................................................................................... 4
1.8 IMPORTS VS. INDIGENOUS PRODUCTION ....................................................................... 4
1.9 DOMESTIC / EXPORT MARKETS ...................................................................................... 4
1.10 EMPLOYMENT GENERATION (DIRECT AND INDIRECT) DUE TO THE PROJECT ......... 4
1.11 PROJECT DESCRIPTION ..................................................................................................... 5
1.12 LOCATION .................................................................................................................................. 5
1.13 DETAILS OF ALTERNATE SITES ...................................................................................... 5
1.14 SIZE OR MAGNITUDE OF OPERATION ............................................................................. 6
1.15 PROJECT DESCRIPTION WITH PROCESS DETAILS ....................................................... 7
1.16 RAW MATERIAL REQUIRED ALONG WITH ESTIMATED QUANTITY, LIKELY SOURCE, MARKETING AREA OF FINAL PRODUCT/S, MODE OF TRANSPORT OF RAW MATERIAL AND FINISHED PRODUCT ......................................................................................................................... 10
1.17 AVAILABILITY OF WATER, ITS SOURCE, ENERGY/ POWER REQUIREMENT AND SOURCE ..... 11
1.18 QUANTITY OF WASTE TO BE GENERATED (LIQUID AND SOLID) AND SCHEME FOR THEIR MANAGEMENT .................................................................................................................................................. 11
1.19 SCHEMATIC REPRESENTATION OF THE FEASIBILITY DRAWING WHICH GIVE FORMATION OF EIA PURPOSE ........................................................................................................................................ 11
1.20 SITE ANALYSIS .................................................................................................................... 12
1.21 LAND FORM, LAND USE AND LAND OWNERSHIP ......................................................... 13
1.22 TOPOGRAPHY ....................................................................................................................... 13
1.23 EXISTING LAND USE PATTERN ......................................................................................... 13
1.24 EXISTING LAND USE PATTERN ......................................................................................... 13
1.25 EXISTING INFRASTRUCTURE ............................................................................................... 13
1.26 SOIL CLASSIFICATION ......................................................................................................... 13
1.27 SOCIAL INFRASTRUCTURE AVAILABLE ......................................................................... 13
1.28 PLANNING BRIEF .................................................................................................................. 13
1.29 POPULATION PROJECTION ................................................................................................. 13
1.30 AMENITIES/FACILITIES ....................................................................................................... 13
1.31 PROPOSED INFRASTRUCTURE .......................................................................................... 13
1.32 INDUSTRIAL AREA (PROCESSING AREA) ........................................................................... 13
1.33 RESIDENTIAL AREA (NON PROCESSING AREA) ............................................................... 13
1.34 GREEN BELT/AFFORESTATION ......................................................................................... 14
1.35 SOCIAL INFRASTRUCTURE ................................................................................................. 14
1.36 CONNECTIVITY ...................................................................................................................... 14
1.37 DRINKING WATER MANAGEMENT .................................................................................... 14
1.38 REHABILITATION AND RESETTLEMENT (R & R) PLAN .................................................. 14
1.39 PROJECT SCHEDULE & COST ESTIMATION ..................................................................... 14
1.40 ANALYSIS OF PROPOSAL (FINAL RECOMMENDATION) ................................................. 14

Manufacturing plant of Laminated Sheet using Synthetic Organic Chemicals at Village- Sukna, Tehsil-Mohammad Bazar, District Birbhum, West Bengal

Pre-Feasibility Report
Manufacturing plant of Laminated Sheet using Synthetic Organic Chemicals at Village- Sukna, Tehsil-Mohammad Bazar, District Birbhum, West Bengal

1.1 EXECUTIVE SUMMARY
M/s Sunlam Laminates India Pvt. Ltd. is a Private Limited Company established on 09.05.2018 having registered office at South City Residents, FlatNo.24J, Tower-2, 375, Prince Anwar Shah Road, Kolkata-700068. The Directors of the company are Mukesh Choudhury, Partha Pramanik, Birangshu Roy and Chandrani Roy. The company has decided to set up a manufacturing unit for production of Decorative laminated sheets at Vill. & Mouza: Sukna, Charicha, P.S. Md. Bazaar Dist.: Birbhum-731127 West Bengal. The proposed project is for manufacturing of laminated sheets. In manufacturing the laminated sheet PF and MF Resin will be used. Thus the unit is categorized under Category “A” of Schedule no. 5(f) for “Synthetic organic chemicals industry” as per EIA notification and its latest amendment.

SALIENT FEATURES OF THE PROJECT

<table>
<thead>
<tr>
<th>SN</th>
<th>PARTICULARS</th>
<th>DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Site Latitude</td>
<td>23.979971°</td>
</tr>
<tr>
<td>2.</td>
<td>Site Longitude</td>
<td>87.522873°</td>
</tr>
<tr>
<td>3.</td>
<td>Site Elevation above MSL</td>
<td>85 m</td>
</tr>
<tr>
<td>4.</td>
<td>Nearest highway</td>
<td>NH</td>
</tr>
<tr>
<td>5.</td>
<td>Nearest railway station</td>
<td>Siuri Approx 9.10 in SSE Direction</td>
</tr>
<tr>
<td>6.</td>
<td>Nearest airport</td>
<td>Kazi Nazrul Islam Airport –Approx-50 km in SSW Direction</td>
</tr>
<tr>
<td>7.</td>
<td>Nearest town/ city</td>
<td>Siuri Railway Station-10 Km-SSE direction</td>
</tr>
<tr>
<td>8.</td>
<td>Topography</td>
<td>Topography of proposed project is flat.</td>
</tr>
<tr>
<td>9.</td>
<td>Archaeologically important places</td>
<td>No</td>
</tr>
<tr>
<td>10.</td>
<td>National parks/ Wildlife Sanctuaries</td>
<td>No</td>
</tr>
<tr>
<td>11.</td>
<td>Reservoir</td>
<td>Tilpara Barrage</td>
</tr>
<tr>
<td>12.</td>
<td>Reserved/ Protected Forests</td>
<td>Charicha Forest</td>
</tr>
<tr>
<td>13.</td>
<td>Seismicity</td>
<td>Zone IV</td>
</tr>
<tr>
<td>14.</td>
<td>Sewage generation</td>
<td>Minimal sewage will generate.</td>
</tr>
<tr>
<td>15.</td>
<td>Effluent Generation</td>
<td>Evaporator will be proposed</td>
</tr>
</tbody>
</table>
1.2 INTRODUCTION OF THE PROJECT / BACKGROUND INFORMATION

1.3 IDENTIFICATION OF PROJECT AND PROJECT PROPOONENT

The Project will be set up at Vill-Sukna, Tehsil-Mohammad Bazar, Dist.: Birbhum-731127. The total area of factory land is 224 decimal belonging to one of the Directors and relatives of the other Director. The proposed factory land is adjacent to Subha Raksha Kali Rice mills Pvt. Ltd. which is run by Sri Partha Pramanik, one of the directors of the company. The land is irregular in shape and has an access to Suri-Dumka PWD Road width 40’ approximately.

**Installed capacity:**
The Proposed unit has installed capacity of manufacturing of 41,40,400 pieces of sheets per annum in 3 shifts i.e. 24 hours.

**Products:**
The unit will produce High pressed laminates of different textures and finish. Standard sizes are as under:

8’X 4” = 32sft.
Thickness: 0.5 mm / 25mm

Initially, the unit will prefer to produce 0.8 and 1.00 mm thickness. The product have various designs like Mat, Glossy with various textures.

1.4 PROJECT PROPOONENT

<table>
<thead>
<tr>
<th>Name of the Company</th>
<th>M/s SUNLAM LAMINATES INDIA PVT.LTD.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>Registered Office : South City Residents, FlatNo.24J, Tower-2, 375, Prince Anwar Shah Road, Kolkata-700068</td>
</tr>
<tr>
<td></td>
<td>Email- <a href="mailto:resinsunlam2019@gmail.com">resinsunlam2019@gmail.com</a></td>
</tr>
<tr>
<td></td>
<td>Contact no.- 9434001447</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of the Directors</th>
<th>Name</th>
<th>DIN No.</th>
<th>PAN No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sri Partha Pramanik</td>
<td>06602966</td>
<td>AIKPP4198C</td>
</tr>
<tr>
<td></td>
<td>Sri Mukesh Choudhury</td>
<td>06586443</td>
<td>ACKPC3991L</td>
</tr>
<tr>
<td></td>
<td>Sri Birangshu Roy</td>
<td>08204442</td>
<td>AC[JPR3561J]</td>
</tr>
<tr>
<td></td>
<td>Smt. Chandrani Roy</td>
<td>08204485</td>
<td>ADEPR2212G</td>
</tr>
</tbody>
</table>

1.5 BRIEF INFORMATION ABOUT THE PROJECT

<table>
<thead>
<tr>
<th>Raw Material</th>
<th>PF RESIN – 7800 TON/YEAR, MF RESIN – 2496 TON/ YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Operating Shifts</td>
<td>3 Shifts (8 Hours per shift)</td>
</tr>
<tr>
<td>Major Raw Material</td>
<td>Resin, Kraft Paper, Design Paper</td>
</tr>
<tr>
<td>Area of Factory Land</td>
<td>Area of factory Land is 224 decimal</td>
</tr>
<tr>
<td>Source of Power</td>
<td>Electric Connection from West Bengal State Electricity Distribution Co. Ltd.</td>
</tr>
<tr>
<td>Status of supply of Electricity</td>
<td>To be applied for 500 KVA Transformer. Power required 350 KVA.</td>
</tr>
</tbody>
</table>
Manufacturing plant of Laminated Sheet using Synthetic Organic Chemicals at Village- Sukna, Tehsil-Mohammad Bazar, District Birbhum, West Bengal

Pre-Feasibility Report

1.6 NEED FOR THE PROJECT AND ITS IMPORTANCE TO THE COUNTRY OR REGION

Huge demand in market for laminated sheet, Laminates is a preferred choice because of various factors such as price consideration, high/low ambient temperature resistant, durability, scratch –resistant and usually retain their look for years. Laminates are also easier to maintain.

Decorative laminates market size is estimated to surpass 12 billion square meters by 2023, growing at more than 5.5% CAGR from 2016 to 2023. Asia Pacific decorative laminates market size was the largest, and accounted for over 46% of the global revenue in 2015. China was the major producer of ready to assemble and laminated flooring, with more than 30% of the total demand in the same year. Increase in purchasing power coupled with growth in residential and non-residential construction spending in Indonesia and India are likely to boost regional demand. As per the National Bureau of Statistics, China’s urban household’s annual per capita disposable income was more than USD 4,400 in 2015. India’s annual disposable income was over 1,600 billion in 2015. Rise in disposable income is likely to positively influence customers to spend on home decor, furniture, and furnishings.

1.7 DEMAND - SUPPLY GAP

Demand for laminates at present are directly related to growth of housing sectors, institutions, IT sector, Automobiles, Hospitality, Health Care centers, Hospitals, Railways and other Government sectors. Hence growth of laminates is estimated as 8%-11%. At present there are 60 units engaged in manufacturing of HPL decorative laminates out of which only 10 units are manufacturing Branded items having capacity of manufacturing 2 lacs and above sheets per month. Others 50 are manufacturing low graded material with non branded products. Their manufacturing capacity is 50000 to 60000 sheets per month. Interestingly, among above mentioned 60 units only 2 manufacturing units are present in Eastern India. Out of that Century Plywood- Century-mica is the Branded name all over India.

1.8 IMPORTS VS. INDIGENOUS PRODUCTION

Raw materials will be procured from indigenous sources. This will help in the economic development of the country to a great extent thus, to decrease the dependency on imports the proposed project can work in a positive manner.

1.9 DOMESTIC / EXPORT MARKETS

Local Market has high demand of laminated sheet hence all the supply will consume in local market.

1.10 EMPLOYMENT GENERATION (DIRECT AND INDIRECT) DUE TO THE PROJECT

M/s Sunlam Laminates India Pvt Ltd. will provide direct and indirect employment to local people as per their skills. Approximate 100-150 people will get employment from this proposed project.
1.11 **PROJECT DESCRIPTION**
The proposed project involves the production of laminated sheet and process PF resin – 7800 Ton/Year, MF resin – 2496 Ton/Year. As the project site is located at near Sukna Village the process of resin will fall under Category “A” and it requires Environmental Clearance from Ministry of Environment, Forests & Climate Change (MoEFCC) under Category ‘A’ in the Schedule 5 (f) of EIA Notification 2006. It is an independent project not interlinked or interdependent project.

1.12 **LOCATION**
The Project will be set up at Vill & Mouza:- Sukna, Charicha, Dist.: Birbhum-731127. The total area of factory land is 224 decimal belonging to one of the Directors and relatives of the other Director. The proposed factory land is adjacent to Subha Raksha Kali Rice mills Pvt. Ltd. which is run by Sri Partha Pramanik, one of the directors of the company. The land is irregular in shape and has an access to Suri-Dumka PWD Road width 40’ approximately. The industry has following favourable conditions of the proposed unit:

- Vicinity to Market
  - Availability of Land Area
  - Availability of Water supply
  - Availability of Local Labour
  - Availability of Power
  - Well developed Transport Infrastructure

1.13 **DETAILS OF ALTERNATE SITES**
No Alternative site has been search for proposed project.
1.14 SIZE OR MAGNITUDE OF OPERATION
The factory land is owned by one of the Directors and relatives of the Director. The total land area is 224 decimals.
The Proposed unit has installed capacity of manufacturing of 41,400 pieces of sheets per annum in 3 shifts i.e. 24 hours.
Yearly consumption of PF RESIN – 7800 TON/YEAR, MF RESIN – 2496 TON/ YEAR
1.15 PROJECT DESCRIPTION WITH PROCESS DETAILS

LAMINATE PROCESS FLOW CHART

RESIN : MELAMINE

DESIGN TREATING

DESIGN ASSEMBLY

HOT PRESS PROCESS

TRIMMING OF SEMI FINISHED SHEETS

SHORTING BY THICKNESS OR FINISH WISE

SANDING

QUALITY

MARKING

PEEL-COATING OR PACKING

STORAGE OF FINISH GOODS

DISPATCH

RESIN : PHENOL

KRAFT TREATING

PACK MAKING
Step 1: Soaking the paper in resins
The manufacturing process starts by soaking the paper in resins.
The brown paper that is going to form the bottom side or base of the laminate is soaked in a bath tub that is filled with phenolic resin. On soaking, the brown paper does not just get wet but rather absorbs the resin and is saturated with it. This soaking process is also known as impregnation, and the machinery which moves the rolled up paper from its spools through the resins is called a PIL (Paper Impregnation Line).
The decorative printed paper and the translucent paper is similarly soaked and saturated with the melamine resin. The resin helps to make these surfaces harder, stiffer and better at resisting scratches and wear and tear.

Step 2: Drying the papers
This is followed by a drying process in which the soaked papers are allowed to dry. After the drying is complete, the paper which earlier was easy to tear acquires new physical properties. It becomes stiff and brittle.
Step 3: Cutting
The hardened rolls of paper are then cut to the desired sizes by the cutting machines (called cutters). In India, the standard or most common size for laminate sheets is 8’x4’ (8 feet by 4 feet). So the machines accordingly cut the papers to this size.

Step 4: High-pressure pressing and bonding
The next step in the laminate manufacturing process is to hard press these papers together under high pressure and temperature. This is done using hydraulic presses. The papers or sheets are stacked upon each other. The brown paper forms the bottom sheet followed by the decorative sheet, and the topmost layer is of the clear translucent paper. The huge hydraulic presses are designed to press large number of laminate sheets at a single go. So all the laminates that are to be pressed are placed one upon another with steel separator plates interspersed between them (so that the separate laminate sheets do not stick with each other while being pressed). The steel sheets also serve another purpose. They are designed to carry textures or patterns on them that get etched on to the surface of the sun mica/laminate sheet while being pressed. The pressing is one of the most important processes in the manufacturing of laminate sheets and is the reason why decorative laminates are often referred to as HPL and HPDL (High-pressure decorative laminates).

Step 5: Sanding the non-decorative side
In the final step of the process, the bottom side (non-decorative side) is uniformly sanded by a sanding machine. The sanding process makes this surface better suited for adhesion to surfaces. This sanded surface is the one on which carpenters apply Fevicol (or other adhesives) while gluing these sunmica/laminate sheets over plywood or other base substrate materials.

Step 6: Testing, Packing, Shipping
Samples of the finished products may be subjected to standard quality tests for laminates as per norms, and these sheets are then packaged and shipped to the regular distribution channels of the laminate companies.
So this is how sun mica and other laminate sheets are made.

Notes:
Thickness: The thickness of Laminate sheets usually ranged from 0.6 mm to 1.5 mm, and accordingly more layers of paper can be used in the process. Much thicker laminate sheets (3mm to 30mm thickness) are also manufactured and these are known as compact laminated sheets. These compact types are stiff and self-supporting. Such compact sheets can be used independently without the need to glue them onto plywood, particle board, MDF or any other base materials.
1.16 **RAW MATERIAL REQUIRED ALONG WITH ESTIMATED QUANTITY, LIKELY SOURCE, MARKETING AREA OF FINAL PRODUCT/S, MODE OF TRANSPORT OF RAW MATERIAL AND FINISHED PRODUCT**

**RAW MATERIALS & CONSUMABLES:** The Raw materials for manufacturing of High Pressed Decorative Laminates are Resin, Kraft Paper, Base Paper, Top design/Laminate Paper.

- Brown paper (such as the one used for brown paper bags. It is also known as Kraft paper)
- Phenolic resin (which is made from phenol and is the basic material used for making plastic)
- Decorative printed paper (this will have the printed decorative design for the face of the sun mica/laminate sheet)
- Melamine resin (A clear transparent resin for treating the decorative paper)
- Clear translucent paper (which forms the topmost overlay of the decorative laminated sheet)

**Consumption of Paper & Resin for one sheet:**
Manufacturing plant of Laminated Sheet using Synthetic Organic
Chemicals at Village- Sukna, Tehsil-Mohammad Bazar, District
Birbhum, West Bengal

Pre-Feasibility Report

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Weight (in Kg.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Craft Paper A Gr.</td>
<td>0.4375</td>
</tr>
<tr>
<td>Craft Paper C Gr.</td>
<td>2.4375</td>
</tr>
<tr>
<td>Base Paper</td>
<td>0.25</td>
</tr>
<tr>
<td>MF Rasin</td>
<td>0.315</td>
</tr>
<tr>
<td>PF Basin</td>
<td>1.225</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4.665</strong></td>
</tr>
</tbody>
</table>

Price of Raw materials:

<table>
<thead>
<tr>
<th>Item</th>
<th>Rate/kg/sheet (in Re.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mf Rasin</td>
<td>115.00</td>
</tr>
<tr>
<td>Pf Rasin</td>
<td>105.00</td>
</tr>
<tr>
<td>Base Paper</td>
<td>450.00</td>
</tr>
<tr>
<td>A Grade Craft</td>
<td>53.00</td>
</tr>
<tr>
<td>C Grade Craft</td>
<td>29.00</td>
</tr>
</tbody>
</table>

1.17 AVAILABILITY OF WATER, ITS SOURCE, ENERGY/ POWER REQUIREMENT AND SOURCE

A. WATER REQUIREMENT
Water will be taken from bore-well. Water will be required for domestic, Construction and Boiler.
1. Domestic Use-7 KLD
2. Construction-8 KLD
3. Boiler -30 KLD

B. POWER
The Company will obtain Power connection from WBSEDCL and 500 KVA Transformer will be installed. Quotation for supply of Power has not yet been obtained. The unit has not proposed to install DG set. The unit will purchase high power USB which will provide back up of 13 to 15 minutes and process in the press line will not be disturbed.

1.18 QUANTITY OF WASTE TO BE GENERATED (LIQUID AND SOLID) AND SCHEME FOR THEIR MANAGEMENT

A. LIQUID EFFULENT
No Liquid waste will be disposed outside the plant.

B. SOLID WASTE
The Domestic waste will be generated it will be hand over to Municipal Corporation.

1.19 SCHEMATIC REPRESENTATION OF THE FEASIBILITY DRAWING WHICH GIVE FORMATION OF EIA PURPOSE
As per the Notification from Ministry of Environment and Forest, New Delhi (MoEF&CC) dated 14.09.2006 and amended on time to time, the project activity falls in under ‘A’ category.
1.20 SITE ANALYSIS
A. CONNECTIVITY
Nearest Railway Station- Sainthia Rly. Stn. (15 KM), Suri Rly. Stn. (10KM)
Manufacturing plant of Laminated Sheet using Synthetic Organic Chemicals at Village- Sukna, Tehsil-Mohammad Bazar, District Birbhum, West Bengal

Nearest Airport- Kazi Nazrul Islam Airport -at Andal, West Burdwan, (65 KM)
Nearest Highway- NH 60 1.4Km SW
SH 11 4.9 KmNE

1.21 LAND FORM, LAND USE AND LAND OWNERSHIP

Present land form of the area for proposed project is Flat Plane.

1.22 TOPOGRAPHY
The topography of the area is plain & undisturbed land.

1.23 EXISTING LAND USE PATTERN
Area for proposed project is non-agriculture area.

1.24 EXISTING LAND USE PATTERN
Land use for proposed project is non-agriculture area.

1.25 EXISTING INFRASTRUCTURE
No existing infrastructure found at the site.

1.26 SOIL CLASSIFICATION
The main soil types developed in the area are black cotton soils, loamy soils.

1.27 SOCIAL INFRASTRUCTURE AVAILABLE

<table>
<thead>
<tr>
<th>Road Connectivity</th>
<th>Proposed project has adjacent road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nearest Railway Station</td>
<td>Siuri Railway Station-10 Km-SSE direction</td>
</tr>
<tr>
<td>Nearest Airport</td>
<td>Kazi Nazrul Islam Airport –Approx-50 km in SSW Direction</td>
</tr>
<tr>
<td>Nearest Hospital</td>
<td>Hospital in Saharakuri</td>
</tr>
<tr>
<td>Nearest school</td>
<td>School in Sukna Village</td>
</tr>
<tr>
<td>Community Facilities</td>
<td>Community facility present in near by village Sukna</td>
</tr>
</tbody>
</table>

1.28 PLANNING BRIEF
PLANNING CONCEPT
Project will complete with one year after getting Prior Environmental Clearance.

1.29 POPULATION PROJECTION
The project will employ most of the workers from nearby villages except for supervisory staff. Thus, there will no increase in population due to the project. However, few people from other areas may migrate in this area for employment and business opportunities.

1.30 AMENITIES/FACILITIES
The project site office, first aid room, rest shelters, drinking water facilities will be provided in the lease area. No house provided to the workers as they will be deployed from nearby villages.

1.31 PROPOSED INFRASTRUCTURE
1.32 INDUSTRIAL AREA (PROCESSING AREA)
No industrial area is proposed.

1.33 RESIDENTIAL AREA (NON PROCESSING AREA)
As the local people will be given employment, no residential area/housing is proposed.
1.34 GREEN BELT/AFFORESTATION
The green belt shall be developed as per CPCB guidelines. The project proponent shall also develop greenbelt in the premises of the schools, hospitals and also carry out the avenue plantation in the vacant areas along roads. The greenbelt shall be developed by planting saplings per year. Indigenous species with the consultation of the State Forest Department shall be planted and maintained.

1.35 SOCIAL INFRASTRUCTURE
The CSR activities will be undertaken by the lessee. The lessee will carry out various activities for social welfare and upliftment by providing health care safety, medical facility, education and training, employment to the local villager’s. The social infrastructure activities will be undertaken in consultation with local panchayat.

1.36 CONNECTIVITY
From the lease area, an road joins a metalled road which further joins the nearest National highway.

1.37 DRINKING WATER MANAGEMENT
Water required for drinking purpose will be obtained through tankers from the nearby available sources.

1.38 REHABILITATION AND RESETTLEMENT (R & R) PLAN
For proposed project there is no R& R issue.

1.39 PROJECT SCHEDULE & COST ESTIMATION

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
<th>Contingency %</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Cost</td>
<td>0.00</td>
<td>0.00%</td>
<td>0.00</td>
</tr>
<tr>
<td>Land Development</td>
<td>0.00</td>
<td>2.00%</td>
<td>0.00</td>
</tr>
<tr>
<td>Civil Construction</td>
<td>303.84</td>
<td>2.00%</td>
<td>6.08</td>
</tr>
<tr>
<td>Plant &amp; Machinery</td>
<td>1102.38</td>
<td>1.00%</td>
<td>11.02</td>
</tr>
<tr>
<td>Electricity</td>
<td>48.05</td>
<td>1.00%</td>
<td>0.48</td>
</tr>
<tr>
<td>Misc. Fixed Assets</td>
<td>15.00</td>
<td>1.00%</td>
<td>0.15</td>
</tr>
<tr>
<td>Preliminary &amp; Pre-operative Expenses</td>
<td>101.11</td>
<td>0.00%</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>1570.38</td>
<td>1.00%</td>
<td>17.73</td>
</tr>
</tbody>
</table>

1.40 ANALYSIS OF PROPOSAL (FINAL RECOMMENDATION)
The technical feasibility and financial viability of the project has been reviewed with reference to the proposed project with reference to overall company as a whole. Our review has been done on the basis of the present scenario and documents made available to us by the company. We have made the assessment afresh and made the changes in assumptions wherever felt required. Based on our analysis it may be inferred that
- The project is technically feasible and financially viable.
- The overall financial liquidity and profitability parameters of the project appeared to be reasonable and satisfactory.
• We conclude the capital expenditure of the company as a viable option subject to the weakness and threats associated with a business venture.
• The operation of plant has significant positive impact on the socio-economic environment of the area. It helps to sustain the development of this area including further development of physical infrastructure facilities.

In the interest of development and improve the social conditions of the local habitants this project should be allowed after considering all the environment aspects.