

## **EXECUTIVE SUMMARY**

### **1. Introduction**

JK Paper Ltd. has two large integrated paper manufacturing units namely JK Paper Mills at Rayagada, Odisha and Central Pulp Mills (CPM) at Songadh, Gujarat with a combined capacity of 4,55,000 TPA. It is the market leader in Branded Copier paper segment and among the top players in Coated Paper and high-end Packaging Boards and is a leading exporter of Branded Copier Papers from India.

Unit CPM, Songadh commenced production in 1968 and was acquired by JK Group in 1992. Unit CPM, Songadh is spreading in an area of 363 acres of land comprising main plant and its supporting facilities, colony, green belt and plantation area.

#### **1.1. Proposed Project**

In the view of upgrading the existing paper and pulp mill at unit CPM, the management of JKPL has proposed to increase the paper/board production capacity from 1,60,800 TPA to 3,60,800 TPA by installing a new board manufacturing unit of capacity 2,00,000 TPA. The existing pulp mill of capacity 60,000 BD TPA will be replaced with ECF based Chemical Wood Pulp (CWP) mill of capacity 1,60,000 BD TPA which will be shifted from JKPL, Rayagada unit and re-installed. A new Bleached Chemi Thermo Mechanical Pulp (BCTMP) of capacity 1,00,000 AD TPA, De-Inking Plant (DIP) of capacity 150 BD TPD and Secondary Fibre Treatment (SFT) Plant of capacity 400 BD TPD are proposed to cater to the fibre demand of the varieties of Boards for the proposed new Board machine. The supporting facilities for the proposed increase in capacities such as chemical recovery section, power plant, effluent treatment plant (ETP) will be augmented/upgraded based on the requirement.

#### **1.2. EIA Study**

The proposed Mill Expansion Plan (MEP) involves manufacturing of additional product including pulp, the proposed project falls under category "A" under sector 5(i) of the EIA notification 2006. In addition, it is proposed to increase the existing captive power plant capacity from 30.25 MW to 72.00 MW which falls under category "B" under sector 1(d) of the EIA Notification 2006. Since the existing mill site does not fall under

any notified industrial area, public consultation was conducted as per the Environmental Impact Assessment (EIA) Notification 2006.

The EIA study was undertaken by M/s Cholamandalam MS Risk Services Limited, a NABET accredited EIA consultant organization in conformity with the guidelines of Ministry of Environment, Forests and Climate Change (MoEF&CC), covering all the aspects of the conditions mentioned in the Terms of Reference issued by MoEF &CC F.No. IA-J-11011/416/2008-IA.II(I), dated, 9<sup>th</sup> October 2018.

## **2. Environmental Management Aspects in the Existing Facility**

The existing facility is permitted and consented to produce 1,60,800 TPA of writing and printing paper and packaging board and pulp production capacity of 60,000 BD TPA as per the *Environmental Clearance* obtained from *Ministry of Environment, Forest & Climate Change (MoEF&CC)*. The facility is granted with *Consolidated Consent and Authorization (CC&A)* from GPCB vide their Consent No. AWH-63794 dated 28.07.2014, valid up to 10.04.2019 under *Water (P & CP) Act 1974* and *Air (P & CP) Act 1981* as amended and under *Hazardous Waste (M &H and TM) Rules 2008*. JKPL, Unit CPM is regularly submitting the compliance report to Regional Office, MoEF&CC, and the facility has obtained certified compliance report for *Environmental Clearance 2008* from *MoEF&CC* Regional Office, Bhopal vide letter No. 5-266/2008(ENV)/316 dated 07/08/2018.

The mill has total land area of 363 acres (Plant area 201 acres and Colony area 162 acres). The total areas of green belt and plantation constitutes to about 120 acres covering about 33% of total area. The existing facility consists of paper machines, board machine, pulp mill, captive power plant, chemical recovery section, lime kiln, effluent treatment plant and other supporting facilities. The facility is permitted to generate 30.25 MW of power from the captive power plant. The facility is permitted to draw 5 MGD (22,730 m<sup>3</sup>/day) of water from Ukai Left Bank Main Canal. Currently the fresh water consumption is about 20,500 m<sup>3</sup>/day including domestic and industrial applications.

The flue gases generated from Boilers is the only source of emission which is vented out through stacks of adequate dimensions after passing through ESPs and pollution control systems. Electrostatic Precipitators (ESP) are installed on all 4 power boilers, recovery boiler and also lime kiln to control the dust emissions to levels below the stipulated norms of GPCB. Continuous emission monitoring systems have been installed on all the stacks. In order to control the fugitive emissions from the coal and ash handling areas, water sprinkling systems are installed.

Odour emissions are controlled at the existing facility by use of “closed feed” system in the batch reactors. 100 % processing of black liquor in the evaporator for further processing in the recovery boiler has been adopted. Ambient Air quality in the existing facility is monitored once in a month and the data is submitted annually to GPCB.

The total wastewater generated at the existing facility is about 17,500 m<sup>3</sup>/day. The existing ETP is designed for a capacity to handle 30,000 m<sup>3</sup>/day effluents. An online wastewater quality monitoring system is installed to monitor the final treated wastewater quality which is connected to GPCB server. The treated wastewater quality conforms to the GPCB prescribed discharge limits.

Apart from utilizing the treated wastewater for the existing greenbelt and plantation in the company owned lands, it also being supplied to irrigation needs of the local farmers. About 1050 acres of land in the nearby areas is getting benefitted due to utilization of treated wastewater in the area.

Wood dust generated during the process of wood chipping is used as a fuel along with coal in coal fired boiler. Fly ash from boilers is disposed as per fly ash management rule 2009 and is utilized for the manufacturing of bricks and cement. Hazardous waste generated from the existing facility includes ETP sludge and used oil which is sold to board manufacturers and given to authorized recyclers respectively.

### **3. Details of the Proposed Project**

The proposed Mill Modernization and Expansion Plan (MEP) is conceptualized to increase the mill's paper/board capacity to 360,800 tpa (increase by 200,000 tpa) with Bleached Hard Wood Pulp (HWP) and Bleached Chemi Thermo Mechanical Pulp

(BCTMP). The details of the Mill Expansion Plan (MEP) are presented in detail in the below Table;

**Table-1: Plant Capacities (Existing v/s Post MEP)**

S.No	Description	Unit	Existing	Post MEP	Incremental	Proposal
<b>1</b>	<b>Paper/Board Machines section</b>					
1.1	PM#1&2 (PWP)	tpa	60,000	60,000	-	Existing will continue
1.2	PM#3 (Board)	tpa	100,800	100,800	-	Existing will continue
1.3	PM#4 (New Board)	tpa	-	200,000	200,000	New Unit
1.4	Total Paper/board Production	tpa	160,800	360,800	200,000	-
		tpd	480	1,080	600	-
1.5	Deinking Plant	BD tpd	-	150	150	New or Existing SFT will be converted to DIP
1.6	Secondary Fibre Treatment (SFT) Plant	BD tpd	200	600	400	Existing will be used with New 400 tpd SFT plant
<b>2</b>	<b>Pulp Mill</b>					
2.1	Bleached Chemical Wood Pulp mill	BD tpa	60,000	160,000	100,000	Relocating and Reinstallation from JKPL unit, Rayagada, Orissa, with Upgradation. The existing pulp mill of capacity 60,000 BD tpa will be retired.
		BD tpd	175	460	285	
2.2	BCTMP mill	AD tpa		100,000	100,000	New Unit
		AD tpd		300	300	
2.3	ClO <sub>2</sub> plant	tpd	2	15	15	Existing Non-integrated ClO <sub>2</sub> plant will be retired and New integrated ClO <sub>2</sub> plant will be installed.
2.4	Oxygen Generation Plant	Nm <sup>3</sup> /hr	200	500	500	Installation of new O <sub>2</sub> generation plant of capacity 500 Nm <sup>3</sup> /hr. The existing O <sub>2</sub> generation plant will be retired.
2.5	Pulp Wet lapping machine	tpd		150	150	New wet lap machine
<b>3</b>	<b>Recovery plant</b>					
3.1	Evaporator	tph of water evaporation	70	300	230	Existing Evaporator will be used for BCTMP waste liquor evaporation along with Reinstalled evaporator with upgradation
3.2	Recovery boiler	tpd of black liquor solids	335	950	950	Existing recovery boiler will be retired and a new Recovery boiler will be installed
3.3	Lime kiln	tpd of lime	90	230	140	Existing will be used alongwith re-installed lime kiln from JKPM or JKPM lime kiln will be re-installed with upgradation.
3.4	Recausticising plant	White liquor cum/day	1,000	3,000	2000	Existing plant will be upgraded with additional equipment.
<b>4</b>	<b>Power Plant</b>					

S.No	Description	Unit	Existing	Post MEP	Incremental	Proposal
4.1	Power Boilers	tph of steam	170	360	190	CFB#1-20 (To be Retired) CFB#2 - 30 (To be Retired) CFB#3-50 (Operating), CFB#4 - 70 (Operating) New CFB#5 - 150 tph (Operating) New CFB#6 - 90 tph (Standby)
4.2	Turbo Generators	MW	30.25	72.00	41.75	TG#1 - 3.125 (To be Retired), TG#2 - 3.125 (To be Retired) TG#3 - 12 (Operating), TG#4 - 12 (Operating) New TG#5 - 30 MW and New TG#6 18 MW will be installed
<b>5</b>	<b>Others</b>					
5.1	PG Plant	Nm <sup>3</sup> /hr	3000	10000	7000	New 7000 Nm <sup>3</sup> /h will be installed
5.2	Precipitated Calcium Carbonate (PCC) Plant (CaCO <sub>3</sub> )	tpm	1200	1200	-	Existing capacity is adequate. No change
5.3	Silicate Nano Fibers (CaSiO <sub>3</sub> )	tpm	1500	1500	-	Existing capacity is adequate. No change
5.4	GCC plant	tpd	--	100	100	New 100 tpd GCC plant will be installed
<b>6</b>	<b>Water and Wastewater</b>					
6.1	Water Intake and Treatment Plant	m <sup>3</sup> /day	35,000	45,000	10000	Intake pump station and WTP will be upgraded.
6.2	Waste Water Treatment	m <sup>3</sup> /day	30,000	45,000	15000	The existing ETP will be upgraded up to tertiary level to meet the additional hydraulic volumes during the post project scenario

**Some of the salient features of the proposed MEP are as below;**

- Replacing existing chlorine-based pulp mill with Elemental Chlorine Free (ECF) process
- Replacing existing conventional old digesters with state-of-the-art RDH cooking
- Replacing old recovery boiler with new high pressure and efficient recovery boiler
- Installation of new BCTMP plant to substitute costly imported pulp
- Making the mill more self-reliant on pulp for board/paper making
- Generating more bio-fuel (black liquor solids) based energy
- State-of-the-art Multilayer Coated Board Machine with energy efficiency
- High pressure, high efficiency FBC boiler for better power generation through co-generation

- Higher efficiency turbo generators with low specific steam/t kWh
- High efficiency ESP for coal fired boiler, Recovery boiler and Lime kiln to meet stringent Particulate Matter (PM) norms
- Non-Condensable Gases (NCG) collection system to collect Non-Condensable Gases and incinerate in Lime kiln
- Producer Gas (PG) plant to fire gas in lime kiln to reduce consumption of costly furnace oil.
- Adopting water conservation and efficient water management
- Recycle and water conservation to reduce specific fresh water consumption
- Upgradation of Wastewater treatment plant by segregating the colored and non-colored effluents with tertiary treatment

### **3.1. Project Requirements**

Major raw material for the proposed MEP is wood. The additional requirement of 3,52,000 TPA of wood/bamboo will be sourced from own plantation along with purchase from local supply to meet any shortages. JKPL, Unit CPM has implemented social and farm forestry plantations of Eucalyptus, Subabul and Casuarina within 350 Km radius of the mill covering different parts of Gujarat, Maharashtra and Madhya Pradesh is about 1,35,000 acres of land. In addition, JKPL unit CPM has developed an action plan for enhancing captive plantation by planting saplings within the facility.

The MEP proposals in the pulp mill are more focused on eliminating elemental chlorine in bleaching, conservation of energy, water and reduction in specific chemical consumption in bleaching. To meet the additional steam demand for power generation, the Captive power plant capacity will be increased from 30.25 MW to 72.00 MW by adding a new 30 MW TG, 18 MW TG and 150 tph CFBC boiler and 90 tph CFB boiler. The existing two TGs of capacity 3.125 MW each and existing two boilers of capacities 20 tph and 30 tph will be retired.

Black liquor (generated in-house), indigenous, imported coal, lignite, furnace oil and pet coke are the fuels. Coal/lignite will be used for power and steam generation. Furnace oil with producer gas will be used in lime mud reburning kiln and furnace oil will be used in start-up and stabilising the operations of chemical recovery boiler.

The total fresh water requirement will be increased from 20,500 m<sup>3</sup>/day to 37,000 m<sup>3</sup>/day whereas the specific water consumption will reduce from 40 m<sup>3</sup>/t to 32m<sup>3</sup>/t of

paper/board production. Necessary In principle Permission has been obtained for additional quantity from Narmada Water Resource Water Supply and Kalpsar Department.

Since the available free space in the mill will be used for project facilities, no additional land is required.

#### **4. Summary of Baseline Monitoring Studies**

The project site (existing mill) is located at Village Gunsada, Bhimpura, Singalkhanch, Fort Songadh Taluk, Tapi District in the State of Gujarat. The study area covers 10 km radius around the boundaries of the project site. As a part of EIA, the primary baseline data monitoring has been conducted for three (3) months i.e., from 24<sup>th</sup> September 2018 to 23<sup>rd</sup> December 2018 and the data has been generated by MoEF&CC approved & NABL accredited Environmental Testing Laboratory **M/s. Vardan Enviro laboratory, Gurgaon**. This baseline studies include Ambient Air Quality Monitoring (AAQM), Soil Quality analysis, Water Quality analysis (Ground and Surface water), and noise monitoring within 10 km radius of the Plant site as per the Terms of Reference (ToR) issued by the MoEF&CC.

Eight (8) locations within the 10 km radius around the study area were selected for soil sampling including three (3) locations where treated wastewater is utilized for land irrigation. The pH of the soil ranges from 7.2 to 8.32 indicating that soil is classified into moderately alkaline. The concentration of chlorides varied from 55.45 mg/100g to 93.79 mg/100g. Available Nitrogen level in the soil was found ranged from 196 kg/ha to 362kg/ha (low to medium category). Calcium is in the range of 45.01 mg/100g to 73.26 mg/100g. No contamination of soil including the samples where treated wastewater is utilized for land irrigation was observed.

The continuous weather monitoring station was installed near the proposed project site at a height of 6m above the ground level and hourly measurements of the following parameters were measured at site during the study period i.e. from 24<sup>th</sup> September 2018 to 23<sup>rd</sup> December 2018. The predominant wind direction during the study period was from East and North East. Ambient Air Quality (AAQ) monitoring was conducted at eight (8) locations in the study area as per CPCB guidelines. The average concentrations of PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub> in the study area ranged from

27.9  $\mu\text{g}/\text{m}^3$  to 51.5  $\mu\text{g}/\text{m}^3$ , 57.8  $\mu\text{g}/\text{m}^3$  to 86.5  $\mu\text{g}/\text{m}^3$ , 14.1  $\mu\text{g}/\text{m}^3$  to 26  $\mu\text{g}/\text{m}^3$  and 24.4  $\mu\text{g}/\text{m}^3$  to 28.9  $\mu\text{g}/\text{m}^3$  which is within the permissible range of 60  $\mu\text{g}/\text{m}^3$ , 100  $\mu\text{g}/\text{m}^3$ , 80  $\mu\text{g}/\text{m}^3$  and 80  $\mu\text{g}/\text{m}^3$  respectively as per NAAQ standards prescribed by CPCB. Noise levels were recorded at the Mill site and other seven locations in the study area. The observed values are complying with the NAAQ standards w.r.t. noise prescribed by CPCB.

To assess the water quality of the study area, the water samples were collected at Upstream and downstream of the Tapi River which is the major source of water for the project. pH of Tapi River, Upstream and downstream water is in the range of 8.04 mg/l to 8.05 mg/l which is moderately alkaline. The TDS levels in the surface water of upstream and downstream was found be 490 mg/l and 498 mg/l respectively. The Fluoride concentration of Upstream and downstream was found to 0.65mg/l and 0.60mg/l respectively. The microbiological content as total coliform of upstream and downstream was found to be 220 MPN/100 ml. All the values observed from the analysis of river water were found to be within the permissible limits as per drinking water, IS: 10500 –2012 “Specification for drinking Water”. To assess the ground water quality of the study area, eight (8) ground water sampling locations were selected. The analysis results of ground water samples indicate that the average pH ranged in between 7.2 to 8.2. TDS ranged from 351.21 mg/l to 670 mg/l. The heavy metal concentration was found to be Below Detectable Limit and fluoride concentrations were observed to be in the ranges of 0.35mg/l to 0.58 mg/l. All the values observed from the analysis of ground water were found to be within the permissible limits as per drinking water, IS: 10500 –2012 “Specification for drinking Water”.

Flora and fauna studies were carried out during 26<sup>th</sup> – 29<sup>th</sup> September 2018 to assess the list of terrestrial plant and animal species that occur in the core zone and the buffer zone up to 10 km distance from the core zone boundary. As diversity of the project concerned Zone III (10Km radius from project boundary) showed higher diversity value than zone I (Core) and zone II (5Km radius from project site) since its diversity enhanced by the reservoir, River and forest.

Primary Socioeconomic Survey was undertaken from 26<sup>th</sup> Sep 2018 to 29<sup>th</sup> Sep 2018. During this survey, primary data in relation to geographical features, settlements, roads and amenities in the respective villages were observed. The discussion was mainly focused on mapping the existing amenities in the respective villages, felt basic needs, Problems if any due to the existing project operation.

## **5. Prediction of Impacts and Environmental Management Plan**

Unlike Greenfield projects, the proposed project will be limited to minor construction activities such as earth work, foundations and flooring etc. Construction related environmental impacts will be limited to plant site which are reversible in nature. The proposed MEP is within the plant premises; hence, there will not be any change in the land use pattern in the study area. The existing green cover in the plant will be maintained 33% of the total area without any change in the landscape and environmental and ecological setting.

The major source of emissions are Particulate Matter (PM), Sulphur dioxide (SO<sub>2</sub>) and oxides of nitrogen (NO<sub>x</sub>) from the proposed coal fired boiler, augmentation in chemical recovery boiler and lime kiln. Prediction of impacts on air environment has been carried out by employing mathematical model (ISCST3 dispersion model).

The emission rates for the proposed coal fired boiler were estimated based on the new thermal power plant standard dated 2015 for PM, SO<sub>2</sub> and NO<sub>x</sub> (i.e. 30 mg/Nm<sup>3</sup>, 100 mg/Nm<sup>3</sup> and 100 mg/Nm<sup>3</sup> respectively). The emission rates for the proposed chemical recovery boiler are estimated based on MoEF&CC limits for boilers used in the other industries including paper and pulp, as per MoEF&CC notification dated 29<sup>th</sup> January 2018 which is 600 mg/Nm<sup>3</sup> and 300 mg/Nm<sup>3</sup> respectively for SO<sub>2</sub> and NO<sub>x</sub>. Whereas, the emission rates for the proposed limekiln are estimated based MoEF&CC standard for lime kiln dated 22<sup>nd</sup> March 2018 which is 400 mg/Nm<sup>3</sup> and 500 mg/Nm<sup>3</sup> respectively for SO<sub>2</sub> and NO<sub>x</sub>. Based on the findings of the detailed air quality modelling exercise, it has been inferred that the resultant cumulative concentration for estimated air pollutant emissions at around 10 Kms radius distance from proposed project will comply with the NAAQ Standards and the peak predicted Ground Level

Concentrations (GLCs) i.e.  $1.59 \mu\text{g}/\text{m}^3$ ,  $9.48 \mu\text{g}/\text{m}^3$  and  $6.03 \mu\text{g}/\text{m}^3$  respectively for PM,  $\text{SO}_2$  and  $\text{NO}_x$  will be observed within 2 km from the project site.

Dedicated Electrostatic Precipitators (ESP) will be installed for control of Particulate Matter (PM) emissions from the proposed boiler in the captive power plant, proposed chemical recovery boiler and lime kiln. High Efficient ESP will be designed to achieve emission norms of  $30 \text{ mg}/\text{Nm}^3$  for the proposed coal fired boiler. It is proposed to adopt dry limestone addition method for capturing  $\text{SO}_2$  emissions within the combustion chamber of the proposed CFBC boiler. Stacks of adequate height will be installed for the proposed coal fired boiler, chemical recovery boiler and lime kiln as per the minimum stack height norms by CPCB for efficient dispersion of gases. The NCGs and Mercaptans formed at the pulp mill section digesters, blow tank systems and evaporators will be controlled by installing NCG gas extraction system

To control the wind-borne coal dust fugitive dust emissions, closed type storage sheds and coal conveyer will be provided with water sprinkling system arrangement. Necessary dust collection systems will be installed at coal handling, conveyors and storage areas.

The major noise emitting sources at the project site are from proposed new Board machine, Turbo Generator and Chipper. Board Machine will be housed inside building and Entire Turbo Generators will be housed in co-generation power house with suitable accoustic enclosure.

The specific water consumption per tonne of paper/board production will reduce considerably from  $40 \text{ m}^3/\text{t}$  to  $32 \text{ m}^3/\text{t}$  during the post MEP scenario due to the adoption of ECF Bleaching technologies and other efficient water use processes and water conservation operations. The additional fresh water required for the proposed project ( $16,500 \text{ m}^3/\text{day}$ ) will also be sourced from Ukai Left Bank Canal as per the existing scenario. The specific wastewater generation per tonne of product will reduce from  $36 \text{ m}^3/\text{T}$  to  $29 \text{ m}^3/\text{T}$  during the Post MEP scenario. The existing ETP of capacity  $30,000 \text{ m}^3/\text{day}$  will be upgraded with addition of required new pollution abatement equipment and processes to meet the additional hydraulic volumes during the post

MEP. The AOx levels in the treated wastewater will be maintained within the GPCB limit of 8 mg/l. The treated wastewater quality will comply with the prescribed MoEF&CC/GPCB limits.

About 27,800 m<sup>3</sup>/day of treated wastewater is proposed to be 100 % utilized for land irrigation. The mill has about 1050 acres currently available for the utilization of treated wastewater for land irrigation. Considering the application rate of 45 m<sup>3</sup>/ha/day for clayey soil as per the MoEF&CC notification dated 14<sup>th</sup> January 2016, about 475 acres of additional land is required for the complete utilization of treated wastewater for land irrigation. Thus, CPM unit has approached nearby farmers to meet the additional land requirement for reusing the treated wastewater for irrigation. Additional pumping and pipeline systems will be installed for disposal of additional treated wastewater for irrigation in the area. However, considering the challenges in utilizing 100% of the treated wastewater quantity for irrigation due to variations in the cropping pattern, JKPL unit CPM requests MoEF&CC to grant permission to discharge treated wastewater of about 15% into Goda Nala during off crop seasons and monsoon after conforming to the discharge standards prescribed by GPCB. Continuous monitoring studies will be undertaken by JKPL Unit CPM to monitor treated wastewater quality, soil quality, river water quality and ground water quality to ensure no adverse impacts are caused due to the discharge of treated wastewater into River/Land.

No major solid wastes are generated from the paper and pulp mill and associated processes. As per the existing practices, the wood dust will be used as alternative fuel in Boiler, fly ash will be used for Cement/Brick manufacturing, lime grit will be used as backfilling material at abandoned stone quarry, ETP sludge will be sold to board manufacturers and spent oil will be disposed to authorized recyclers.

## **6. Public Consultation**

Public consultation was conducted as per the Environmental Impact Assessment (EIA) Notification 2006. Public hearing for the proposed project was conducted at CPM

Colony Ground, J K Paper Ltd., Unit: CPM, PO: Central Pulp Mills, Fort Songadh, Dist: Tapi (Gujarat) -394 660 dated 30/04/2019.

Public hearing meeting was chaired by Mr.R.S.Ninama, IAS., Chairman, Public Hearing Meeting and District Collector/District Magistrate, Surat District. The meeting was conducted by Mr. A.G. Patel, Regional Officer, Gujarat Pollution Control Board, Navsari. About 247 persons attended the Public Hearing meeting and 30 persons raised their concern on various issues. Participants from various groups including local farmers, working women, Sarpanchs, etc. were among the participants in the public hearing.

## **7. Conclusions**

- Full-fledged wastewater treatment facilities and high efficiency Electrostatic Precipitators (ESP) and other pollution abatement measures will result in minimizing the adverse impacts on the environment
- The NCGs and Mercaptans formed at the pulp mill section digesters, blow tank systems and evaporators will be controlled by installing NCG gas extraction system
- Total investment for the installation of project is **Rs 2190 Crore** (including all indirect taxes like custom duty and GST etc.)
- The project will create direct employment to about 300 persons. In addition, it would generate indirect employment to about 1000 persons in the industries and service organizations and material handling, etc., which will be supported by the operations of the mill.

This project will have significant beneficial effects in terms of growth and development of the regional economy