EXECUTIVE SUMMARY

OF

ENVIRONMENTAL IMPACT ASSESSMENT REPORT

FOR

PROPOSED 2000 CMD COMMON EFFLUENT TREATMENT PLAN

AT: SURVEY NO: 168, 169, 170, 172, 179/1 & 179/2
HINGANGHAT INTEGRATED TEXTILE PARK, TALUKA: HINGANGHAT, DISTRICT: WARDHA,
STATE: MAHARASHTRA

BY

HINGANGHAT INTEGRATED TEXTILE PARK PVT. LTD.

EXECUTIVE SUMMARY

A. BRIEF DESCRIPTION PROJECT

S. NO.	DETAILS	INFORMATION		
1	Name of the Project	Proposed Common Effluent Treatment Plant (CETP)		
2	Capacity	2000 CMD		
3	Regulatory Framework	Category 7 (h) "Common Effluent Treatment Plants" as per EIA Notification, 2006		
4	Location	Survey No: 168, 169, 170, 172, 179/1 & 179/2 Hinganghat Integrated Textile Park Taluka: Hinganghat, District: Wardha State: Maharashtra		
5	Toposheet No.	55 L/10, 55 L/11, 55 L/14 & 55 L/15 of SOI		
6	Geographical Coordinate	**Latitude**	**Longitude**	**Elevation (MSL)**
		20°33'28.46"N	**78°47'54.47"E**	**218**
7	Name of Project Proponent	Hinganghat Integrated Textile Park Pvt. Ltd.		
8	Area Requirement	2667.1 sq. m		
9	Power Requirement	**For CETP** Connected load: 387 kW Operating load: 182 kW Cost: 29596 Rs./day **For RO** Connected load: 329.5 kW Operating load: 237.4 kW Cost: 33158 Rs./day		
10	Man Power	During Construction: Around 28-30 numbers During Operation: 8-10 numbers Source: Local persons shall be hired		

S. NO.	DETAILS	INFORMATION
11	Project Cost	573 Lakhs 49 Lakhs
Environmental Setting		
12	Nearest Railhead	Hinganghat RS: 4.0 km SE Direction
13	Nearest Airport	Dr. Babasaheb Ambedkar International Airport, Nagpur: 63.0 km NE Direction
14	Nearest Town	Hinganghat: 4.0 Km ESE Direction
15	Nearest Habitat	Vani Village: 1.0 Km SSW Direction
16	Nearest Water Bodies	Vena River: 2.5 Km SE Direction Pipalgaon Nala: 7.0 Km SE Direction Kumbhi Nala: 7.0 Km SE Direction Ambiya Nala: 7.5 Km SSE
17	Nearest Highway	National Highway-7: 2.0 Km S Direction
18	General topography	Plain land
19	Eco Sensitive Zone (National Park, Wildlife Sanctuary, Biosphere Reserve, Wild Life Corridors etc.)	Not within 5 km radius from Project boundary
20	Historical & Archeological Important Place, Defense Establishment	

B. PROJECT PROCESS

Hinganghat Integrated Textile Park Pvt. Ltd. has proposed Common Effluent Treatment Plant (CETP) within the textile park of total 2000 CMD capacity to provide the comprehensive treatment and management of Effluent generating from the various industries. Treated effluent shall be reused back to the industries and the plant shall be completely based on Zero Liquid Discharge (ZLD) by providing four stages Reverse Osmosis (RO) and Multi Effective Evaporator (MEE) facility.

C. BASELINE STATUS OF ENVIRONMENT

Summary of the Environmental monitoring undertaken at different locations during Pre monsoon Season (March 2017 to May 2017) are given below for various parameters:

Table 1: Environmental Baseline Monitoring Results

Parameter	Location	Results	Standards		
Ambient Air Quality	8 Location	PM2.5: 33.3 to 71.5 µg/m3 PM10: 9.6 to 19.2 µg/m3 SOx : 1.9 to 16.7 µg/m3 NOx : 8.8 to 19.2 µg/m3	PM2.5 : 60 µg/m3 PM10 : 100 µg/m3 SOx : 80 µg/m3 NOx : 80 µg/m3		
Noise Level	10 Location	Day: 44.9- 57.4 dB(A) Night: 27.1- 44.8 dB(A)	Industrial	Day: 75 dB(A)	Night: 70 dB(A)
			Residential	Day: 55 dB(A)	Night: 45 dB(A)
Water Quality	Ground Water: 8 Location	pH : 7.67 to 8.12 TDS : 17.0 to 820 mg/l TH : 152.0 to 488.0 mg/l	6.5 to 8.5 2000 mg/l		
	Surface Water: 1 Location (Two samples from 1000 m distance)	pH : Slightly alkaline TDS: US (256.0 mg/L) to DS (206 mg/L). TH: US (150.0 mg/L) and DS (142 mg/L). BOD: 10.0 to 12.0 mg/l			
Soil Quality	9 Location	Soil is Neutral and slightly alkaline in nature. Values of Nitrogen, Potassium and Phosphorus show that the soil quality of almost every place is good for agriculture practices	-		

All analysis results of AAQM, Noise Level, Ground & Surface Water and Soil were found well within the limit prescribed of CPCB and other regulatory agencies.

D. SUMMARY & CONCLUSION

Water, Wastewater and Effluent management

- Effluents from the textile park should be treated well to the standards as prescribed by the Central/Maharashtra Pollution Control Boards
- Transportation of Effluent shall be done only through closed pipeline system from unit to CETP
- In all cases, efforts should be made for re-use of water and its conservation
- Arrangement shall be provide to hold the effluent up to 24 hr. in case of emergency shutdown
- Arrangement shall be provided at the inlet of CETP to measure flow regularly
- ZLD shall be achieved by providing advanced treatment technology i.e. Reverse Osmosis (RO) & Multi Effective Evaporators (MEE)
- Laboratory is proposed with all analysis instruments and facilities for analysis of wastewater. The wastewater parameters will be analyzed regularly and records will be maintained for the same
- All the chemicals will be stored and handled safely
- Preventive maintenance program will be implemented regularly
- The unit shall be provided with necessary mechanical equipment, electrical arrangements, instrumentation & automation with SCADA system

Air Pollution

- The emission levels of pollutants from stack attached with DG sets should conform to the pollution control standards prescribed by Central or State pollution control board
- In-plant control measures should be taken to contain the fugitive emissions
- Infrastructural facilities should be provided for monitoring the stack emission and measuring the ambient air quality including micro-meteorological data (wherever required) in the area
- Proper stack height attached with DG sets as prescribed by the Central/State Pollution Control Boards should be provided for better dispersion of pollutants over a wider area to minimize the effect of pollution
- Internal roads shall be developed so as to reduce the fugitive emission

- This greenbelt shall be develop which will help to reduce the air pollution
- Regular water sprinkling shall be done in and around the plant premises on regular basis

Solid & Hazardous Wastes

- No hazardous or nonhazardous waste shall be disposed openly. Required area shall be provided for same storage of the same so as to send to the CHWTSDF and recyclers
- Top soil shall be stored separately so as to use the same for plantation
- Intensive programs of tree plantation on disposal areas should be undertaken
- Training to the workers/operator for safe handling of waste
- Necessary agreement shall be made with CHWTSDF for safe handling and disposal of hazardous waste
- Transportation of construction material shall be done through closed tracks so as to avoided the dust generation which ultimately harm quality of top soil

Noise and Vibration

- Manufacturers and suppliers of machine/equipment will be selected to ensure that these machine /equipment meet the desired noise/vibration standards
- The operators working in the high-noise areas shall be provided with ear-muffs/ear-plugs
- Acoustic laggings and silencers shall be provided in equipment wherever necessary
- Transportation of Raw material shall be ensured only in day time
- Proper green belt shall be developed to reduce the noise level
- Proper maintenance and lubrication of rotating/moving part so as to reduce the noise level

Occupational Safety & Health

- Adequate space will be provided for equipment repair or removal
- Equipment maintenance shops will be set up with appropriate safety provisions for hazards associated with maintenance activities
- Laboratories with two easily accessible exists that are reasonably remote from each other will be constructed
- Lightning protection will be provided
- Emergency shutdown switch, clearly labeled, at all machinery units will be provided
- Alternative arrangement of power shall be provided
- Fire hydrants and fire alarms will be provided

- Laboratory wall surfaces, ceilings, and furniture will be made by nonflammable or fire resistant materials
- First aid Kits will be provided in plant premises and site office
- Safety shoes, chemical aprons, work cloths, safety helmet and rubber boots will be provided
- Safety equipment will be located for easy access in an emergency
- Safety Helmets and ear plugs will be provided for visitors
- Proper house-keeping and cleanliness shall be maintained both inside and outside of the CETP unit
- Proper parking places shall be provided for trucks and other vehicles
- Separate entry and exit shall be provided in the plant premises
- Proper speed breakers shall be provided to avoided
- Complete plant shall be equipped with all required signs and direction boards
- Security arrangement at entry and exit gate
- Proper entry of vehicles at entry and exit gate etc.
- Visitor ID cards shall be allotted to the visitor
- Required width of road shall be provided for easy movement of vehicles

Vegetal Cover

- More than 33% of total plot area shall be developed under green belt.
- Native, fast growing tree species will be planted.
- Ground flora and shrubs species shall also be provided.
- Proper maintenance shall also be ensured for survival of the plant species

Odor Management

- All the aspects of odor control have been adopted during designing of the treatment plant
- Proper aerobic condition will be maintained in biological treatment system
- Avoiding any shock loading in term of flow and COD variation
- Avoiding upsets in the smooth running of CETP
- Avoiding the solid inventory and sludge backlog
- Continuous disposal of sludge
- Proper operating condition will be maintained
- Ensure the proper housekeeping

- Green Belt will be developed in and around the plant area
- Spraying of anti-odorous chemicals wherever required
- Use of Personal protective equipment like' nose masks, goggles for individuals working in the CETP area

E. EMP COST ESTIMATION

The approximate cost for the EMP will be 79.0 Lakhs towards capital investment and about 68.0 Lakhs/year towards recurring cost per annum. Details of the same are given below:

Table No. 2: Capital Cost of Environmental Monitoring or for mitigation measures

Sr. No.	Name of Activity	Capital Cost (Rs. Lakhs)	Recurring Cost (Rs. Lakhs/year)
Construction Phase			
1	PPE's	12	2
2	Dust Suppression	5	2
3	Environmental Monitoring	-	7
4	Green Belt Development	10	3
5	Sanitation Work	6	2
6	Waste Management	7	1.5
Sub Total		40	17.5
Operation Phase			
1	Air Pollution Control System	3	1.5
2	RWH & Water Pollution Control	7	2.5
3	Noise pollution control	1	0.5
4	Green Belt Development/ Maintenances	6	2
5	Environmental monitoring / Environmental Management	-	7
6	Occupational health & safety	7	2
7	Waste Management	15	35
Sub Total		39	50.5
TOTAL		**79.0**	**68.0**