EXECUTIVE SUMMARY

Proposed 30 KLPD Molasses based Distillery/Ethanol Plant

Adinathnagar, Tal. Pathardi, Dist. Ahemadnagar, Maharashtra

Proposed by

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1. Brief Description of the project

SVSSKL proposes to install a new 30 KLPD Distillery/Ethanol Plant, with Incineration Boiler based Co-gen Power Plant for ZLD to produce Ethanol and Rectified Spirit, which will operate for 300 days in a year on own B-heavy/C-molasses

2. Nature and Size of the project

The proposed 30 KLPD capacity distillery / ethanol plant will employ fermentation, multi pressure distillation system, evaporation & slop fired incineration boiler based cogeneration power plant. The sugar plant will supply B-heavy/C-molasses to the distillery plants & bagasse as support fuel for the incineration boiler. The incineration boiler & turbine will supply steam & power to the proposed distillery plant & auxiliaries of the co-gen power plant, during the operating periods internally. The incineration boiler based co-gen power plant will employ high pressure & temperature configuration incineration boiler (42 kg/cm^2 and 400°C) with 10 TPH capacity and matching 1.2 MW single extraction cum condensing type TG set & DCS control system, for efficient operation. (Incineration boiler & TG set will be suitable only for the 30 KLPD distillery plant).

2.1 Project Location

The proposed distillery will be located at Adinathnagar, Tal. Pathardi, District Ahmednagar - Maharashtra. Proposed distillery graphically located at Lat 19°12'39.86"N & Long 75° 5'52.48"E, at a maximum elevation of 530 m above MSL.

The land requirement for proposed industry unit is already under possession. Proposed project will be within existing factory premises. Project site is adjacent to Maharashtra State highway 148 (SH-148) which connects Ahmednagar with Paithan. The factory is also connected to Kalyan-Ahmednagar- Pathardi- Parbhani-Nanded-Nirmal (NH 222) at Tisgaon which lies 3.5 km towards the SW on SH-148. There are no Eco-sensitive zones like Tropical Forest, Biosphere Reserve, National Park, Wild Life Sanctuary, and Coral Formation Reserves within 10 km Influence Zone. Environmental setting of the project site is given in **Table 1** below.

Table 1: Environmental Setting of the Project Site

Site location	Adinath nagar	
Nearest Village	Kasar Pimpalgaon	1.5 km towards NE
Nearest Town/Taluka	Pathardi	9 km towards SE
District Headquarters	Ahmednagar	39.5 km towards SW
Nearest Highway	SH-148 (Ahmednagar- Paithan)	Adjacent to highway

Nearest Railway Station	Ahmednagar	39.5 km towards SW
Nearest Airport	Shirdi International Airport/Saibaba Airport)	90.55 km towards SW
Nearest Water Source	Mula Canal	2.5 km towards NNW
	Jambhul odha	1 km in WSW

2.2 Land Details

The total area available with the factory is 77.40 acres out of that total 25.55 acres will developed under green belt.

Detailed area breakup is given below,

- Total plot area 77.40 acres i.e. 31.32Ha.
- Sugar factory built up area: 11.07 acres
- Open space: 27.47 acres
- Road area: 3.37 acres
- Distillery: 9.95 acres
- Existing Green Belt: 15.5 acres
- Proposed Green Belt: 10 acres
- Total greenbelt: 25.55 acres

2.3 Size and Magnitude of the Operation

The brief information of proposed expansion of integrated project details of sugar, distillery and cogeneration are given in **Table 2.**

Table 2: Salient features of integrated project

#	Particulate	Description
1.	Project	Proposed 30 KLPD Molasses based Distillery/Ethanol Plant
	Location	106/1,106/2, 105/1, 105/2,441, Adinathnagar 414505, Tal. Pathardi, Dist. Ahmednagar, Maharashtra.
2.	Product	Molasses / sugarcane juice based distillery / Ethanol Plant (30 KLPD) Total Spirit + Fusel Oil : 31.50 KLPD Rectified Spirit (RS) : 30 KLPD Extra Neutral Alcohol (ENA) : 30 KLPD Ethanol : 30 KLPD Steam & Power from incineration boiler based cogeneration power plant, on Spent wash / bagasse as fuels. Existing sugar 2500 TCD

3.	Molasses requirement (TPA)	Molasses B Molasses 26800 TPA C Molasses 3719 TPA
4.	Operation days	300
5.	DG	Existing DG 320 kVA & 187 kVA
6.	Sugarcane juice (MTD	800-1000 MTD
7.	Water requirement	Total fresh water requirement for proposed distillery will be 275 CMD (270 Industrial +5 domestic).
8.	Source of water	Mula Right canal
9.	Boiler	12 TPH
10.	TG	1.2 MW
11.	Fuel	Bagasse 1.4 TPH Conc. Spent wash 3.5 TPH
12.	Steam	Total Steam Generation 11.7 TPH
13.	Power Requirement	For proposed Distillery/Ethanol 0.9
14.	Total effluent generation	Spent wash max 300 CMD Condensate 216 CMD Spent lees 60 CMD Blow down 30 CMD
15.	Ash	Bagasse ash 9.1 TPD Spent wash ash 10 TPD
16.	CPU sludge sludge	10 TPD
17.	Air pollution control measures	Electrostatic precipitator
18.	Man-power	During Construction – 50 nos. During Operation – 70 nos.
19.	Total project cost	Rs. 51.79 Cr
20.	EMP capital cost	Rs. 2.46 Cr
21.	CER Cost	Rs. 1.0 Cr.
22.	Nearest Village	Kasar Pimpalgaon 1.5 km in N
23.	Nearest Town / City	Pathardi 90 km in Se
24.	Nearest National Highway	SH-148 (Ahmednagar- Paithan) Adjacent
25.	Nearest Railway station	Ahmednagar 39.5 km towards SW
26.	Nearest Airport	Aurangabad Airport 78 km in NE Shirdi International Airport(or Saibaba Airport) 90.55 km towards SW
27.	National Parks, Reserved Forests (RF) / Protected	Jayakawadi Bird sanctuary 45 km in NE No any Forests (RF) / Protected Forests (PF), Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors

	Forests (PF), Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km radius	etc. within study area of 10 km radius observed in 10 km radius from the project boundary
28.	River / Water Body (within 10 km radius)	Mula Canal 2.5 km towards NNW Jambhulodha 1 km in WSW

3. Description of Environment

Collection of base line data is an integral aspect of the preparation of Environmental Impact Assessment Report. Existing baseline data gives idea about the present status of environment in the proposed project area. It helps to evaluate anticipated effects due to setting up of 30 KLPD Molasses based Distillery/ Ethanol Plant at Shri. Vridheshwar Sahakari Sakhar Karkhana Ltd. At Adinathnagar, Tal. – Pathardi, Dist. – Ahmednagar, Maharashtra and superimposed on the compiled baseline data subsequently to assess environmental impacts.

The study was conducted in the impact area; 10 km radius area surrounding the project site, during 1st October 2020 – 31st December 2020. Studies were undertaken to generate baseline data.

Table 3: Environmental Parameters and Frequency of Monitoring

Components	Parameters	Frequency	Methodology adopted
Ambient air quality	$PM_{2.5}$, PM_{10}, SO_2, NO_x	Ambient air quality samples are monitored at 10 locations for 24 hours twice a week for the study period	PM_{10}/$PM_{2.5}$: Gravimetric method SO_2: Modified West and Gaeke Method. (IS : 5182, Part II) NOx: Jacobs & Hochheiser Method. (IS 5182 Part VI)
Meteorology	Surface: Wind speed & direction, temperature, relative humidity and rainfall	Secondary data collected IMD	Monitoring data for primary data IS: 8829
Water quality	Physical, Chemical and Bacteriological parameters.	Ground water samples were collected from 9 locations and 2 surface water samples were	Standard methods for Examination of Water and Wastewater' published by American Public

		collected	Health Association (APHA)
Ecology	Terrestrial fauna and flora and River ecology	Field survey conducted in 10 km study area, once during the study period	Listing of floral and faunal species.
Noise	Noise levels in dB(A)	Continuous 24 – hourly monitoring at 10 locations once during the study period	IS: 4954 as adopted by CPCB.
Soil	Physico-chemical	Sampling at 9 locations around project site once during the study period.	BIS specifications
Socioeconomic Data	Socio-economic characteristics of the affected area	General in 10 km radial study area and data collected around the project site through field visits	Census 2011 and Primary study
Land use pattern	Land use for different categories	10 km radius, based on data published in Primary Census Abstract and satellite imagery LISS –III	Topo-sheet Satellite imageries
Geology and hydrogeology	Type, drainage etc.	Field Observations in 10 km study area and from secondary data	Authenticate published data.

Table 4: Observation of Environmental monitoring

Environmental Attributes	**Frequency of monitoring**	**Parameters**	**Observed Results**	
Ambient Air Quality	10 Locations 24 hourly samples Twice a week for 3 months (in µg/m$^{3)}$	PM10	PM10 – 44.3 to 66.5 µg/m^3 PM2.5 – 12.8 to 27.8 µg/m^3 SO_2 – 7.2 to 16.6 µg/m^3 NOx – 12.7 to 20.2 µg/m^3 All parameters are within NAAQ 2009 standards.	
		PM2.5		
		SO_2		
		NO_x		
		CO		
Water Quality (Ground & Surface)	Primary data Ground water samples were collected from 9 locations and 2 surface water samples were collected from one location	Colour	**SW**	**GW**
		pH	pH – 7.02 to 7.12 TDS – 225 to 234 µg/m^3 EC – 364 to 377 µS/cm	pH – 7.11 to 7.54 TDS – 287 to 490 µg/m^3 EC – 445 to 714.8 µS/cm
		TDS		
		EC		

			E - Coli – 125 to 200	E - Coli – Not detected.
		E-Coli	All parameters are within limit.	
Soil Quality	Once in season at 9 locations	Soil type and texture, Physico-chemical properties, NPK	pH – 7.81 to 8.09 Organic Carbon – 0.36 to 0.52 % Water Holding Capacity – 36.7 to 43.6 % Nitrogen – 128.7 to 148.4 kg/ha Phosphorous – 14.6 to 19.4 kg/ha Potassium – 174.9 to 204.2 kg/ha Dark brown to black, clay loam, soil is good in fertility, good water holding capacity, heavy metal contamination signs not seen.	
Noise Quality	Once in season at 10 Locations (Noise levels in dB (A)	Day	50.6 – 70	
		Night	41.6 – 55.2	
Land use Pattern	One time visit of the study area for ground truthing	Identification & classification of land use	Most of the land is Agricultural land followed by Barren land	
Ecology	General in 10 km radial study area and data collected around the project site through field visits	Flora	Accasia sp. Azadirachta indica , Cassia tora, Senna siamea etc.	
		Fauna	Common mormon, Lemon pansy, green bee-eater, Drongo etc.	

4. Anticipated Environmental Impacts

Based on the assessment made in the preceding sections the overall impacts due to the proposed power project are summarized in **Table 5**

Table 5: Summary of Impacts due to proposed activities on environment

Sr. No	Environmental Component	Project Activity	Impacts Identified	Impact Assessment after Mitigation

1.	Topography	Site Clearance	Minor changes in landscape	Insignificant
		Construction Activities	Changes in landscape	Insignificant
		Operation activities	Changes in land use. The available free land is utilized.	Insignificant
2.	Air Quality	Site clearance	Excavation and levelling activities are limited hence, fugitive emissions would be restricted.	Insignificant
		Construction activities	Local increase in SPM	Insignificant
		Transportation	Vehicular and fugitive emissions	Insignificant
3.	Noise	Construction activities	Temporary local increase in noise	Insignificant
		Operation activities	Continuous noise but confined to within the Plant Area	Insignificant
		Transportation	Increase in noise levels due to vehicular traffic	Insignificant
4.	Water Resources	Construction activities	The water will be used during the construction activities.	Insignificant
		Operation activities	Surface water	Insignificant,
5.	Water Pollution	Construction activities	Small volume of wastewater from the construction and sanitation	Insignificant
		Operation activities	Effluent generated in the plant	Insignificant as there will be zero discharge of effluent.
6.	Ecology	Site Clearance	There will not be major disturbance to flora fauna	Insignificant
		Construction activities	There will not be major disturbance.	Insignificant
		Operation activities	There will not be major disturbance to flora fauna.	Insignificant
7.	Soil Characteristics	Construction activities	Since there is minimal levelling and excavation, the proposed project area is within the existing facilities.	Insignificant
		Operation activities	No changes are envisaged in this phase.	Insignificant
8.	Land Use	Construction activities	There will be change in land use for industrial purpose.	Significant
		Operation activities	The existing land use is change to industrial use.	Insignificant

9.	Socio-economics	Construction activities	Creation of additional jobs/ businesses.	Significant
		Operation activities	Rise in per capita income due to increased opportunities.	Significant
10.	Civic Amenities	Construction activities	Built up of temporary structures for workers and non-workers.	Moderately insignificant
		Operation activities	Availability of permanent structures for workers, non-workers	Moderately insignificant
11.	Occupational Health	Construction activities	Dusty conditions during summer with vehicular movement	Insignificant
		Operation activities	Process specific activities, heat and emission protective control measures followed	Insignificant
12.	Vibrations	Construction activities	Heavy equipment usage will be temporary	Insignificant
		Operation activities	Continuous usage of machinery	Insignificant
13.	Solid/ Hazardous waste	Construction activities	General construction waste will be disposed of in designated sites	Insignificant
		Operation activities	Ash from burning of bagasse in boilers	Insignificant

5. Alternative Analysis

Proposed project will be within existing factory premises at Adinathnagar, Tal. Pathardi, Dist. Ahmednagar. Location of the site has below advantages,

Availability of raw material/fuel

Proximity of molasses as a raw material and cost-effective transportation.

Availability of water supply

The availability of water from the source is adequate to meet the requirement of the proposed distillery. Source of water for proposed distillery is the factories own rainwater harvesting pond.

Availability of infrastructural facility

Industrial infrastructural facilities such as roads, transport, security, water, power, administration etc. are available with existing factory. Community facilities such as quarters, medical services, education and training facility etc. are also available at site.

Environmental features of site

No eco-sensitive areas such as biosphere, mangrove, protected forest, national parks etc. or environmental sensitive locations such as protected monuments, historical places are present within 10 km from the project site.

6. Environmental Monitoring Program

Detail Environmental monitoring has been described in chapter VI. Proposed project shall monitor for environmental aspects like ambient air, waste water, solid hazardous waste, ecology, occupational health, and safety during construction and operation. Besides monitoring, the compliances to all environmental clearance conditions and regular permits from SPCB/MoEFCC shall be monitored and reported periodically.

7. Additional Studies

Additional studies have been included in chapter VII are as below,

- Risk Assessment in which risks arising from
  - Storage and Handling raw material and product.
  - Operation of DG sets, production, Boiler, Storage and Handling of hazardous chemicals
- Disaster Management Plan
- Occupational Health and Safety Management System

8. Project and Environmental Cost Benefits

The present crushing capacity of Shree Vridheshwar SSKL is 2500 TCD. In order to take advantages of the current conducive policies from the Central Government for ethanol production, SVSSKL has proposed to install 30 KLPD distillery / ethanol plant, along with incineration boiler based cogen power plant, for achieving Zero Liquid Discharge (ZLD). The project has following benefits –

- The road connectivity will get improved due to the industry. This improved physical infrastructure will be an added facility to the community for surface transport
- Efforts will be more focused on recycling of wastewater after adequate treatment. Thus water extraction for process will be minimized.
- Improvements in Social Infrastructure
- Employment Potential

Environmental Benefits –

- Factory shall follow safety rules & regulations, maintain good housekeeping and judiciously operate eco-friendly and zero discharge project to meet the prescribed norms and shall promote environment friendliness.
- Alcohol is well known as an industrial raw material for manufacture of a variety of organic chemicals including pharmaceuticals, cosmetics, polymers etc.
- A large demand is anticipated for alcohol as a fuel. Alcohol is an eco-friendly product and is a substitute to the imported petroleum.
- Indeed fuel ethanol production has been promoted for a variety of reasons as mentioned below,
  - It has less severe impact on the environment than conventional gasoline and less dangerous to health. Oxygenates are compounds such as alcohols or ethers which contain oxygen in their molecular structure. Oxygenated fuels tend to give a more complete combustion of its carbon to carbon dioxide (rather than monoxide) which leads to reduced air pollution from exhaust emissions.
  - It reduces the dependence on oil imports.
  - It helps to maintain rural economy.
- Factory proposes zero liquid discharge method for waste water treatment. Maximum waste water will be recycled back into the system.
- Factory proposes to install Multiple Effect evaporator followed by Incineration boiler. Advantages are as follows
  - Production of steam and power generation.
  - Reduction in air pollution as compared to coal based boiler.
- Reduction in water pollution and achieve zero discharge in inland surface water

9. Environmental Management Plan

9.1. Environment Management Plan during Construction Stage

The construction activities of the proposed unit will increase in dust concentrations and fugitive emission due to vehicles movement. The following control measures are recommended to mitigate the probable adverse impacts.

Table 6: Implementation of Environment Management Plan during Construction Stage

Aspect	Description	Responsibility	Record
Site preparation	• Regular sprinkling of water around vulnerable areas of the construction sites to control the	• Construction supervisor/ Contractor	• Water consumption

Aspect	Description	Responsibility	Record
	dust spread or emission into the atmosphere. Excavated soil will be covered with tarpaulin sheet or shall be kept in such way that dust emission will be avoided. • Top excavated soil be used in greenbelt development, rest hard rock will be used in leveling work. First Aid facilities shall be made available during construction	• Safety officer/ Site Engineer	• Excavated soil quantity and utilization
Noise	• No idling of machine shall be allowed during construction activities Night time construction activities and vehicular movement shall not be allowed. • Personal protective equipment like ear muffs or ear plugs, masks etc. will be provided to workers who will be exposed to high noise.	• Construction supervisor/ Contractor • Safety officer/ Site Engineer	Vehicular and construction equipment check record
Construction equipment and waste	• Transport vehicles as well as transport routes should be properly maintained during whole construction phase to minimize smoke / dust emission from vehicle exhausts and unpaved roads. • Composite solid wastes including metal scrape, earthwork, other wastes, getting generated in construction process should be disposed as per construction waste disposal guidelines.	• Construction supervisor/ Contractor • Safety officer/ Site Engineer	Record of transport vehicles Generation of solid waste, its storage and its disposal
Site security and Occupational Health	• Construction site has a potential hazardous environment. To ensure that the local inhabitants are not exposed to these hazards, the site shall be secured by fencing and manned entry points. It will be fully illuminated during nighttime	• Construction supervisor/ Contractor • Safety officer/ Site Engineer	• Record and Supervision of Personal protective equipment's provided • Record of all safety signs • Record of First aid kits • Record of medical check up

Aspect	Description	Responsibility	Record
	• Necessary care will be taken as per the safety norms for the storage of the chemical products • Contractor will supervise the safe working of their employees. • Barricades and fences are provided around the construction area personnel protective equipment's e.g. safety helmet, goggles, gumshoes, etc. will be provided to the workers. • Accidental spill of oils from construction equipment and storage sites will be prevented. • Tree plantation will be undertaken during the construction phase for to prevent air pollution will be nullify in operation phase of the project. • Personal Protective Equipment like ear muffs or ear plugs, masks etc. will be provided to workers who will be exposed to high noise. • First Aid facilities shall be made available during construction. • All necessary infrastructural services like water, drainage facilities and electrification will be provided as per requirement • Drainage network will be properly channelized. Storm water drainage will be developed properly. This network will be checked & maintained regularly.		• Supervision and record of good house keeping
Greenbelt development	• Green belt shall be develop well before starting construction. • Green cover shall be increase all around factory in in tiers and	• Construction supervisor/ Contractor • Safety officer/ Site Engineer	Record of planting, mainly around the factory supervision on irrigation facility and survival rate.

Aspect	Description	Responsibility	Record
	along the road with native and thick canopy forming plants. • Green belt development will help to reduce Air and Noise pollution during construction works	•	

9.2. Environment Management Plan for Operation Phase

Table 7: Detailed EMP for Operation Phase

S.N.	Activity	Responsibility	Implementation	Record
1.	Water Pollution Control devices	Process manager/ Distillery manger/ Environment Officer / Biogas & composting in-charge	Commissioning of CPU, Incineration Boiler during Construction phase. Spent wash (Max 300 m^3/d) will be treated through Multi effect evaporator (MEE) followed by Incineration boiler. Spent lees, cooling tower and boiler blow down and condensate will be treated in Condensate polishing unit. Domestic Sewage of Existing sugar plant is led down to Existing septic tank followed by Soak Pit. Domestic Sewage from proposed distillery will be disposed through existing sugar ETP.	**Monitoring of wastewater Treatment** All the treated effluents will be monitored regularly for flow rate and its characteristics in order to assess the performance of the CPU. Appropriate measures will be taken if the treated effluent quality does not conform to the permissible limits. Record of ETP & CPU performance. Spent wash, spent lees, condensate analysis. Record of third party laboratory analysis report. Regular inspection record, control & necessary maintenance for reduction of evaporation loss and blow down from cooling system, Optimization of COC in cooling system.
2.	Air Pollution Control devices	Process manager/ Distillery manger/ Environment Officer	Commissioning of boiler, ESP/ wet scrubber before starting operation.	• Ambient Monitoring record. Maintains record for storage of raw material and products. The emissions from the stack will be monitored

				continuously for exit concentration of the suspended particulate matter, SO_2 µg/m^3 and NOx µg/m^3. • Sampling ports will be provided in the stacks as per CPCB guidelines. If the concentration of these pollutants exceeds the limits, necessary control measures will be taken.
3.	Noise pollution	Process manager/ Distillery manger/ Environment Officer	Immediate during Operation	Record of noise monitoring. The workers working in the high noise areas like Boiler house, Distillation, MEE, feed pumps, steam generation plant and turbo generator area will be provided with ear muffs/ear plugs. The silencers and mufflers of the individual machines will be regularly checked Supervision record for Acoustic enclosure to DG, Boiler, insulation.
4.	Solid waste Management	Process manager/ Distillery manger/ Environment Officer	Immediate during operation	Records of generation of solid waste. Supervision record of storage and disposal solid waste.
5.	Greenbelt development	Process manager/ Distillery manger/ Environment Officer	Gradually during Operation	Record of planting/number of plants planted and to be plant, supervision on irrigation facility and survival rate ensuring healthy and dense greenbelt. Greenbelt development plan is described in section 10.5.
6.	Rainwater harvesting and storm	Process manager/ Distillery	• Gradually during construction and operation. Storm water drainage system will consist of well-	Record of rainwater harvesting plan in the factory,

	water drainage	manger/ Environment Officer	designed network of open surface drains with rainwater harvesting pits. RWH structures will be provided to harvest the rain water from roof TOP and plant area. • The collected rain water will be utilized for plant uses to optimize the raw water requirement. The surface water run-off from the main plant area would be led to a sump for settling and the over flow would be collected in the common water basin for Industrial uses.	collection lines provided and location of the same. Record of supervision and maintenance. Monitoring of rainwater system to avoid mixing of effluent into storm water,
7.	Occupational Health and Safety	Process manager/ Distillery manger/ Environment Officer	During Operation	Record and Supervision of Personal protective equipment's provided. Record of all safety signs. Record of First aid kits Record of medical check up Supervision and record of good housekeeping. Record ad supervision of firefighting equipment's provided and its regular check/
8.	CER	Chairman/Managing Director /Process manager/ Distillery manger/ Environment Officer	During Operation	Maintain separate record of CER activity carried out year wise and amount spent on that.
9.	Resource saving, Recycle/ Recovery	Process manager/ Distillery manger/ Environment Officer	During Operation	Reuse of process water, recycling of ETP treated water, recycling of used oil, use of power saving equipment's, natural ventilation designs in construction phase, use of thermal insulations wherever heat transfer is anticipated, CFL lighting, photosensitive

				switches, rainwater harvesting

10. Budgetary provision for Environment Management Plan

Environment management cost will be around Rs.2.46 cr. & recurring cost will be Rs. 23 lakh. The details of EMP cost is mentioned in **Table 8.**

Table 8: Budgetary provision for Environment Management Plan

Sr. No	Construction phase (with Break-up)	Capital Cost (Amount in lakhs)	O & M (Amount in lakhs)
1.	Environmental monitoring	--	1.5
2.	Air Environment	--	0.5
3.	Health Check Up	--	1.5
4.	Occupational Health	--	2.5
	Total		**6**
Sr. No	**Operation Phase (with Break-up)**	**Capital Cost (Amount in lakhs)**	**O & M (Amount in lakhs)**
1.	Air pollution - Electrostatic precipitator	100.0	2.5
2.	CPU	80.0	1.5
3.	Environmental Monitoring (Air, water, waste water, Soil, Solid waste, Noise)	_	3
4.	Occupation health	3.0	5
5.	Green belt	30.0	8
6.	Solid waste	3.0	1.5
7.	Rain water	30.0	1.5
	Total	**246**	**23**

11. Conclusion

- Proposed project does not attract rehabilitation and resettlement of people, since the proposed project will be located in the existing sugar factory premises.
- Proposed project does not anticipate any adverse impacts on environment.
- Production process is environmentally safe as ZLD is proposed with efficient mitigation measures implemented.
- Air emissions control through stack height and will be monitored regularly.

- Loss of vegetation and habitat will not be attributed.
- Workplace/ operation hazards, which will be minimized by providing personal protective equipment's, safety precautions, emergency plan & disaster management plan.
- Consequently, impacts on air, water, land and ecological environments are insignificant and the socio-economic benefits are predominantly positive.
- Thus, overall project features, process, potential of pollution, pollution prevention measures and environmental management plan proposed by proponent illustrates that proposed project will not have any considerable impacts on environment as well as on socio-economic & ecological conditions of the project area.