

EXECUTIVE SUMMARY

**ENVIRONMENTAL IMPACT ASSESSMENT &
ENVIRONMENTAL MANAGEMENT PLAN
for
PROPOSED PRODUCTION OF 9998.0 METRIC TON / YEAR
HIGHLY PURE ESTERS DERIVED FROM A COMBINATION
OF FATTY ACIDS & FATTY ALCOHOLS OF
VEGETABLE OILS**

**of
M/S. JORINCO SPECIALITIES PRIVATE LIMITED (JSPL)
at**

**GAT NO. 351/1, BHARE, NEXT TO
INDUS BIOTECH PVT. LTD., TEHSIL: MULSHI,
DISTRICT: PUNE, PIN. 411045, MAHARASHTRA**

EIA CONSULTANT

**SAGE (SUSTAINABLE APPROACH FOR GREEN
ENVIRONMENT) LLP**

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Powai, Mumbai, Maharashtra – 400076**

Approved By: NABET- Quality Council of India



NABET/EIA/2225/IA 0105 Valid Up to September 22, 2025

EXECUTIVE SUMMARY

Jorinco Specialities Private Limited (JSPL)	Environmental Impact Assessment and Environmental Management Plan for Proposed Production of 9998.0 Metric Ton/Year Highly Pure Esters derived from a Combination of Fatty Acids & Fatty Alcohols of Vegetable Oils of M/s. Jorinco Specialities Private Limited at Gat No. 351/1, Bhare, Next to Indus Biotech Pvt. Ltd., Tehsil: Mulshi, District: Pune, Pin. 411045, Maharashtra.
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EXECUTIVE SUMMARY

1 INTRODUCTION

Jorinco Specialities Private Limited (JSPL) has proposed a new project for Production of 9998.0 Metric Ton/Year Highly Pure Esters derived from a Combination of Fatty Acids & Fatty Alcohols of Vegetable Oils at Gat No. 351/1, Bhare, Next to Indus Biotech Pvt. Ltd., Tehsil: Mulshi, District: Pune, Pin. 411045, Maharashtra.

Boundary Coordinates of the project site are presented in Table below –

Point Name	Latitude	Longitude
A	18°31'04.9"N	73°40'29.6"E
B	18°31'06.1"N	73°40'29.8"E
C	18°31'06.3"N	73°40'29.7"E
D	18°31'07.6"N	73°40'30.0"E
E	18°31'07.9"N	73°40'29.5"E
F	18°31'08.0"N	73°40'29.6"E
G	18°31'08.8"N	73°40'30.8"E
H	18°31'07.9"N	73°40'33.4"E
I	18°31'08.0"N	73°40'34.7"E
J	18°31'08.1"N	73°40'35.1"E
K	18°31'04.1"N	73°40'35.3"E
L	18°31'04.5"N	73°40'33.7"E
M	18°31'04.9"N	73°40'32.4"E
N	18°31'04.9"N	73°40'30.8"E

2 PROXIMITIES TO SOCIAL INFRASTRUCTURE

Proximities to Social Infrastructure are presented in Table below –

Sl. No.	Amenities	Name	Road Distance (Km)	Aerial Distance (Km)	Direction
1	Airport	Pune International Airport	34.00	27.00	NE
2	Railway Station	Pune Railway Station	28.00	21.00	E
		Shivaji Nagar Railway Station	26.00	18.60	E

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3	Bus Depot	Ghotawade Phata - Bus stop	0.80	0.60	S
		Vimal Garden - Bus stop	0.45	0.25	S
		Paud Gaon Bus Station /ST Stand	7.70	6.00	W
4	Schools	Shri Vidyabhavan English Medium School -School Pirangut	1.40	0.50	E
		Elite International school	1.10	0.80	SE
		Mamasaheb Mohol Memorial School. Pirangut	1.30	1.00	S
		Rani Laxmibai Mulinchi Sainiki Shala, Kasaramboli, PO Pirangut	3.00	1.30	W
		Pirangut English Medium School - Government School	2.30	1.80	SE
		Heritage International School - Kasar Amboli,Ambadwet	2.50	1.50	SW
		Sankalp Valley School -Urawade	4.20	3.50	SW
		ORCHIDS The International School - CBSE School in Hinjewadi	3.80	2.80	N
		New English School, Ghotawade	3.80	3.20	NW
		The New Dale English Medium School - Godambewadi	5.00	4.40	NW
5	Highway	Sanskriti School (Bhukum campus)	7.00	5.00	SW
		Mulshi Road (Pune Paud Road)	0.80	0.50	S
		Mumbai - Pune Expressway	12.00	9.80	E
7	Colleges	Hinjewadi Pirangut Road (Ghotawade Road)	0.05	0.05	w
		Shri vidya bhavan high school and junior college - school Randack, ghotawade phata	1.00	0.40	SE
		Bharati Vidyapeeth College Of Engineering Lavale Pune	4.60	2.60	NE
		Chanakya Junior College Pune -	1.50	1.00	SE
		Anantrao Pawar College	4.20	3.30	SE
		ITI college bhare -Government College	2.00	1.50	N
		Symbiosis Knowledge Village,Symbiosis Campus Path,Lavale	15.00	6.00	NE
8	Hospitals	Symbiosis Institute of Skill Development	6.00	4.50	W
		Primary Health Centre –Hospital,Pawale Aali Road,Pirangut	2.50	1.80	SE
		Shri Ganesh Hospital - Mulshi Rd, Ghotawade Phata, Chowk,	0.85	0.60	SE
		Shrikrupa Hopspital, Mulshi Rd, Ghotawade Phata, Chowk,	0.85	0.60	SE
		Mauli Hospital - Ghotawade Phata	0.85	0.60	SE
		Shraddha hospital and ICU	0.90	0.60	S
Shree Sai Hospital – Hospital Hirachandra Building, Pirangut camp	2.20	1.70	SE		

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		Mulshi Speciality Hospital	2.80	2.00	SE
		Bharti Vidyapeeth Hospital	5.00	2.90	NE
		Symbiosis University Hospital & Research Centre	14.00	5.80	NE
9	Post office	Kasaramboli Post office	2.60	1.50	SW
		Pirangut Post Office	2.20	1.70	SE
10	Police Station	Police Chowki Pirangut	1.60	1.10	SE
		Paud police station	8.00	6.30	W
11	Market	Dinesh Kirana And General Stores	0.05	0.05	W
		Sahadu Nana Complex Ghotwade Phata Chowk	0.85	0.50	S
		Ghotwade Phata Chowkstreet Market (Fruit and vegetable store)	0.85	0.50	S
		Sahaydri Hardware & Industrial Hardware -Hardware store	2.50	2.000	SE
		Shrinath Engineering -Industrial equipment supplier	0.90	0.65	S
12	Bank	ICICI Bank-Pirangut, Pune-Branch & ATM	0.85	0.50	SE
		HDFC Bank - BankGhotawade Phata Chowk,	0.85	0.50	SE
13	Fire Station	Phase 3 Fire Station - Hinjawadi	8.70	6.60	N
		Kothrud Fire Station	17.50	14.60	SE

3 DESCRIPTION OF THE PROJECT

Proposed project is to produce 9998.0 Metric Ton/Year Highly Pure Esters derived from a Combination of Fatty Acids & Fatty Alcohols of Vegetable Oils. Total Plot Area is 15950 m². Proposed Project Cost will be Rs. **41,20,00,000/-**. Jorinco Specialities Private Limited (JSPL) will not abstract ground water. Already JSPL has the permission for 31KLD from Bhare Grampachayat, but simultaneously JSPL will procure water by local tankers.

List of Proposed Products With Quantity

Sr. No.	Name of the product	Production Capacity (MT/Month)	Production Capacity (MT/Annum)
1	Isopropyl Myristate	300	3600
2	Isopropyl Palmitate	100	1200
3	Isopropyl Laurate	54.2	650.4
4	Cetearyl Octanoate	25	300
5	Cetyl Octanoate	4.2	50.4

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6	Methyl Palmitate	12.5	150
7	Methyl Laurate	12.5	150
8	Octyl Palmitate	66.7	800.4
9	Octyl Stearate	16.7	200.4
10	Cetyl Palmitate	8.34	100.08
11	Medium Chain Triglyceride	233	2796
Total		833.14	9997.68 Say 9998.00

Source: JSPL

Total Plot Area is 15,950 m². Total Built up Area will be 9,548 m². Parking Area will be 1,133 m². Green Belt Area will be 5,269 m² which is about 33% of the Total Plot Area.

Good communication, transportation and all other basic facilities are available here and there will be no issue of rehabilitation and resettlement. The proposed project will be located at outside of MIDC Pirangut.

4 RAW MATERIALS

List of Major Raw Materials

Sr.No.	Raw Material	Form	Est. Quantity (MT/Month)	Est. Quantity (MT/Year)
1	Myristic Acid	solid	250	3000
2	Palmitic Acid	solid	150	1800
3	Stearic Acid	solid	12	140
4	Lauric Acid	solid	58	700
5	2 Ethylhexanoic Acid	liquid	11	130
6	C8/C10 coconut acid	liquid	217	2600
7	Methanol	liquid	3	40
8	Isopropanol	liquid	100	1200
9	Octanol	liquid	29	350
10	Glycerine	liquid	43	510
11	Cetostearyl Alcohol	solid	23	280
12	Soda Ash	solid	8	100
13	pTsa	solid	0.8	10
			905	10860

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5 PROPOSED AREA STATEMENT

Sr. No.	Particular	Area in m ²
1	Total Plot Area:	15,950
2	Built Up Area:	9,548
3	Parking Area:	1,133
4	Green Area (33%)	5,269

6 POWER REQUIREMENT

- Total Power Load will be **474.3 KW**
- Working Power Load will be **308.24 KW**
- Stand by Power Load will be **166.06 KW**

Additional Source

- DG set 1: 400 KW consuming HSD 108 Lits/hr
 - DG set 2: 200 KW consuming HSD 54 Lits/hr
- Thermic Fluid Heater consuming Briquette 1.0 mt/hr

Following measures & ways will be taken to save the Electrical Energy –

- ❖ Energy efficient Fluorescent Lamp T5, CFL will be used which have higher output.
- ❖ Power factor will be maintained ~0.99 with the capacitor banks. All capacitors will be provided with Harmonic Filters to avoid distortion in Voltage i.e. Clean Power will be available.
- ❖ External lighting will be automatically controlled using timer contactor at external lighting panel. Led type lights & Sodium vapor lights will be used for external lighting.

7 WATER REQUIREMENT

Jorinco Specialities Private Limited (JSPL) will not abstract ground water. Already JSPL has the permission for 31 KLD from Bhare Grampachayat, but simultaneously JSPL will procure water by local tankers.

Total Water Requirement: 31 KLD (28 KLD Fresh Water + 3 KLD Recycled from ETP)

Industrial Use: 26 KLD

-Cooling Tower – 20 KLD (17 KLD Fresh Water + 3 KLD Recycled from ETP)

-Process Water – 6 KLD

Domestic Use: 5 KLD

Fresh Water Supply for the proposed plant will be made available from Bhare Gram Panchayat.

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8 FUEL REQUIREMENT

DG set 1: 400 KW consuming HSD 108 Lits/hr

DG set 2: 200 KW consuming HSD 54 Lits/hr

Thermic Fluid Heater consuming Briquette 1.0 mt/hr

Mode of Transportation: Road

9 EMPLOYMENT GENERATION DUE TO THIS PROJECT

Phases	Temporary Employment	Permanent Employment	Total Employment
Construction Phase	50	5	55
Operational Phase	5	50	55

10 ESTIMATED PROJECT COST

Detailed Break up of Investment of the Project

Project Cost	Capital Cost	Recurring Cost
Land	Long Lease	6 lakhs/month rent
Building / Premises	25,00,00,000/-	
Plant & Machinery / Equipment	15,00,00,000/-	
Furniture & Fixtures	50,00,000/-	
Any other Movable / Immovable fixed assets	70,00,000/-	
Total	41,20,00,000/-	

11 WASTEWATER MANAGEMENT

About 4.5 KLD domestic sewage and 3.5 KLD industrial effluents will be generated in this proposed project. Industrial effluents will be generated from process. This 3.5 KLD effluent will be treated in Effluent Treatment Plant of 7.0 KLD capacity. Effluent will be treated up to tertiary level and 3.0 KLD treated effluent will be recycled in Cooling Tower. Simultaneously 4.5 KLD sewage will be generated. This 4.5 KLD sewage will be treated in Sewage Treatment Plant of

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6.0 KLD capacity. Sewage will also be treated up to tertiary level and 4.0 KLD treated sewage will be utilized for green belt development. Already the Project Proponent is going to develop Green Belt at 5,269 m² area within plant premises i.e 33% of the Total Plot Area. It will be a ZLD Process.

12 AIR POLLUTION CONTROL

The main sources of gaseous emission will be

- a. Flue gas emission due to combustion of Briquettes in Thermic Fluid Heater.
- b. Two Numbers of DG Sets consuming HSD

It is proposed to use briquettes (1mt / hr) as fuel for Thermic Fluid Heater. However, the Stack Height of the Thermic fluid heater will be 30.5 m for adequate dispersion of pollutants. The main emitted pollutants will be PM₁₀, PM_{2.5} from flue gas stack. Cyclone Separator and Bag Filter for this flue gas emission will be provided as Air Pollution Control measure to the stack attached to Thermic Fluid Heater. Emissions will also be generated from DG Sets consuming HSD. Stack Height for DG Sets will be 8.0 m. The main emitted pollutants will be SO₂ & NO₂. Wet Absorber / Wet Scrubber for this gas emission will be provided as Air Pollution Control measure to the stack attached DG Sets. Fugitive emissions will be generated from handling and transportation.

13 SOLID WASTE MANAGEMENT

Two types of solid waste will be generated in the plant during operational period. One is Hazardous Waste and the other is Non-Hazardous Waste.

a. Non-Hazardous Solid Waste

Non-Hazardous Solid Wastes from this factory will be from office and plant like waste paper, corrugated box, broken glass / plastic non-contaminated, used but decontaminated drums, plastic decontaminated bags, domestic waste garden leaves. Sweepers / workers will collect such wastes separately (Biodegradable and Non biodegradable) from the source and would store in solid waste collection enclosure (to be located suitably within the project site). Recyclable non-biodegradable solid wastes will be sold to prospective buyers. Biodegradable solid waste will be used for composting within the plant premises.

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b. Hazardous Solid Waste

The main source of hazardous waste will be sludge from ETP.

Details about Hazardous Solid Waste

Sr. No.	Description	Qty (TPM)	Mode of Storage	Management
1	ETP Sludge	2.0	Will be collected in HDPE bags and stored in HW storage room	It will be handed over to CHWTSDf, MEPL.

Other Industrial Solid Waste Management

Sr. No.	Description	Qty (Kg/day)	Management
1	Ash from Briquette	500	Will be handed over to brick manufacturer on daily basis.

14 NOISE CONTROL

During the operational phase, there may be generation of noise due to operation of thermic fluid heater, reactor, loading equipments and other vehicular movements. All these sources will generate continuous noise. However, the noise transition outside the plant boundary will be low because most of the noise generating equipments will be kept in closed structures. The workers will also be provided ear muff, ear plug while working at noisy area.

15 IMPACT AND MITIGATION ON LAND / SOIL

The proposed project will be located at outside of MIDC Pirangut, Post: Pirangut, Taluka: Mulshi, District: Pune. There will be only installation of new machineries which will not damage the present condition of land. The site is well connected by road, water supply & drainage facility. Due to availability of all physical infrastructures, the topography of existing land will not change. The unit will take all reasonable precautions to make its solid waste storage area impervious to water and leachate migration. This will prevent soil contamination. The unit will provide pucca RCC flooring at production, raw material storage and at finished product storage to avoid any contamination with soil during handling, spillages or curing activity. The impact on land environment due to stack emission and its dispersion can be a long-term impact on nearby crop area. Company will install Cyclone Separator and Bag Filter. As unit is zero discharge units, soil quality is not adversely impacted by **Jorinco Specialities Private Limited (JSPL)**, Plant operations. The main source of hazardous waste will be sludge from ETP. Will be

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collected in HDPE bags and stored in HW storage room. It will be handed over to CHWTSDF, MEPL.

16 IMPACT ON BIOLOGICAL ENVIRONMENT

Flora

The prediction of impacts on the floristic components of the environment is as follows: Analysis of biotic factors reveals that ambient air and fresh water quality will remain, practically, unaffected to the flora. Thus, indirect adverse impact on flora is ruled out. The floristic component of the study area does not include any threatened species. Thus, impact on threatened species of flora is ruled out.

Fauna

The prediction of impacts on the faunal components of the environment is as follows: The quality of ambient air and fresh water system will remain, practically, unaffected. Thus indirect impact due to these abiotic factors is ruled out. The Industry does not envisage destruction of habitat and feeding or breeding area of fauna species. No threatened species of fauna are reported to exist in the area. Thus, no impacts on threatened species are envisaged due to normal operations. Thus, direct adverse impact on faunal species is ruled out due to normal operation of the plant.

17 GREEN BELT DEVELOPMENT

Total Plot Area is 15,950 m². Green Belt is estimated to be developed within the project site in 33% of the Total Plot Area i.e 5,269 m² area i.e 1.3 acre is reserved for green belt development. The green belt will be developed as per the norms i.e. 1000 trees per acre of the land. Hence total 1,300 Native trees will be planted. The survival rate of saplings will be min 90%.

List of Species to be Planted

Sr. No.	Scientific Name	Common Name
1	<i>Michelia Champaca</i>	Champa
2	<i>Mangifera indica</i>	Mango
3	<i>Sacra Indica</i>	Ashoka
4	<i>Cassia fistula</i>	Amaltas
5	<i>Delonix regia</i>	Gulmohar
6	<i>Peltophorum aculeate</i>	Sonmukhi
7	<i>Anthocephlus cadamba</i>	Kadam
8	<i>Diospyros Montana</i>	Shisham
9	<i>Tabebuia rosea</i>	Tababuia
10	<i>Syzygium cumini</i>	Jambu
11	<i>Pithecellobium dulce</i>	Vilayati Amla-
12	<i>Mimusops hexandra</i>	Rayan/Ranjana

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13	<i>Ougeinia dalbergioides</i>	Tiwas
14	<i>Cordia dichotoma</i>	Gunda
15	<i>Butea monosperma</i>	Khakharo/Kesudo
16	<i>Polyalthia longifolia</i>	Asopalav
17	<i>Azadirachta indica</i>	Neem
18	<i>Pongamia pinnata</i>	Karanj
19	<i>Tamarindus indica</i>	Imali
20	<i>Roystonea regia</i>	Royal palm
21	<i>Dalbergia sissoo</i>	Sisoo
22	<i>Acalypha godseffiana</i>	Acalypha

18 SOCIO ECONOMIC ENVIRONMENT

Due to proposed project, employment generation will increase for skilled, semi skilled and unskilled workers. It is expected that direct and indirect employment likely to be generated due to proposed activities for local people. The local surrounding people will get maximum benefit of this project due to their reduction of travelling time & cost. Moreover, it will result into the improvement in the economy of the local vendors. This will ultimately boost the employment opportunity. Impact in terms of displacement of habitation and settlements due to the proposed project is totally absent for this project. No loss or disturbance of any historic and cultural heritage is associated with the proposed project. It is also beneficial to its downstream supplier industries to boost their activity as well as beneficial to surrounding service provider units. Thus, overall impact due to this industrial development along with employment potential poses long-term positive impact on the socio-economic environment on surrounding area as it provides benefits in terms of economics to the people employed with it. The issues such as compensation and rehabilitation are not involved for this project.

19 RAIN WATER HARVESTING SYSTEM

Rooftop Rainwater harvesting is proposed in this project to conserve the rooftop rain water and to prevent this rain water going waste through storm drains. Maximum quantity of rooftop rainwater that can be harvested = 27 m³ per day during rain. Harvested roof top rain water will be utilized to reduce fresh water demand. RWH Tank of more than Six (06) days storage capacity (180m³) will be provided for harvested rooftop rain water.

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Rooftop Area Details

Particulars	Area in m ²
Administration Block (Ground Flr.)	910.5
Plant Area (Ground Flr.)	1037.65
Pump House (Ground Flr.)	731.15
FG Packaging & Packing Stores	968.07
Security Cabin 1 & 2	119.66
Metering Kiosk	48
Total Catchment Area	3815.03

Rooftop Rain Water Harvesting Calculation

Catchment Area	Area in m ²	Run off Co-efficient	Rainfall Intensity (m/day)	Harvested Rooftop Rain Water (m ³ /day)
Roof Top Area	3815.03	0.9	0.008	27

20 METEOROLOGY AT SITE

Meteorology at Site (1st January, 2023 to 31st March, 2023)

Sl. No.	Parameters	January	February	March	
1	Temperature (°C)	Maximum	21.61	24.18	27.10
		Minimum	16.53	20.03	22.08
		Average	19.04	22.40	24.84
2	Relative Humidity (%)	Maximum	82.25	71.44	66.50
		Minimum	53.50	31.25	35.44
		Average	68.11	43.17	49.77
3	Wind Speed (m/s)	Maximum	2.62	3.17	2.80
		Minimum	1.23	1.3	1.19
		Average	1.73	2.11	2.06
4	Wind Direction (%)	N	0.0	0.0	0.0
		NNE	0.0	0.0	0.0
		NE	3.2	10.7	0.0
		ENE	12.9	46.4	9.7
		E	9.7	3.6	12.9
		ESE	6.5	3.6	3.2
		SE	3.2	17.9	16.1
		SSE	9.7	7.1	3.2
		S	25.8	7.1	6.5
		SSW	16.1	3.6	6.5
		SW	3.2	0.0	0.0

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		WSW	9.7	0.0	3.2
		W	0.0	0.0	3.2
		WNW	0.0	0.0	12.9
		NW	0.0	0.0	22.6
		NNW	0.0	0.0	0.0
5	Solar Radiance (W/m²)	Maximum	373.61	363.63	419.45
		Minimum	296.76	312.61	333.71
		Average	331.94	326.10	371.41
6	Rainfall (mm)	Monthly Total	3.57	0.04	1.85
		No. of Rainy Days	8	1	14

21 AMBIENT AIR MONITORING RESULT

	PM₁₀ (µg/m³)	PM_{2.5} (µg/m³)	SO₂ (µg/m³)	NO_x (µg/m³)	CO (mg/m³)
Standard value as per NAAQs, 2009 and Monitoring duration	100 (24 h)	60 (24 h)	80 (24 h)	80 (24 h)	04 (01 h)
A-1: Project Site					
Average	64	28	11	18	0.8
Min.	55	22	8	14	0.6
Max.	75	36	15	22	1.0
98% Percentile	74	35	15	22	1
A-2: Near Babuji House, Bhare Village					
Average	58	26	8	13	0.6
Min.	55	24	7	11	0.5
Max.	63	28	9	15	0.8
98% Percentile	62.54	28	9	15	0.78
A-3: Near Vitthal Rukmini Mandir, Mulkhed Village					
Average	52	24	6	14	0.7
Min.	45	21	5	11	0.5
Max.	61	30	7	16	0.8

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98% Percentile	59.62	29.08	7	16	0.79
A-4-Mahesh Auto Services, Lavale Village					
Average	66	31	12	19	0.8
Min.	62	26	8	15	0.6
Max.	70	36	15	23	0.9
98% Percentile	69.54	36	15	22.54	0.89

The results show that ambient air quality at all location is within the statutory limits.

22 NOISE MONITORING RESULT

23	On Project Site	200 mtr towards North Side from project boundary (Industrial Zone)	100 mtr towards East Side from project boundary	500 mtr towards South Side from project boundary	Near ZP School, Bhare Village	Near Tanaji Kadam House, Mulkhed	Near Daetwyler Swiss Tec India Pvt. Ltd., Lavale	Shree Swami Samarth Dry Cleaners, Pirangut	Near SBI ATM, Urawade Village	Near ZP School, Manakarwadi Village
Limit in dB(A) Leq*	Industrial Zone	Industrial Zone	Industrial Zone	Commercial Zone	Silence Zone	Residential Zone	Industrial Zone	Commercial Zone	Commercial Zone	Silence Zone
Day Time	75	75	75	65	50	55	75	65	65	50
Night Time	70	70	70	55	40	45	70	55	55	40
6:00 AM	43.5	47.3	49.5	48.7	45.4	45.1	48.2	46.5	49.1	42.5
7:00 AM	48.5	48.1	51.2	52.4	46.2	48.8	51.5	50.2	52.7	44.8
8:00 AM	53.5	49.6	51.8	54.8	49.7	51.4	53.8	52.7	54.2	48.3
9:00 AM	54.6	52.3	53.4	56.2	50.6	53.5	54.1	53.1	55.8	50.6
10:00 AM	55.7	51.6	52.3	58.2	51.6	54.1	56.6	55.4	56.9	51.3
11:00 AM	54.3	53.8	53.1	60.8	51.3	54.8	58.3	56.9	59.2	52.2
12:00 PM	55.6	50.2	52.8	54.3	50.7	55.7	59.6	57.8	63.2	50.9
1:00 PM	54.3	49.7	50.6	53.7	51.3	55.4	63.2	58.5	64.5	51.1
2:00 PM	53.2	51.3	52.4	53.9	50.8	54.3	60.1	59.5	60.7	50.9
3:00 PM	55.7	50.8	51.7	52.5	52.5	52.1	58.5	57.3	62.1	52.2
4:00 PM	54.3	53.6	54.3	57.3	51.1	51.6	60.2	59.8	60.8	48.5
5:00 PM	53.2	54.6	51.8	59.1	50.3	53.2	61.7	60.2	62.5	50.1
6:00 PM	52.1	53.2	52.5	62.5	47.6	52.1	58.4	57.6	59.2	48.4
7:00 PM	51.6	52.1	52.9	58.2	46.5	50.2	57.5	56.4	58.1	47.8
8:00 PM	48.9	51.6	52.7	55.4	45.3	48.7	56.1	55.2	56.7	47.5
9:00 PM	47.6	46.7	49.4	52.3	44.3	48.5	54.6	53.8	54.9	46.8

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10:00 PM	46.5	45.2	48.7	50.9	42.1	47.9	52.5	51.6	55.7	40.1
11:00PM	45.3	44.6	46.2	51.2	40.6	43.5	51.8	51.3	54.3	39.6
12:00 AM	43.2	43.2	48.5	50.7	39.7	42.2	52.1	52.3	53.2	40.4
1:00 AM	42.8	42.1	46.8	51.3	38.5	41.3	50.6	52.1	52.1	39.8
2:00 AM	42.9	41.6	48.3	50.1	38.7	40.7	50.9	51.5	51.6	40.4
3:00 AM	43.2	43.5	47.8	49.3	39.5	40.3	49.3	49.8	52.2	39.5
4:00 AM	42.1	42.7	46.2	48.8	38.5	38.8	49.8	49.3	49.5	39.7
5:00 AM	41.8	43.5	46.9	47.2	38.7	39.5	48.5	49	50.1	38.8
L_{eq}(d)	53.2	51.6	52.2	57.0	49.8	52.6	58.4	56.8	59.8	49.7
L_{eq}(n)	43.8	43.4	47.5	50.1	39.7	42.8	50.9	51.0	52.8	39.8
L_{max}	55.7	54.6	54.3	62.5	52.5	55.7	63.2	60.2	64.5	52.2
L_{min}	41.8	41.6	46.2	47.2	38.5	38.8	48.2	46.5	49.1	38.8

Conclusion: Noise levels at most of the location are observed to be within statutory prescribed limits.

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23 GROUND WATER MONITORING RESULT

			GW-1-Hand Pump, Bhare Village	GW-2-Hand Pump, Mulkhed Village	GW-3-Sahil Raut Farm, Borewell, Lavale Village	GW-4-Hand Pump, Pirangut Village	GW-5-Near Padwal House, Hand Pump, Botarwadi Village	GW-6-Hand Pump, Manakarwadi	GW-7-Borewell Water, Aamrale Village		Permissible Limits
Sr. No.	Test Parameter	Test Method	Test Result							Unit	
1.	Color	APHA 2120 C :2017, 23 rd Ed.	BDL[DL=1]	BDL[DL=1]	BDL[DL=1]	BDL[DL=1]	BDL[DL=1]	BDL[DL=1]	BDL[DL=1]	Hazen	15
2.	Odor*	IS 3025 (Part 05) : 1983	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
3.	Turbidity	IS 3025 (Part 10) : 1984	0.5	0.3	0.7	0.4	0.5	0.6	0.4	NTU	5
4.	pH	IS 3025 (Part 11) :2022	7.4	7.6	7.5	7.3	7.7	7.3	7.5	-	6.5 – 8.5
5.	Electrical Conductivity	IS 3025 (Part 14) : 1984	825	784	878	788	724	834	748	μS/cm	-
6.	Total Dissolved Solids	IS 3025 (Part 16) : 1984	568	488	582	512	462	542	482	mg/L	500
7.	Total Hardness as CaCO ₃	IS 3025 (Part 21) : 2009	292	264	306	284	250	282	244	mg/L	600
8.	Nitrates as NO ₃ ⁻ -N	IS 3025 (Part 34) : 1988	0.5	0.6	0.7	0.4	0.3	0.8	0.7	mg/L	45
9.	Calcium as Ca	IS 3025 (Part 40) : 1991	60	55	62	59	52	59	51	mg/L	75
10.	Magnesium as Mg	IS 3025 (Part 46) : 1994	35	31	37	34	29	33	29	mg/L	30
11.	Chlorides as Cl ⁻	IS 3025 (Part 32) : 1988	126	119	137	127	113	133	118	mg/L	250
12.	Sulphates as SO ₄ ²⁻	APHA 4500-SO ₄ ²⁻ E:2017, 23 rd Ed.	65	45	71	49	43	52	46	mg/L	200

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13.	Fluoride as F ⁻	APHA 4500-F-B-D:2017, 23 rd Ed.	0.5	0.4	0.7	0.5	0.4	0.6	0.5	mg/L	1
14.	Boron as B	APHA 4500-B-B:2017, 23 rd Ed.	0.2	0.3	0.4	0.2	BDL[DL=0.1]	0.4	0.3	mg/L	0.5
15.	Iron as Fe	IS 3025 (Part 53) : 2003	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	mg/L	0.3
16.	Zinc as Zn	IS 3025 (Part 49) : 1994	BDL[DL=0.02]	BDL[DL=0.02]	BDL[DL=0.02]	BDL[DL=0.02]	BDL[DL=0.02]	BDL[DL=0.02]	BDL[DL=0.02]	mg/L	5
17.	Total Coliform Bacteria*	IS 1622: 1981	4	2	2	4	2	2	4	CFU/100 ml	10 CFU /100ml
18.	<i>E. Coli</i> *	IS 1622 : 1981	Absent	Absent	Absent	Absent	Absent	Absent	Absent	CFU/100 ml	Shall not be detected in any 100 ml sample.

24 SURFACE WATER MONITORING RESULT

Sr. No.	Test Parameter	Test Method	SW1-Mula River	SW2-Urawade Lake	SW3-Rawdewadi Lake	SW4-Manas Lake	SW5-Upstream Nallah Water_ Front of Phoenix Mecano Compant	SW6-Downstream Nallah Water_North East side of project site	SW7-Upstream Nallah Water_ Pirangut Village	SW8-Downstream Nallah Water_Back side of Urbangram Pirangut Appartment	Unit
1.	Color	APHA 2120 C :2017, 23 rd Ed.	BDL[DL=1]	BDL[DL=1]	BDL[DL=1]	BDL[DL=1]	BDL[DL=1]	BDL[DL=1]	BDL[DL=1]	BDL[DL=1]	Hazen
2.	Odor*	IS 3025 (Part 05) : 1983	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4.	Turbidity	IS 3025 (Part 10) : 1984	16.8	6.3	5.8	5.1	18.2	15.6	16.9	12.8	NTU
5.	pH	IS 3025 (Part 11) :2022	7.3	7.5	7.4	7.3	7.5	7.3	7.5	7.3	-

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6.	Electrical Conductivity	IS 3025 (Part 14) : 1984	458	403	366	335	483	462	428	388	µS/cm
7.	Total Dissolved Solids	IS 3025 (Part 16) : 1984	292	262	238	218	314	300	274	240	mg/L
8.	Total suspended solids	IS 3025 (Part 17) : 1984	42	7	6	4	47	40	46	36	mg/L
9.	Total Hardness as CaCO ₃	IS 3025 (Part 21) : 2009	162	144	128	116	172	160	146	130	mg/L
10.	Nitrates as NO ₃ ⁻ -N	IS 3025 (Part 34) : 1988	0.7	0.5	0.4	0.5	0.8	0.7	0.8	0.6	mg/L
11.	Biochemical Oxygen Demand (27°C, 3Days)	IS 3025 (Part 44) : 1993	6.3	2.5	2.1	2.3	14	12.9	13.8	11.3	mg/L
12.	Chemical Oxygen Demand	IS 3025 (Part 58) : 2006	56	28	24	20	108	96	104	84	mg/L
13.	Dissolved Oxygen	IS 3025 (Part 38) : 1989	5.1	5.5	5.6	5.7	4.4	4.7	4.6	4.8	mg/L
14.	Calcium as Ca	IS 3025 (Part 40) : 1991	34	30	26	25	36	34	30	26	mg/L
15.	Magnesium as Mg	IS 3025 (Part 46) : 1994	18	17	15	13	20	18	17	16	mg/L
16.	Chlorides as Cl ⁻	IS 3025 (Part 32) : 1988	68	62	57	52	74	66	59	52	mg/L
17.	Sulphates as SO ₄ ²⁻	APHA 4500-SO ₄ ²⁻ E:2017, 23 rd Ed.	32	27	24	21	37	34	28	25	mg/L
18.	Fluoride as F ⁻	APHA 4500-F ⁻ B-D:2017, 23 rd Ed.	0.5	0.4	0.5	0.4	0.6	0.5	0.6	0.5	mg/L
19.	Iron as Fe	IS 3025 (Part 53) : 2003	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	mg/L
20.	Zinc as Zn	IS 3025 (Part 49) : 1994	BDL[DL=0.02]	BDL[DL=0.02]	BDL[DL=0.02]	BDL[DL=0.02]	BDL[DL=0.02]	BDL[DL=0.02]	BDL[DL=0.02]	BDL[DL=0.02]	mg/L
21.	Total Coliform Bacteria*	IS 1622 : 1981	1600	900	500	900	1600	1600	1600	1600	MPN/100 ml

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25 SOIL MONITORING RESULT

Sr. No.	Test Parameter	S1-On Project Site	S2-Bhare Village	S3-Kacharu Tapkir Farm, Mulkhed Village	S4-Hanumant Raut Farm, Lavale Village	S5-Front of Yash One Apartment, Pirangut Village	S6-Front of Red Earth Apartment, Urawade	S7-Mankarwadi Village	S8-Near Darawali Water Falls, Aamrale Village	Unit
1	Color*	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	-
2	pH(1:2.5 Soil: Water)	7.2	7.5	7.5	7.2	7.3	7.1	7.6	7	-
3	Electrical Conductivity (1:2 Soil: Water Extract)	345	421	421	452	502	466	504	466	uS/cm
4	Bulk Density	1124	1138	1119	1154	1086	1111	1122	1111	kg/m ³
5	Organic Matter	1.2	1	1.1	1.4	1.1	0.9	1.3	1.2	%
6	Total Organic Carbon	0.7	0.6	0.7	0.8	0.6	0.5	0.7	0.7	%
7	Moisture Content	4.6	3.9	5.2	4.2	6	5	4	6.2	%
8	Water Holding Capacity	56.8	53.3	57.8	54.7	53.5	56.5	53.5	51.8	%
9	Cation Exchange Capacity	28.3	27.8	28.6	26.9	26.9	27.1	27.4	27.8	meq/100g
10	Sodium as Na (Exchangeable)	1.2	1.3	1.2	1.3	1.2	1.3	1.1	1.2	meq/100g
11	Potassium as K (Exchangeable)	0.4	0.4	0.4	0.5	0.4	0.5	0.6	0.5	meq/100g
12	Calcium as Ca (Exchangeable)	13.5	13.5	13.5	12.5	13.5	13.5	12.5	13.5	meq/100g
13	Magnesium as Mg (Exchangeable)	13.7	14.7	13.7	13.7	12.6	14.7	13.7	14.7	meq/100g
14	Sodium as Na (water Extractable)	54	56	62	55	55	56	45	56	mg/kg
15	Potassium as K (water Extractable)	23	29	27	36	28	29	22	25	mg/kg
16	Calcium as Ca (water Extractable)	116	108	100	108	108	116	100	116	mg/kg
17	Magnesium as Mg (water Extractable)	66	61	66	71	61	66	66	61	mg/kg

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18	Chloride as Cl- (water Extractable)	68	78	87	78	87	78	78	68	mg/kg
19	Sulfate as SO4-- (water Extractable)	114	113	121	121	122	112	115	113	mg/kg
20	Available Phosphorus as P2O5	67	50	67	110	64	74	67	56	kg/ha
21	Available Potassium as K2O	236	234	245	64	237	252	241	223	kg/ha
22	Available Nitrogen as N	128	122	117	114	128	109	130	126	kg/ha
23	Porosity	52.6	53.3	46.4	53.9	55.5	51.7	50.4	53.5	%
24	SAR	1.1	1.1	1.1	1.1	1.1	1.1	1	1	(meq/kg) ^(0.5)
25	Salinity	214	261	261	280	311	289	312	289	mg/L
TCLP Metals										
1	Cadmium as Cd	BDL[DL=0.018]	BDL[DL=0.018]	BDL[DL=0.018]	BDL[DL=0.018]	BDL[DL=0.018]	BDL[DL=0.018]	BDL[DL=0.018]	BDL[DL=0.018]	mg/L
2	Total Chromium as Cr	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	mg/L
3	Cobalt as Co	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	mg/L
4	Copper as Cu	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	mg/L
5	Iron as Fe	BDL[DL=0.09]	BDL[DL=0.09]	BDL[DL=0.09]	BDL[DL=0.09]	BDL[DL=0.09]	BDL[DL=0.09]	BDL[DL=0.09]	BDL[DL=0.09]	mg/L
6	Lead as Pb	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	mg/L
7	Manganese as Mn	BDL[DL=0.12]	BDL[DL=0.12]	BDL[DL=0.12]	BDL[DL=0.12]	BDL[DL=0.12]	BDL[DL=0.12]	BDL[DL=0.12]	BDL[DL=0.12]	mg/L
8	Nickel as Ni	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	BDL[DL=0.06]	mg/L
9	Zinc as Zn	BDL[DL=0.018]	BDL[DL=0.018]	BDL[DL=0.018]	BDL[DL=0.018]	BDL[DL=0.018]	BDL[DL=0.018]	BDL[DL=0.018]	BDL[DL=0.018]	mg/L

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26 POST PROJECT ENVIRONMENTAL MONITORING PROGRAMME

Sr. No.	Particulars	Location	Frequency	Capital Cost (Rs.)	Recurring Cost (Rs.)	Responsibility
Construction Phase						
1.	Ambient Air quality for PM ₁₀ , PM _{2.5} , SO ₂ and NO _x	Project site and two samples out of the project site	24-hour sample quarterly	-	30,000	PP will appoint NABL/MOEF&CC approved Laboratory/ Consultant
2.	Noise level	Project site and two samples out of the project site	Day time and night time quarterly	-	20,000	PP will appoint NABL/MOEF&CC approved Laboratory/ Consultant
3.	Health	Labor health Checking		-	50,000	Contractor/PP
		Total			1,00,000	
Operation Phase						
1.	Ambient Air quality for PM ₁₀ , PM _{2.5} , SO ₂ and NO _x	a. Three samples outside the project premises in direction at 500m and 1000 m at 120° b. 1 sample within the project site	half yearly	-	50,000	PP will appoint NABL/MOEF&CC approved Laboratory/ Consultant
2.	Noise level	Day time and night time, DG set and 2 samples outside the project site.	half yearly	-	30,000	PP will appoint NABL/MOEF&CC approved Laboratory/ Consultant
3.	Flue gas from Stack attached to Thermic Fluid Heater for PM ₁₀ , PM _{2.5} , and Stack attached DG Sets for SO ₂ and NO _x	Sampling port of chimney	Online Continuous & Monthly by NABL/MOEF approved Laboratory	10,00,000	1,00,000	PP will appoint NABL/MOEF&CC approved Laboratory/ Consultant
4.	Meteorology data, Wind velocity and direction,	At site	Hourly	-	20,000	PP will appoint NABL/MOEF&CC approved Laboratory/

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Sr. No.	Particulars	Location	Frequency	Capital Cost (Rs.)	Recurring Cost (Rs.)	Responsibility
	Temperature (max & min), Humidity (max & min) Rainfall					Consultant
5.	Soil Organic and Inorganic matter	Three locations	Pre monsoon – and Post monsoon.	-	20,000	PP will appoint NABL/MOEF&CC approved Laboratory/ Consultant
6.	Effluent & Sewage Analysis	ETP & STP (treated and untreated)	Online continuous and Monthly	500000	50,000	PP will appoint NABL/MOEF approved Laboratory/ Consultant
		Total		15,00,000	2,70,000	

27 ADDITIONAL STUDIES

Jorinco Specialities Private Limited (JSPL) has carried out Hazard & Operability Study (HAZOP Study). Public Hearing will be conducted. Issues raised during Public Hearing will be complied by M/s. Jorinco Specialities Private Limited (JSPL). Public Hearing Proceedings will be incorporated within the EIA Report.

28 PROJECT BENEFITS

Jorinco Specialities Private Limited (JSPL) aims to make readily available a wide range of high purity Organic Esters at a price which is globally competitive in comparison to other high premium manufacturers in the market. The management of JSPL believes that there is tremendous potential to manufacture these products in India and supply globally primarily due to India's technical capabilities and large workforce. Considering good export as well as domestic market, marketability of the product will not be a problem at all.

Temporary and permanent employment of skilled and unskilled persons as well as technical and managerial employment for operation of the plant will be done which will result in beneficial impacts on economic environment. In addition to providing direct employment, the project will also generate indirect employment in other sectors with an opportunity of trade and services. Thus, with the adoption of policy of local employment and priority to local contractor in the contract services, a significant long term positive impact is foreseen on the economic environment of the area.

Jorinco Specialities Private Limited (JSPL)	Environmental Impact Assessment and Environmental Management Plan for Proposed Production of 9998.0 Metric Ton/Year Highly Pure Esters derived from a Combination of Fatty Acids & Fatty Alcohols of Vegetable Oils of M/s. Jorinco Specialities Private Limited at Gat No. 351/1, Bhare, Next to Indus Biotech Pvt. Ltd., Tehsil: Mulshi, District: Pune, Pin. 411045, Maharashtra.
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Phases	Temporary Employment	Permanent Employment	Total Employment
Construction Phase	50	5	55
Operational Phase	5	50	55

29 EMP BUDGET OF ENVIRONMENTAL PROTECTION MEASURES

Cost of the Project will be **Rs. 41,20,00,000/-** i.e **41.2 Crore**. Cost for Environmental Management during Constructional Phase will be **Rs. 7.4 Lakh [Rs. 5.4 Lakh as Capital Cost & Rs. 2.0 Lakh as Recurring Cost]**. Cost for Environmental Management during Operational Phase will be **Rs. 75.0 Lakh. [Rs. 52.5 Lakh as Capital Cost & Rs. 22.5 Lakh as Recurring Cost]**.

Total Investment towards the Environmental Protection, Control & Mitigation Measures would be about Rs. 82.4 Lakh i.e. 2.0% of the Total Project Cost.

The provision for adequate funds will be kept aside to meet with regular expenses for the environmental control measures. Capital & Recurring Cost for environmental management for the proposed project during Constructional phase is given in following Table and Capital & Recurring cost for environmental management for the proposed project during Operational phase is also given in Table below.

Cost for Environmental Management (Construction Phase)

Sr. No.	Attributes	Parameters	Management Measures	Capital Cost (Rs. in Lakh)	Recurring Cost (Rs. in Lakh)
1	Air Pollution	Dust & Particulate matters due to material hauling & construction activity	Dust suppression measures such as regular water sprinkling, covering the stock piles, Providing PPE's viz. Dust masks, Safety Goggles to construction workers, Site barricading	0.15	0.5

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2	Land/Soil & Water pollution	Construction activity waste viz. solid recyclable wastes, non-recyclable wastes, excavated soil & surface runoff water & sewage	Construction activity wastes: Solid recyclable inert wastes: The inert solid recyclable waste viz. left over iron rods, wooden flanks, cardboards, wooden boxes will be stored in separately in dedicated area & sold to recycler.	0.5	1.0
			Solid non-recyclable inert wastes: The inert non-recyclable wastes viz. leftover concrete debris, stones, aggregates will used as filling material for internal roads.	0.9	
			Excavated soil: The excavated soil will be stored & used for green belt development activity.	0.5	
			Surface run off: Surface runoff generated due to water sprinkling activity will be appropriately routed to nallah by temporary constructed channels.	0.9	
			Domestic sewage: Mobile sanitation (toilet) facility will be provided to construction workers & will be periodically cleaned by Night soil tankers	2.0	
3	Noise pollution	Noise generation due to construction activities & use of machineries / equipment's	PPE viz. Ear plugs will be provided workers & it will be ensured construction activity will be limited between 9. AM to 5 PM only.	0.45	0.5
Total				5.4	2.0

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Cost for Environmental Management (Operational Phase)

S.N.	Component	Mitigation/Management measures		Capital Investment (INR, in Lakh)	Estimated Recurring Expenditure/Year (Rs. in Lakh)
1	Air	Emissions from Thermic Fluid Heater & DG set	Stack Height (Thermic Fluid Heater) – 30.5 mtr & Stack Height (DG Set) – 8.0 mtr.	5.0	1.0
2	Water	ETP of 7.0 KLD Capacity and STP of 6.0 KLD Capacity		5.0	1.0
3	Noise	Ear plugs / muffs for workers, acoustic enclosures to noise generating equipments		1.0	0.5
4	Environment Monitoring	Online Monitoring System / Monitoring from NABL Approved Laboratory		15.0	2.7
		Ambient Air Monitoring	PM ₁₀ , PM _{2.5} , SO ₂ , NO _x , CO		
		DG stack monitoring	TPM, SO ₂ , NO _x		
		Effluent (Treated & Untreated)	pH, COD, BOD, TSS, TDS, Oil & Grease		
5	Occupational Health	Glares, Gloves, Safety shoes, Helmets, Ear Plugs etc. & 6 monthly health-medical check-up of all employees (Recurring).		2.5	1.0
6	Green Belt	Green Belt Development -1,300 Trees		1.4	-
		Estimated annual expenditure for maintenance of green belt		--	1.2
7	Solid Waste Management	Development of dedicated area for solid waste storage & waste management		5.0	2.0
9	Rain Water Harvesting Measures	Provision of Rainwater harvesting tank		2.3	1.0
10	Energy	Installation of Solar Panels		5.0	2.0
11	Disaster Management & Safety	Provision of Lightning arrestor, Implementation of safety measures identified in Quantitative Risk Assessment studies.		5.0	2.0
12	Storm Water Management	Development & Maintenance of internal storm water drains (Recurring).		3.3	1.0
13	Environment Management Cell	Supervision of Environmental Monitoring & Management Department		2.0	7.1
Total				52.5	22.5

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30 CORPORATE ENVIRONMENT RESPONSIBILITY

Corporate Environment Responsibility is core value of Jorinco Specialities Private Limited (JSPL). This company will contribute towards economic, social and environmental development that will create positive impact on society. JSPL will focus on education, generating employment, sustainable development of livelihoods and health. **Jorinco Specialities Private Limited (JSPL)** will expend **2% of Capital Investment (Project Cost)** towards **Corporate Environment Responsibility i.e Rs. 82,40,000/-**. **Total Project Cost** is **41.2 Crore**. It is a Greenfield Project and Cost of the Project is below 100 Crores.

Improvement in Social Infrastructure will be done in association with Local Authorities. Local needy people will get financial help for education from this company. Local needy hospitals will get financial help to provide better treatment to the local needy people.

Corporate Environment Responsibility

Sr. No.	CER Activity	Fund Allotment (Rs.)
1.	Improvement in Social Infrastructure	15,00,000
2.	Hospitals	55,00,000
3.	Education	12,40,000
Total		82,40,000

31 CONCLUSION

It can be concluded that on positive implementation of Mitigation Measures and Environmental Management Plan during the constructional and operational phase, there will be negligible impact on the environment and the proposed project will be beneficial to the Local People, State & Nation.