Executive Summary of Environmental Impact Assessment Report

FOR

Proposed Expansion of Synthetic Organic Chemicals - Active Pharmaceutical Ingredients (API) Manufacturing Unit at Village Hingni Taluka Seloo, Dist. Wardha, Maharashtra – 442106.

Total Capacity after Proposed Expansion: 23,823 MTA
and
Proposed Briquette & Pallet manufacturing Plant (Bio Fuel) – 100 MT/Day

ToR Letter No: IA/MH/IND3/511528/2024, dated 17/02/2025

Submitted by

IPCA Laboratories Limited

Village - Hingni, Taluka Seloo, Dist.- Wardha,

Maharashtra - 442106

Environmental Consultant

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NABET Certificate No. NABET/EIA/2225/RA 267_Rev 01
Valid Till- 27.06.2025

Contents

1. Introduction

PCA Laboratories Ltd., is located at Village Hingni, Taluka Seloo, District Wardha, Maharashtra – 442106. The geographical location is latitudes 20°54'53.47"N and longitudes 78°42'20.23"E. Index map of project is shown in **Figure 1-1**. The project received Prior Environmental Clearance with EC F. No. IA-J-11011/141/2021-IA-II (I) dt. 27th August, 2021 and Amendment in Environmental Clearance received dated 24th March, 2023 for 17 Nos. products having production capacity of 4,470 MTA. Based on obtained EC and EC Amendment construction activity is ongoing at site till date. Unit has obtained Consent to Establish Format1.0/CAC/UAN No. MPCBCONSENT-0000177444/CE/2405001820, dated 20.05.2024 and valid till 16.12.2028. None of above-mentioned Environment Clearance is converted into Consent to Operate. Unit has applied for CTO.

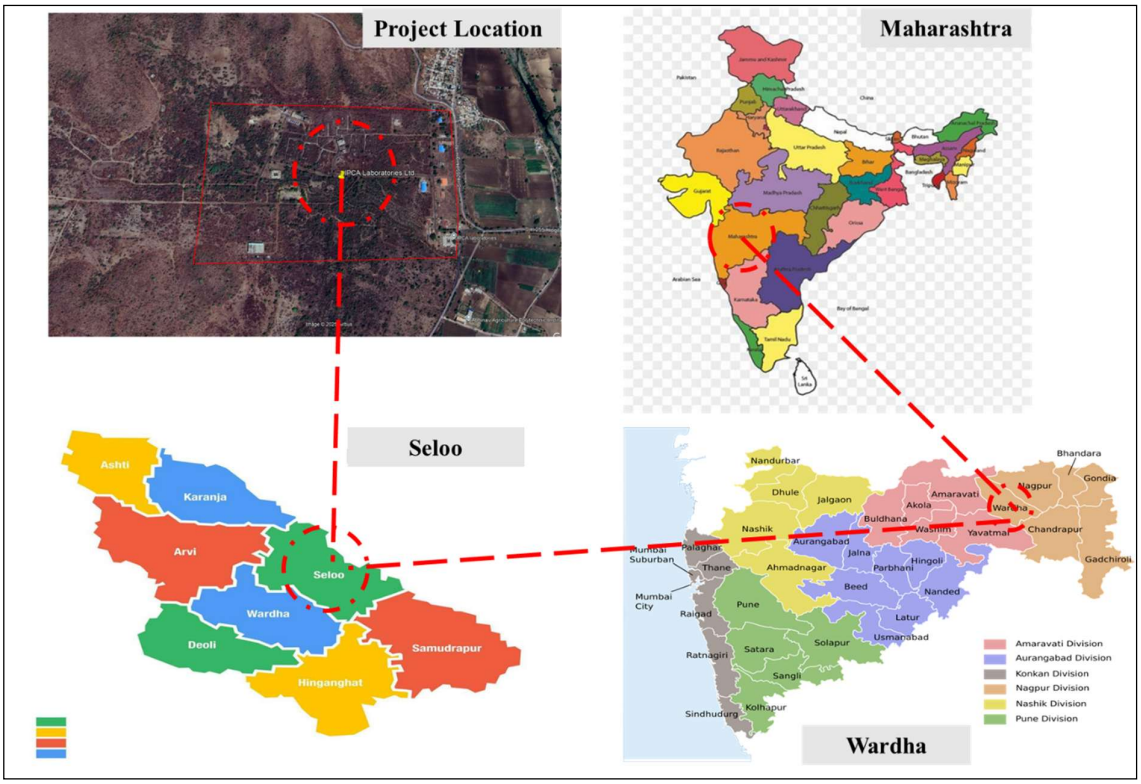

Figure 1-1: Index Map showing Location of the project

2. Project Description

IPCA Laboratories Ltd. is planning to propose expansion of Synthetic Organic Chemical - Active Pharmaceutical Ingredients (APIs). The company has obtained the possession of land at Village Hingni Tal Seloo, Wardha, Maharashtra - 442106, measuring 5,27,474.97 m^2 area. The possession receipt / plot possession letter is available. The proposed master layout of the proposed project is shown in **Figure 2-1**. The project received Prior Environmental Clearance with EC F. No. IA-J-11011/141/2021-IA-II(I) dt. 27th August, 2021 and Amendment in Environmental Clearance received dated 24th March, 2023. The proposed expansion manufacturing unit is planned to increase production capacity from

4,470 MTA to 23,823 MTA with addition of new products & Proposed Briquette & Pallet manufacturing Plant (Bio Fuel) – 100 MT/Day.

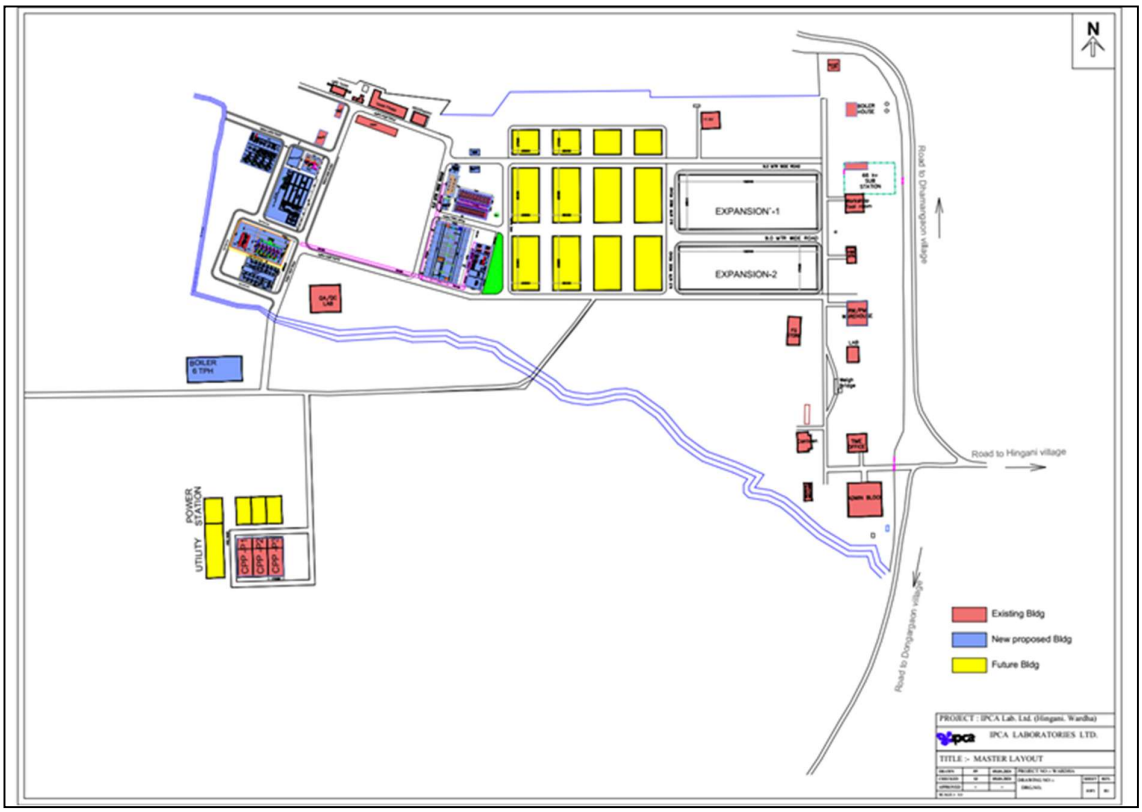

Figure 2-1: Proposed Master Layout

As per the EIA Notification dated 14th September 2006 and its subsequent amendments, the proposed project comes under schedule 5(f) – Synthetic Organic Chemical Manufacturing Industry. As the proposed expansion project is planned outside notified industrial area, Maharashtra therefore, the project is categorized as Category 'A'. Details for the same is mentioned below.

Sr. No.	Name of the product/By-product	CAS No.	Quantity / Capacity (MTA)		
			As per EC Dt. 27.08.2021 and Amended Dt. 24.03.2023	Proposed incremental	Total
Group 1					
1.	Chloroqunine Phosphate	50-63-5	200	--	200
2.	Chloroqunine Sulfate	132-73-0	200	--	200
3.	Hydroxy chloroquine sulphate	747-36-4	300	--	300

Sr. No.	Name of the product/By-product	CAS No.	Quantity / Capacity (MTA)		
			As per EC Dt. 27.08.2021 and Amended Dt. 24.03.2023	Proposed incremental	Total
4.	Losartan Potassium	124750-99-8	400	--	400
5.	Valsartan	137862-53-4	300	--	300
6.	Primaquine Phosphate	63-45-6	10	--	10
7.	Piperquninephospate	4085-31-8	250	--	250
8.	2-Ethyl Hexyl Nitrate (2-EHN)	27247-96-7	--	10000	10000
9.	Lasamide	2736-23-4	--	1200	1200
10.	Losartan Base	114798-26-4	--	600	600
11.	4,7-DCQ	86-98-6	--	600	600
12.	Para Hydroxy Acetophenone	99-93-4	--	360	360
13.	6-Floro Tetra Hydro Quinoline	59611-52-8	--	192	192
14.	R &D Products	--	--	18	18
15.	Mannich Base Pure	42036-65-7	--	120	120
Group 2					
16.	Amodiaqunine Base	86-42-0	300	--	300
17.	Amodiaqunine HCL	69-44-3	300	--	300
18.	Alloprinol	315-30-0	300	--	300
19.	Etodolac	41340-25-4	300	--	300
20.	Mesalamine	89-57-6	300	--	300
21.	Furosemide	54-31-9	600	--	600

Sr. No.	Name of the product/By-product	CAS No.	Quantity / Capacity (MTA)		
			As per EC Dt. 27.08.2021 and Amended Dt. 24.03.2023	Proposed incremental	Total
22.	Hydrochlorothiazide	58-93-5	200	--	200
23.	Chlorthalidone	77-36-1	100	--	100
24.	Metoprolol Tartrate	56392-17-7	400	--	400
25.	Metochloropramide HCl	7232-21-5	10	--	10
26.	N-1 (2' Cyanobiphenyl-4yl) Methyl] -(L)-Valinemethyl Ester Hydrochloride	482577-59-3	---	600	600
27.	3-Amino Pyrazole Carboxamide Hemisulfate	27511-79-1	--	840	840
28.	Hydroxynovaldeamine	69559-11-1	--	300	300
29.	2-Cyano - 4- Bromo Methyl Biphenyl	114772-54-2	--	480	480
30.	7-Ethyl tryptophol	41340-36-7	--	360	360
31.	2-Butyl-4-Chloro-5-Formyl Imidazole	83857-96-9	--	1200	1200
32.	5-NITRO salicylic acid	96-97-9	--	480	480
Group 3					
33.	Novalidamine	140-80-7	--	120	120
34.	Ortho Tolyl Benzo Nitrile	157366-46-6	--	600	600
35.	4-Amino-6-chloro-1,3-benzenedisulfonamide	121-30-2	--	480	480

Sr. No.	Name of the product/By-product	CAS No.	Quantity / Capacity (MTA)		
			As per EC Dt. 27.08.2021 and Amended Dt. 24.03.2023	Proposed incremental	Total
36.	2-chloro-5-(1s-1-hydroxy-3-oxo-2h-isonidol-1-yl) benzensulfanamide	1441368-51 -9	--	180	180
37.	Metoprolol Epoxide	56718-70-8	--	300	300
38.	Phthaloyl Amlodipine	88150-62-3	--	48	48
39.	2,3 Dichlorobenzoyl Cyanide (DCBOC)	77668-42-9	--	60	60
40.	Para Amino Benzoic Acid	150-13-0	--	48	48
41.	4-Hydrazino Benzene Sulphonamide HCL	17852-52-7	--	60	60
42.	Methyl Benzothiazine Isopropyl Ester (MBIE)	35511-15-0	--	48	48
43.	Dibenzo[b,f][1,4] thiazepin-11(10H)-one	3159-07-7	--	**5**	**5**
44.	**By-products (**Spent XXXXxazide , sodium sulphite etc**)**	--	**--**	54	54
45.	**Captive Bio Fuel Production** (Briquette & pallet manufacturing plant (Bio Fuel))	--	--	100 MT/Day	100 MT/Day

COST OF PROJECT

The expansion will be carried out at existing plot. The expected cost of proposed expansion is Rs. 676.76 Crores. Total area assigned for the operation is 3,00,787.84 sq. m., after expansion 5,27,474.97 m^2, existing green belt area is approx. 10,6076.88 m^2. after expansion 1, 85,000 m^2.

FUEL & ELECTRICITY CONSUMPTION

Source	As per EC Dt. 27.08.2021 and Amended Dt. 24.03.2023	Total After Proposed Expansion
Connected Load	10000KW	10000KW
Total Operational Load	6500KW	6500KW
Generation of electricity from Solar	710 kWp	710 kWp
% of saving due to installation of Solar	11%	11%

Equipment	Total Fuel Quantity
As per EC Dt. 27.08.2021 and Amended Dt. 24.03.2023	
Boiler 16TPH x 2 Nos	Imported Coal/Bio Briquette: 138 TPD
Boiler 8 TPH x 1 No.	Imported Coal/Bio Briquette: 31 TPD
Thermopack 10 LacKcal/hr x 2 Nos	Imported Coal/Bio Briquette: 13.8 TPD/ HSD: 5600 Lit/D
DG set 1500 KVA x 3 Nos	HSD: 975 Lit/Hr.
Total After Proposed Expansion	
Boiler 8 TPH x 2 Nos	Coal/BioBriquette/Biogas (NCV): 1200 Kg/Hr/ 1458 Kg/Hr/ 1372 m3 /Hr
Boiler 8 TPH x 1 No.	Coal/BioBriquette/Biogas (NCV): 1200Kg/Hr/ 1458 Kg/Hr/ 1372 m3 /Hr
Thermopack 10 LacKcal/hr x 2 Nos	Imported Coal/Bio Briquette: 13.8 TPD/ HSD: 5600 Lit/D
DG set 600 KVA x 1 No, 1010 KVA x 1 No, 1500 KVA x 2 Nos.	HSD: 110 Lit/Hr. HSD: 225 Lit/Hr. HSD: 975 Lit/Hr. each

WATER CONSUMPTION

As per EC Dt. 27.08.2021 and Amended Dt. 24.03.2023- 557 CMD

Total After Proposed Expansion – 657 CMD

WASTE WATER GENERATION, TREATMENT & DISPOSAL

As per EC Dt. 27.08.2021 and Amended Dt. 24.03.2023 - out of 360 CMD effluents from Process, 150 CMD is high TDS which will be treated in MEE-1. MEE condensate i.e. 180 CMD (150 CMD + 30 CMD

Live steam condensate from MEE-1) will be fed to secondary treatment of ETP along with Low TDS stream i.e. 407 CMD (260 CMD from washings & 147 CMD from utility blowdowns). This total effluent i.e. 587 CMD will be fed to RO. RO permeate i.e 440 CMD will reuse for utilities and RO reject i.e 147 CMD will be treated in MEE-2. Condensate of MEE-2 (147 CMD + 30 CMD Live steam condensate from MEE-1) will be again recycled and reused in utilities

After Proposed Expansion - Out of 380 CMD effluent from Process, 160 CMD is high TDS which will be treated in MEE-1. MEE condensate i.e. 192 CMD (160 CMD + 32 CMD Live steam condensate from MEE-1) will be fed to ETP along with Low TDS stream i.e. 497 CMD (220 CMD from Process + 130 from washing + 99 CMD from cooling + 48 from Boiler). This total effluent i.e. 689 CMD will be fed to RO. RO permeate i.e 552 CMD will reused for utilities and RO reject i.e 137 CMD will be treated in MEE-2. Condensate of MEE-2 (137 CMD + 28 CMD Live steam condensate from MEE-1) will be again recycled and reused in utilities.

GASEOUS EMISSION

Details of stacks along with their mitigation methods

	Boiler	**Boiler**	**Thermo pack**	**D.G Stack**
As per EC Dt. 27.08.2021 and Amended Dt. 24.03.2023				
Capacity	16 TPHx2Nos.	8 TPHx1No.	10 Lackcal/Hr x 2Nos. (One working, one standby)	1500 KVA X 3 Nos.
Fuel type	Imported Coal /Bio Briquette	Imported Coal /Bio Briquette	Imported Coal/Bio Briquette/HSD	HSD
Total Fuel quantity	138 TPD	31 TPD	13.8 TPD / 5600Lit/D	975Lit/Hr
MOC	MS	MS	MS	MS
Shape	Round	Round	Round	Round
Diameter(mm)	1000	1000	1200	500
Stack	40 m each	30 m	30 m each	30 m

	Boiler	Boiler	Thermo pack	D.G Stack
Height m (above ground level)				each
Gas temperature	135 ^{o}C	135 ^{o}C	145 ^{o}C	145 ^{o}C
Type of Pollutant	Particulate matter, SO2	Particulate matter, SO2	Particulate matter, SO2	SO2, NOx
Quantum of Pollutant	Particulate matter:7.028g/s, SO2:15.72 g/s(Each)	Particulate matter:1.578g/s, SO2:3.58 g/s	Particulate matter: 0.306 g/s, SO2:0.694g/s (Each)	SO2: 1.1g/s NOx: 7.91g/s
Control Equipment	Multicyclone followed by ESP and stack of adequate height	Multicyclone followed by Bag filter and stack of adequate height	Multicyclone followed by Bag filter and stack of adequate height	Stack of adequate height
Total After Proposed Expansion				
Capacity	8 TPHx2Nos.	8 TPHx1No.	10 Lackcal/Hr x 2Nos. (One working, one standby)	DG set 600 KVA x 1 No, 1010 KVA x 1 No, 1500 KVA x 2 Nos.
Fuel type	Coal/BioBriquette/Biogas (NCV)	Coal/BioBriquette/Biogas (NCV)	Imported Coal/Bio Briquette/HSD	HSD
Total Fuel	1200 Kg/Hr/ 1458	1200 Kg/Hr/ 1458	13.8 TPD /	HSD: 110

	Boiler	Boiler	Thermo pack	D.G Stack
quantity	Kg/Hr/ 1372 m3 /Hr	Kg/Hr/ 1372 m3 /Hr	5600Lit/D	Lit/Hr. HSD: 225 Lit/Hr. HSD: 975 Lit/Hr. each
MOC	MS	MS	MS	MS
Shape	Round	Round	Round	Round
Diameter(mm)	63.5	63.5	1200	500
Stack Height m (above ground level)	30 m	30 m	30 m	30 m
Gas temperature	135 ^{o}C	135 ^{o}C	145 ^{o}C	145 ^{o}C
Type of Pollutant	Particulate matter, SO2	Particulate matter, SO2	Particulate matter, SO2	SO2, NOx
Quantum of Pollutant	Particulate matter:1.578g/s, SO2:3.58 g/s	Particulate matter:1.578g/s, SO2:3.58 g/s	Particulate matter: 0.306 g/s, SO2:0.694g/s (Each)	SO2: 1.1g/s NOx: 7.91g/s
Control Equipment	Multicyclone followed by ESP and stack of adequate height	Multicyclone followed by Bag filter and stack of adequate height	Multicyclone followed by Bag filter and stack of adequate height	Stack of adequate height

Details of Process Emission Generation and It's Management				
As per EC Dt. 27.08.2021 and Amended Dt. 24.03.2023				
Source	**Emissions**	**APC**	**Media**	**Disposal**
Process Stack 1	HCL/HBr/Acid Mist	Scrubber	Alkali	ETP

Process Stack 2	NH3	Scrubber	Water	ETP
Process Stack 3	HCL	Scrubber	Alkali	ETP
Process Stack 4	HCL	Scrubber	Alkali	ETP
Process Stack 5	HCL	Scrubber	Alkali	ETP
Process Stack 6	HCL	Scrubber	Alkali	ETP
Process Stack 7	HCL	Scrubber	Alkali	ETP
Process Stack 8	HCL	Scrubber	Alkali	ETP
Total After Proposed Expansion				
Process Stack 1	HCL/HBr/Acid Mist	Scrubber	Alkali	ETP
Process Stack 2	NH3	Scrubber	Water	ETP
Process Stack 3	HCL	Scrubber	Alkali	ETP
Process Stack 4	HCL	Scrubber	Alkali	ETP
Process Stack 5	HCL	Scrubber	Alkali	ETP
Process Stack 6	HCL	Scrubber	Alkali	ETP
Process Stack 7	HCL	Scrubber	Alkali	ETP
Process Stack 8	H2S	Scrubber	Acid & Alkali	ETP
Process Stack 9	H2S	Scrubber	Acid & Alkali	ETP

HAZARDOUS WASTE MANAGEMENT

Sr. No.	Category No.	Type of Waste	Unit	As per EC Dt. 27.08.2021 and Amended Dt. 24.03.2023	Total After Proposed Expansion	Disposal
1.	26.3	Spent Acid	MT/A	13540.8	13540.8	Cement Plant or authorized recycler/ CHWTSDF
2.	28.6	Spent Caustic Solution	MT/A	1790	2148	Cement Plant or authorized recycler/ CHWTSDF
3.	28.6	Spent Solvent	MT/A	958.0	1150	Sale to authorized party/ pre/coprocessing/ CHWTSDF

Sr. No.	Category No.	Type of Waste	Unit	As per EC Dt. 27.08.2021 and Amended Dt. 24.03.2023	Total After Proposed Expansion	Disposal
4.	28.1	Process Residue & Waste	MT/A	1160.0	1392	pre/coprocessing/CHWTSDF
5.	5.1	Used Oil/ Spent oil	MT/A	10	10	Sale to authorized party/ CHWTSDF
6.	28.3	Spent Carbon (Process)	MT/A	771.0	925	pre/coprocessing/ CHWTSDF
7.	26.6	Spent Process mother liquor	MT/A	6331	7598	Authorized recycler /pre/coprocessing/ CHWTSDF
8.	33.1	Empty barrels/ containers/ Liners/ used PPEs contaminated with hazardous waste	MT/A	250	250	Sale to authorized party / CHWTSDF
9.	28.5	Date expired Products (0.5% of total production capacity)	MT/A	25	25	pre / coprocessing /CHWTSDF
10.	28.4	Off specification products (0.5% of total	MT/A	25	25	pre/coprocessing/ CHWTSDF

Sr. No.	Category No.	Type of Waste	Unit	As per EC Dt. 27.08.2021 and Amended Dt. 24.03.2023	Total After Proposed Expansion	Disposal
		production capacity)				
11.	33.2	Contaminated cotton Rugs and other cleaning material	MT/A	10	10	CHWTSDF
12.	36.2	Spent Filter media	MT/A	10	10	CHWTSDF
13.	35.2	Spent iron exchange Resin	MT/A	2	2	pre/coprocessing/CHWTSDF
14.	28.2	Spent catalyst	MT/A	79.0	79.0	Sent for regeneration to Authorized party/CHWTSDF
15.	36.1	Distillation residue	MT/A	2060	2472	pre/coprocessing/CHWTSDF
16.	35.3	ETP Sludge	MT/A	2000.0	2000.0	pre/coprocessing/CHWTSDF
17.	35.3	Spent Carbon (ETP)	MT/A	135.0	162.0	pre/coprocessing/CHWTSDF
18.	35.3	MEE Salts	MT/A	26470.0	26800.0	CHWTSDF
19.	35.3	Spent Solvents (from Stripper)	MT/A	1620.0	1752.0	pre/coprocessing/ CHWTSDF

3. Description of Environment

The baseline environmental study was conducted during the **summer season (March–May 2024)** within a **10 km radius** of the project site. The environment was studied in terms of land use, topography, air and water quality, soil, noise levels, and biological and socio-economic aspects.

- **Air Quality**: Ambient Air Quality Index (AAQI) remained within CPCB norms with PM_{10}, $PM_{2.5}$, SO_2, NO_2, and CO levels under permissible limits.
- **Water Quality**: Surface and groundwater samples were tested; all parameters met drinking and irrigation standards.
- **Soil**: Slightly alkaline with good fertility and low contamination.
- **Noise**: Noise levels were within residential and industrial limits.
- **Flora & Fauna**: No rare or endangered species recorded.
- **Socio-Economic Profile**: Majority of the local population is engaged in agriculture and allied activities.

4. Anticipated Environmental Impacts and Mitigation Measures

The potential impacts and corresponding mitigation strategies were identified for both construction and operation phases:

- **Air**: Installation of dust suppression systems, bag filters, and stack emissions control.
- **Water**: Adoption of a **Zero Liquid Discharge (ZLD)** approach; efficient ETP and STP installed.
- **Noise**: Acoustic enclosures for DG sets and time-restricted operations.
- **Waste**: Segregation and proper disposal of hazardous and non-hazardous waste as per CPCB guidelines.
- **Ecology**: Development of a **greenbelt over 33%** of total plot area using native species.

5. Analysis of Alternatives (Technology & Site)

Site: No alternative sites were considered due to the availability of adequate space within the existing premises.

Technology: Adoption of modern and clean technologies including solvent recovery systems, process automation, and use of clean fuels (briquettes and pallets).

Waste Management: Preference for waste minimization, recycling, and resource optimization.

6. Environmental Monitoring Program

Sl. no.	Monitoring Scope	No. of Locations	Parameters	Frequency	Institutional Responsibility	
					Implementation	Audit/ Supervision
Construction Phase						
1.	**Ambient Air Quality Monitoring**					
	Onsite (1 location at main gate and one is between 200 to 500 m down wind	4 locations	$PM_{2.5}$, PM_{10}, NO_2, SO_2, CO_2.	Half yearly	Contractor through approved monitoring agency	PMC supervisor / Contractor

Sl. no.	Monitoring Scope	No. of Locations	Parameters	Frequency	Institutional Responsibility	
					Implementation	Audit/ Supervision
	direction and 2 will be monitored cross wind direction of the particular monitoring season)					
2.	**Noise Quality Monitoring**					
	Only 01 location near main gate of the plant/ unit	1 locations	Lmin, Lmax, Leq, L10, L50 and L90	Day and Night time average samples every quarter 2 time in peak period / activities	Contractor through approved monitoring agency	PMC supervisor / Contractor
3.	**Ground water Quality Monitoring**					
	Groundwater -5 locations, and Surface water -2 locations (US and DS site)	5 location for Ground water Surface water -2 locations	Physical, chemical and heavy metals & biological parameters.	Twice a year	IPCA Laboratories Ltd. through MoEF&CC approved Lab	3rd Party
4.	**Soil Quality Monitoring**					
	1 location within project site	1 location	Texture, pH, electrical conductivity, cation exchange capacity, alkali metals, Sodium Absorption Ratio (SAR), permeability , porosity.	yearly	IPCA Laboratories Ltd. through MoEF&CC approved Lab	3rd Party
Operation Phase						
1.	**Ambient Air Quality Monitoring**					
	17 Stacks attached with 3-DG, 5-	5 locations	PM2.5, PM10, NO2, SO2, CO2,	Half yearly	Contractor through approved	PMC supervisor

Sl. no.	Monitoring Scope	No. of Locations	Parameters	Frequency	Institutional Responsibility	
					Implementation	Audit/ Supervision
	Boiler, and 9-Wet Scrubbers		NH_3, H_2S, O_3, HCl, HBr, HF, Cl & Acid mist		monitoring agency	/ Contractor
2.	**Noise Quality Monitoring**					
	Only 01 location near main gate of the plant/ unit	4 locations	Lmin, Lmax, Leq, L10, L50 and L90	Day and Night time average samples every quarter 2 time in peak period / activities	Contractor through approved monitoring agency	PMC supervisor / Contractor
3.	**Ground water Quality Monitoring**					
	STP – Once per month from inlet and outlet ETP - Once per month from inlet and outlet	4 locations	As per standards	Once in every month	IPCA Laboratories Ltd. through MoEF&CC approved Lab	3rd Party
4.	**Soil Quality Monitoring**					
	1 location within project site	1 locations	Texture, pH, electrical conductivity, cation exchange capacity, alkali metals, Sodium Absorption Ratio (SAR), permeability, porosity.	yearly	IPCA Laboratories Ltd. through MoEF&CC approved Lab	3rd Party
5. 5	**Health & Safety**					
	Occupational Health	--	Health and fitness check-up of employees	Half yearly	IPCA Laboratories Ltd. through MoEF&CC approved Lab	3rd Party
	Emergency preparedness	--	Mock drill records, on site	Half yearly	IPCA Laboratories Ltd. through	3rd Party

Sl. no.	Monitoring Scope	No. of Locations	Parameters	Frequency	Institutional Responsibility	
					Implementation	Audit/ Supervision
			emergency plan, evacuation Plan		MoEF&CC approved Lab	

7. Additional Studies

Risk Assessment & Disaster Management Plan (RA-DMP): Identifies hazards like chemical leaks, fires; onsite and offsite emergency plans are defined.

Public Hearing: Yet to be conducted; a comprehensive action plan will be prepared based on public feedback.

Corporate Environmental Responsibility (CER): Activities proposed for community health, education, and green initiatives.

8. Project Benefits

Economic: Increased foreign exchange through exports.

Employment: Direct and indirect employment opportunities for the local population.

Social: Improved infrastructure, health services, and education under CER initiatives.

Environment: Adoption of renewable energy sources and afforestation for carbon sequestration.

9. Cost Benefit Analysis

Costs: Total project cost estimated at ₹67,676 lakh; environmental management cost is ₹4,400 lakh (capital) and ₹517 lakh/year (recurring).

Benefits: Economic growth, employment generation, environmental sustainability, and improved community welfare.

10. Environment Management Plan

EMP includes control measures for air, water, noise, and solid waste; risk management, safety measures, and continuous monitoring. It ensures compliance with statutory norms and sustainability.

- **Greenbelt Development**: 1,85,000 m² (35% of total area).
- **Pollution Control Systems**: ESPs, scrubbers, multi-effect evaporators, etc.
- **Institutional Setup**: A dedicated Environment Management Cell for implementation and monitoring.

11. Summary and Conclusion

The proposed expansion aligns with environmental norms and sustainability goals. The project will generate socio-economic benefits while ensuring environmental protection through comprehensive mitigation and monitoring strategies. With strict adherence to the EMP and regulatory compliance,

the project is environmentally viable and socially beneficial. Additionally, the project incorporates advanced pollution control technologies, greenbelt development, and a Zero Liquid Discharge (ZLD) system to minimize environmental impact. IPCA Laboratories Ltd. is committed to operating in a responsible manner that contributes to both community welfare and environmental conservation.