PRE - FEASIBILITY REPORT

for

PROPOSED BULK DRUG & ITS INTERMEDIATES UNIT

of

M/s. MAHRSHEE LABORATORIES PVT. LTD.

(UNIT-II)

PLOT NO. 3046 A & B, PHASE – III, GIDC, PANOLI-394116,

DIST: BHARUCH (GUJ.)

Prepared By:

NABL Accredited Testing Laboratory
ISO 9001:2008 Certified Company

Aqua-Air Environmental Engineers P. Ltd.
403, Centre Point, Nr. Kadiwala School, Ring Road, Surat - 395002

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1.0 Executive Summary

1.1 Project Details

M/s. Mahrshee Laboratories Pvt. Ltd. (Unit-II) proposes Bulk Drug & its Intermediates unit at Plot No. 3046 A & B, Phase III, GIDC, Panoli-394116, Dist. Bharuch, Gujarat.

1.1.1 Products along with Production Capacity

Sr. No.	Name of Product	Proposed Production Capacity (MT/Month)
1	α-Phenyl-2-Piperidyl Acetamide	15
2	(4-tert-butylcyclohexyl) Acetic Acid	
3	Tranexamic Acid	
4	Masalamine	
5	5-Chloro-1-(4-Piperidinyl)-2-Benzimidazolidinone	
6	Phenyleffrine HCl	
7	Salbutemol Sulphate	
8	Flavoxate HCl and its Intermediate	
9	Febendazole	
10	Ibuprofen	
	Total	**15**

1.2 Raw Material Requirement

SR. NO.	PRODUCT WISE RAW MATERIALS	QUANTITY (MT/MT)
1.	**α-Phenyl-2-Piperidyl Acetamide**	
	α-Phenyl-2-Pyridyl Acetamide	1.10
	Acetic Acid	6.60
	Pd on Charcoal	0.10
	Sodium Hydroxide	0.30
2.	**(4-tert-butylcyclohexyl) Acetic Acid**	
	p-tert butyl Cyclohexanone	0.85
	Triethylphosphono Acetate	1.23
	Toluene	6.00
	Sodium Methoxide	0.30
	Methanol	4.80
	Pd/C 5%	0.04
	Conc. HCl	1.18
	Potassium Hydoxide	0.35
	Acetonitrile	2.80
	Activated Carbon	0.05
3.	**Tranexamic Acid**	
	4-Aminomethyl Benzoic Acid	1.07
	Methanol	2.00
	Ruthenium Metal	0.20
	Sodium Hydroxide	0.26
	Hydrochloric Acid	0.50
4.	**Masalamine**	
	5-Nitro Salicylic Acid	1.32
	Hydrogen	0.06
	Raney Nickel	1.32
	Sodium Hydroxide	0.40
	Hydrochloric Acid	0.52
	Hydrose	0.34
	Carbon	0.14
5.	**5-Chloro-1-(4-Piperidinyl)-2-Benzimidazolidinone**	
	N-Carbethoxy-4-Piperidone	0.77
	Ammonia Gas	0.26
	Methanol	15.90
	Raney Nickel	0.35
	Hydrogen	0.13
	2,5-Dichloro Nitrobenzene	0.87
	Sodium Carbonate	0.30

	Toluene	5.20
	Urea	0.33
	Sodium Hydroxide	0.59
	Activated Carbon	0.15
6.	**Phenyleffrine HCl**	
	3 Hydroxy Acetophenone	1.33
	Ethyl Acetate	0.78
	Bromine	0.78
	Toluene	12.56
	Sodium Bi Carbonate Solution	0.18
	2-Methyl Benzyl Amine	0.92
	IPA HCl	1.44
	Methanol	8
	Palladium Charcoal Catalyst	0.28
	Carbon	0.05
	Liq. Ammonia	1.67
	IPA	1.2
	L(+)Tartaric Acid	1.11
	Acetic Anhydride	1.31
	Sulphuric Acid	0.37
	IPA HCl 20%	0.8
	Carbon	0.04
	Acetone	0.27
7.	**Salbutemol Sulphate**	
	Methyl Salicylate	0.33
	Ethylene Chloride	3.5
	Aluminium Chloride	1.21
	Acetyl Chloride	0.27
	Sodium Carbonate	0.03
	Citric Acid	0.01
	Acetone	1
	Potassium Carbonate	1
	Potassium Iodide	0.04
	Benzyl Chloride	0.4
	Methanol	5
	TBAB	0.06
	Sulphuric Acid	1.07
	Bromine	0.87
	Diglyme	0.33
	T-Butyl Amine	0.84
	Sodium Borohydride	0.29

	PD/C 10 %	0.04
	Ethyl Acetate	2.73
	A Charcoal	1
8.	**Flavoxate HCl and its Intermediate**	
	Methyl Salicylate	1.75
	Chloroform	10.35
	Bromine	2.02
	Sodium bisulfate	0.13
	Ethylene Dichloride	12.00
	Propionyl Chloride	3.12
	Aluminum chloride	4.40
	Methanol	7.40
	Benzoyl Chloride	1.20
	Sodium Benzoate	1.44
	Sodium Hydroxide	0.66
	HCl	1.06
	Hydrogen	0.09
	Palladium on charcoal 5%	0.06
	Sodium carbonate	0.80
	Piperidine-2-ethanol	0.59
	Toluene	10.40
	Thionyl chloride	0.59
	Activated Carbon	0.03
	Acetone	0.90
	IPA HCl	0.90
9.	**Febendazole**	
	5 Chloro 2 Nitro Aniline	0.79
	Methanol	3.03
	Thiophenol	0.54
	Raney Nickel	0.06
	Cyanamide Soln (50%)	0.39
	Methyl Chloro Formate	0.46
	Caustic Flakes	0.41
	Butyl Acetate	0.41
	Hydrochloric Acid	0.23
10.	**Ibuprofen**	
	MCA	0.25
	IPA	0.91
	Sulphuric Acid	0.27
	Soda Ash	0.1
	Iso Butyl Benzene	0.23

	Aluminium Chloride	0.2
	EDC	1.3
	Ammonia Solution	0.12
	HCl	0.21
	Acetyl Chloride	0.11
	Sodium Metal	0.17
	C.S.Lye	0.5
	Sodium Dichromate	0.19
	Acetone	1.48
	N-Hexane	1.26

1.3 Water Requirement, Waste Water Generation and Treatment

Total water requirement will be 15.5 KL/Day which will be met through GIDC water supply. Total wastewater generation will be 11.15 KL/Day. The neutralized low COD effluent after primary treatment (8.68 KL/Day) will be sent to the CETP of M/s PETL, Panoli for the further treatment and final disposal. The neutralized high COD effluent after primary treatment (1.67 KL/Day) will be sent to the Common Spray Dryer of M/s PETL, Panoli for further treatment and final disposal. Domestic effluent (0.8 KL/Day) will be sent to septic tank & soak pit.

1.4 Air Pollution Source and Control Management

There will be emission from Boiler, Process Vents (2 Nos.) & DG Set (1 No.). Adequate air pollution control equipments i.e. Stack Height shall be provided, Two stage Scrubbers shall be installed to prevent air pollution.

1.5 Hazardous Waste

Sr. No	Type of Waste	Category	Proposed Generation	Mode of Treatment & Disposal
1.	ETP Sludge	35.3	0.8 MT/Month	Collection, Storage, Transportation & Sent to TSDF site of M/s. PSWML, Panoli or M/s. BEIL, Ankleshwar
2.	Used Oil	5.1	0.1 Lit/Month	Collection, Storage, Transportation & Sale to registered re-processor or used for lubrication within premises
3.	Spent Carbon	28.3	0.8 MT/Month	Collection, Storage, Transportation & co-processing in cement industries or Send to M/s. BEIL, Ankleshwar for incineration
4.	Discarded Containers	33.1	30 Nos/Month	Collection, Storage, Transportation, Decontamination & given to registered vendors
5.	Discarded Liners	33.1	50 Nos/Month	Collection, Storage, Transportation, Decontamination & given to registered vendors
6.	Distillation Residue	36.1	2.4 MT/Month	Collection, Storage, Transportation & Sent to Common Incineration of M/s. BEIL, Ankleshwar or given for Co-Processing in Cement Industries
7.	Aluminium Chloride	-	140 MT/Month	Collection, Storage & Sold to re-processors or end users
8.	Sodium Carbonate	-	0.5 MT/Month	
9.	HBr Soln.	-	45 MT/Month	
10.	Benzoic Acid	-	17 MT/Month	
11.	Sodium Bromide	-	15 MT/Month	
12.	Sodium Sulfite	-	44 MT/Month	
13.	Aluminium Hydroxide	-	3 MT/Month	

1.6 Green Belt

Total 1,500 m^2 land area is available at site; out of this 150 m^2 (i.e. 10 % of total area) will be developed as greenbelt and other forms of greenery.

1.7 Power & Fuel Requirements

Power requirement will be 125 HP which will be taken from DGVCL. 1 No. of 62 KVA DG Set will be kept for emergency power back up.

Fuel: Natural Gas: 600 Sm^3/day, LDO: 500 Lit/day

2.0 INTRODUCTION OF THE PROJECT/BACKGROUND INFORMATION

2.1 Identification of the project and project proponent. In case of mining project, a copy of mining lease/letter of intent should be given.

Identification of the project

M/s. Mahrshee Laboratories Pvt. Ltd. (Unit-II) proposes Bulk Drug & its Intermediates unit at Plot No. 3046 A & B, Phase III, GIDC, Panoli-394116, Dist. Bharuch, Gujarat.

Mahrshee Laboratories Pvt. Ltd. a Privet Limited firm incorporated in year 1999 engaged in manufacturing of various Active Pharmaceutical Ingredients (Bulk Drugs) and Drug Intermediates. The company's manufacturing unit is located at Plot No. Plot No.3014 & 3015, Phase-III, GIDC Estate, Panoli-394116, Tal: Ankleshwar, Dist. Bharuch in Gujarat (INDIA), 350 kms north of the India's commercial capital, Mumbai. The nearest airport is Surat, which is just 60 kms away from the plant. Panoli is also connected with road and railways across the country. The nearest railway station is Ankleshwar & Bharuch.

Identification of the project proponent

Sr. No	Name of the Director	QUALIFICATION
1	Mr. Vinubhai Mohanbhai Dobaria	B.Sc. (Chemistry)
2	Mr. Parshottambhai Shambhubhai Patel	10^{th}
3	Mr. Jayantibhai Gangjibhai Patel	12^{th}
4	Mr. Rameshbhai Vallabhbhai Patel	10^{th}
5	Mr. Mukeshbhai Dayabhai Patel	B.Com.

2.2 Brief description of nature of the Project

M/s. Mahrshee Laboratories Pvt. Ltd. (Unit-II) proposes Bulk Drug & its Intermediates unit at Plot No. 3046 A & B, Phase III, GIDC, Panoli, Dist. Bharuch, Gujarat.

2.3 Need for the project and its importance to the country and or region

The demand for products intended to be manufacture is increasing in the country. By this project, M/s. Mahrshee Laboratories Pvt. Ltd. (Unit-II) will be able to meet the demand of various products internationally and locally. This will also generate direct and indirect employment opportunity for various levels of people.

2.4 Demands-Supply Gap

Based on our informal survey of the market with our current customers and various traders, we have found that there is a big potential for the range of the products we are planning. These products will be an addition to the current range of our group's products.

2.5 Imports vs. Indigenous production

Based on the current cost of indigenous raw materials, it will make us very competitive against imported finished products and we will be able to increase the export of our finished products.

2.6 Export possibility

We shall export our products.

2.7 Domestic/Export Markets

Majority of the products will be exported and some products will be sold in local market.

2.8 Employment Generation (Direct and Indirect) due to project.

M/s. Mahrshee Laboratories Pvt. Ltd. (Unit-II) will give direct employment to 30 nos. of local people based on qualification and requirement. In addition to direct employment, indirect employment shall generate ancillary business to some extent for the local population.

3.0 Project Description

3.1 Type of Project including interlinked and interdependent projects, if any.

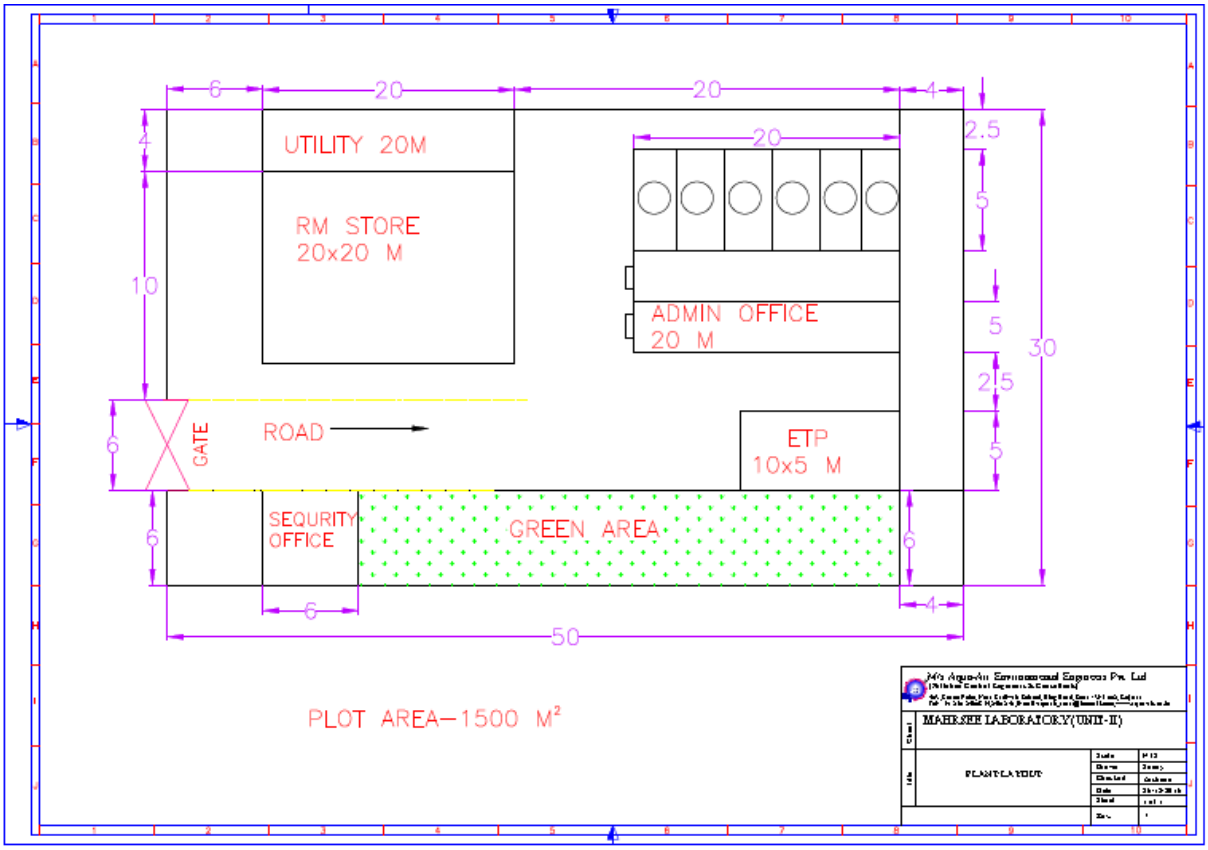
No interlinked project has been submitted.

Location (map showing general location, specific location and project boundary & project site layout) with coordinates.

- **Map showing general location**

- **Specific location and project boundary**

- **Plot Layout**


6
20
20
4
UTILITY 20M
RM STORE
20x20 M
20
2.5
5
ADMIN OFFICE
20 M
5
2.5
5
30
4
10
6
GATE
ROAD
ETP
10x5 M
6
SEQURITY
OFFICE
GREEN AREA
6
6
4
50
PLOT AREA=1500 M²
MAHESH LABORATORY(UNIT-II)
PLANT LAYOUT

3.3 Details of alternate sites considered and the basis of selecting the proposed site, particularly the environmental considerations gone into should be highlighted.

Looking to the market demand of the products in International market, it was decided by M/s. Mahrshee Laboratories Pvt. Ltd. (Unit-II) to put new facility. Over and above major raw material suppliers are available in this region and considering proximity to existing operational unit in Panoli GIDC, it was finally decided to set up this new neighbour unit.

Major factors involved in the selection of site are listed below:

- Site situated in Notified Industrial Estate.
- Site is well connected by road & Rail
- Proximity to raw material suppliers
- Availability of power and cleaner fuel - natural gas.
- Availability of water from GIDC water supply
- Availability of effluent discharge pipeline to deep Sea through NCTL pipe line via CETP of PETL, Panoli & FETP of NCTL, Ankleshwar
- Availability of common TSDF and common incineration sites in nearby area.
- Availability of skilled workmen
- Proximity to cities like Ankleshwar, Bharuch and Surat, ensure access to already existing social and commercial infrastructure.

Modern infrastructure support and amenities at par in other global markets, including:

- Efficient transport facilities.
- Environment-friendly zone.
- Uninterrupted power supply.

3.4 Size or Magnitude of Operation

Please refer Section-1.1.1

3.5 Project Description with process details (a schematic diagram/flow chart showing the project layout, components of the project, etc. should be given)

Please refer Form-I, Annexure-III.

3.6 Raw Material required along with estimated quantity, likely source, marketing area of final product/s, mode of transport of raw material and Finished product.

For raw material required along with quantity; Please refer Form-I, Annexure-I. Majority of the products will be used for international market and some products will be sold in domestic market.

3.7 Resource optimization/recycling and reuse envisaged in the project, if any, should be briefly outlined.

Every effort will be put to recycle/reuse the water.

3.8 Availability of water its source, energy/power requirement and source should be given.

Water Source

Total water requirement shall be met through GIDC water supply.

Power & Fuel Requirement

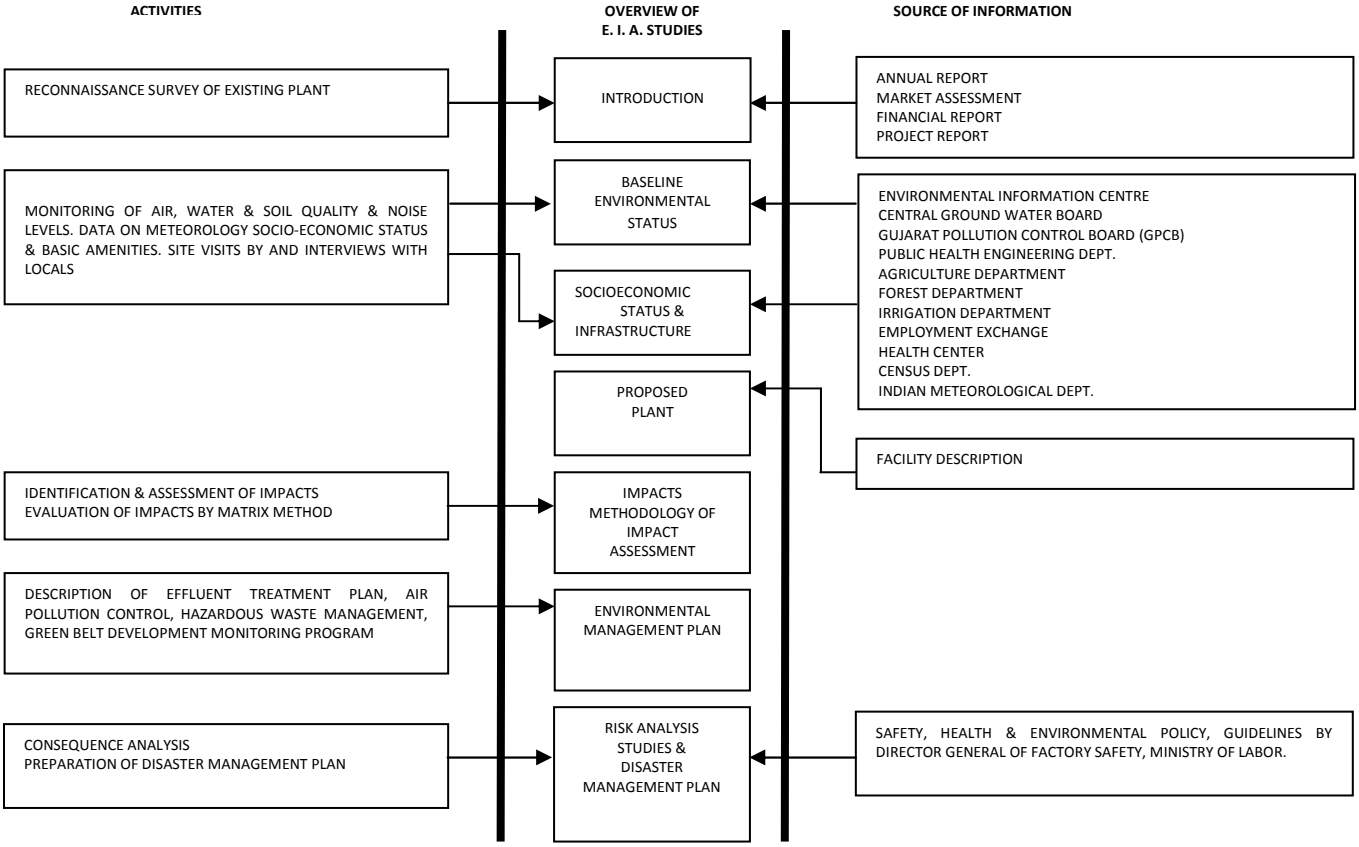
Power requirement will be 125 HP which will be taken from DGVCL. 1 No. of 62 KVA DG Set will be kept for emergency power back up.

Fuel: Natural Gas: 600 Sm^3/day, LDO: 500 Lit/day

3.9 Quantity of wastes to be generated (liquid and solid) and scheme for their management/disposal.

Please refer Form-I, Annexure-V.

3.10 Schematic representations of the feasibility drawing which give information of EIA purpose.

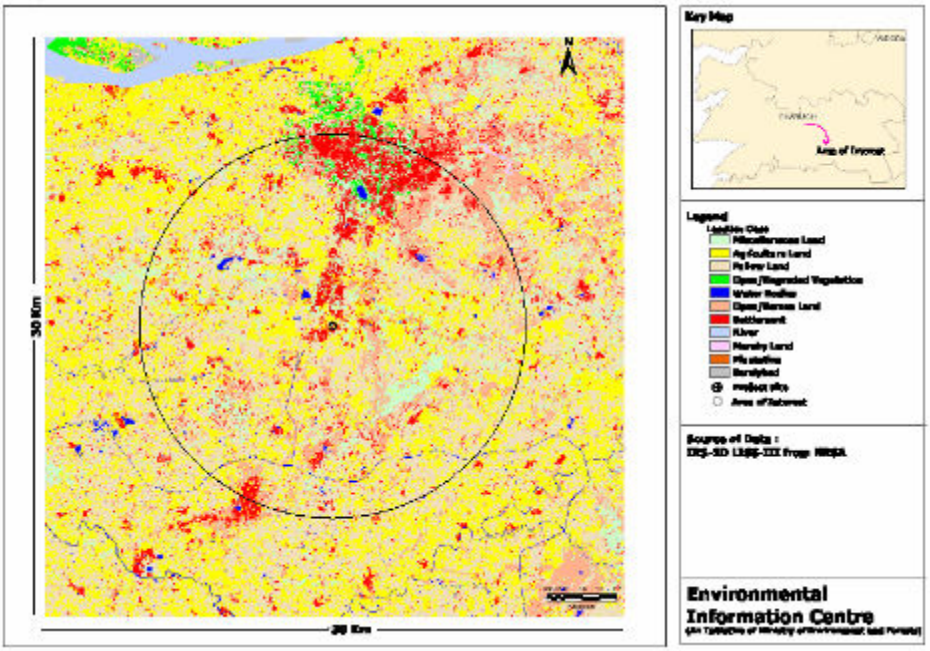


4.0 Site Analysis

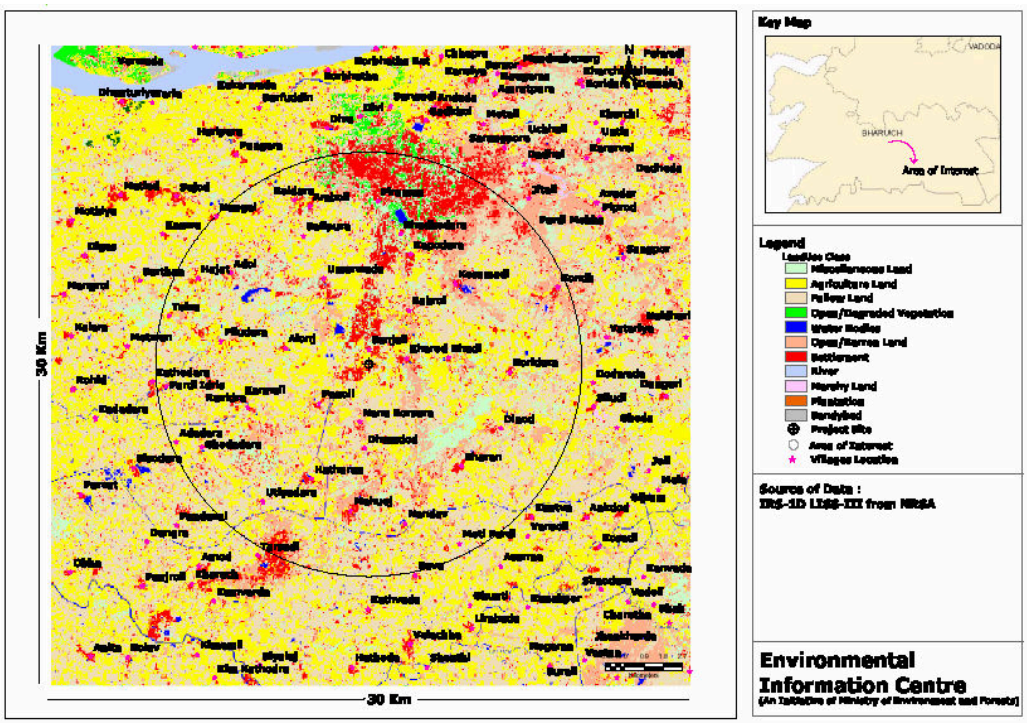
4.1 Connectivity

- Site situated in Notified Industrial Estate.
- Site is well connected by road & Rail
- Proximity to raw material suppliers
- Availability of power and cleaner fuel - natural gas.
- Availability of water from GIDC water supply
- Availability of effluent discharge pipeline to deep Sea through NCTL pipe line via CETP of PETL, Panoli & FETP of NCTL, Ankleshwar
- Availability of common TSDF and common incineration sites in nearby area.
- Availability of skilled workmen
- Proximity to cities like Ankleshwar, Bharuch and Surat, ensure access to already existing social and commercial infrastructure.

4.2 Land Form, Land Use and Land Ownership



4.3 Existing land use pattern (agriculture, non-agriculture, forest, water bodies (including area under CRZ)), shortest distances from the periphery of the project to periphery of the forests, national park, wild life sanctuary, eco sensitive areas, water bodies (distance from HFL of the river), CRZ. In case of the notified industrial area, a copy of the Gazette notification should be given.



(Source: Environmental Information Center, New Delhi)

AREAS UNDER DIFFERENT LANDUSE

SR. NO.	LANDUSE CLASSIFICATION	AREA WITHIN 10 KM OF PROJECT LOCATION	PERCENTAGE OF TOTAL AREA
1	Agriculture	80.32	25.56
2	Fallow Land	135.48	43.11
3	Habitation, Settlement	31.34	9.97
4	Marshy Land	0.20	0.06
5	Miscellaneous Land	28.44	9.05
6	Degraded Vegetation	1.98	0.63
7	Water	2.36	0.75
8	Open & Barren Land	33.37	10.62
9	River	0.74	0.24
Total		**314.23**	**100.00**

(Source: Environmental Information Center, New Delhi)

4.4 Existing Infrastructure

The proposed project is located in G.I.D.C., Panoli, Dist: Bharuch, which is a well developed designated Industrial Area.

Total Plot Area = 1,500 m^2

Green Belt = 150 m^2

4.5 Soil Classification

Soil Characteristics under Project Area are as below Table;

Mapping Category	Area in (Sq km)	Description	Taxonomy1	Taxonomy2	Class	Sub_Class	Soil Unit (Order)	Physiography	Depth	Erosion	Drainage	Surface Texture	pH	Salinity / Alkalinity	Calcareousness	Fertility
B	54.85	Very deep, moderately well drained, fine soils on very gently sloping basalic interfluves with slight erosion; associated with deep well drained, calareous fine soils with slight erosion	Fine, montrmorilloniti c, hyperth ermic Typic Chromu sterts	Fine, montmori llonitic (calcareou s) hyperther mic Vertic Ustochrep ts	Soils of west coast (soils of Gujara t plain)	Soils of interfl uves	Vertisol / Inceptis ol	Very Gently sloping	Very Deep-Deep	Slight	Mod. Well	Fine	Neutr al	Nil	Calcar eous	Mediu m
C	0.12	Very deep, moderately well drained, fine soils on very gently sloping basaltic interfluves with moderate erosion; associated with very deep, well drained, fine soils with moderate erosion	Fine, montmo rillonitic, hyperth ermic Typic Chromu sters	Fine, montmori llonitic, hyperther mic Vertic Ustochrep ts	Soils of west coast (soils of Gujara t plain)	Soils of interfl uves	Vertisol / Inceptis ol	Very Gently sloping	Very Deep	Mode rate	Mod. Well	Fine	Neutr al	Nil	Nil	Mediu m

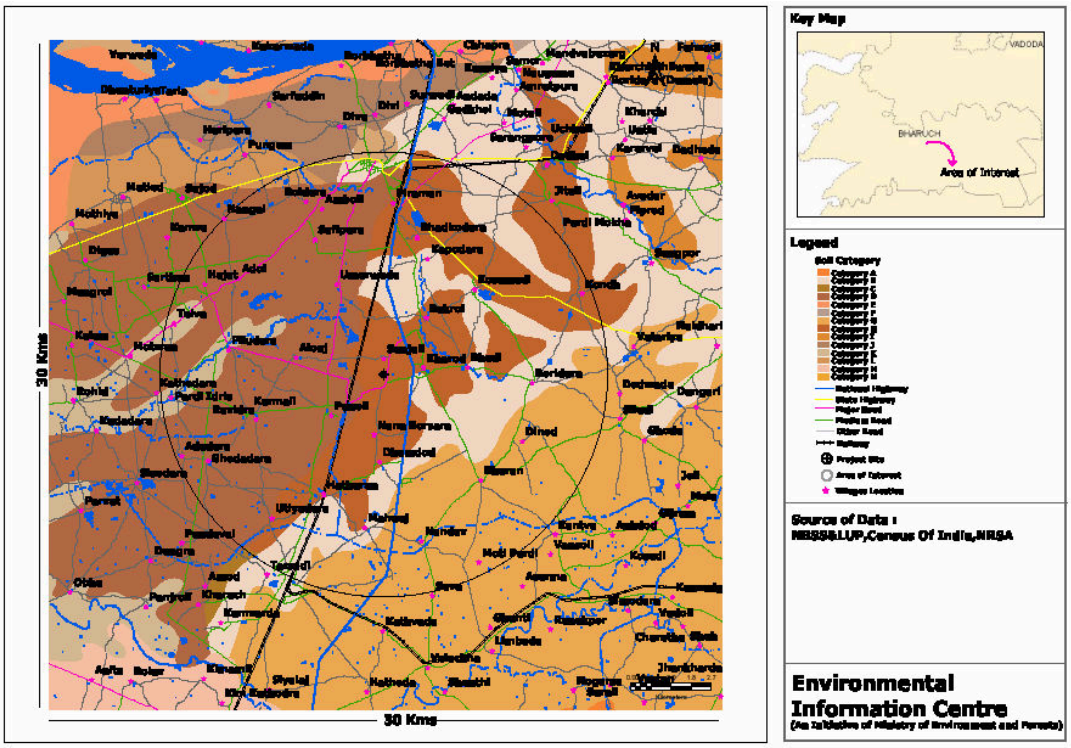
D	103.33	Very deep, moderately well drained, fine soils on nearly level alluvial plain with slight erosion and slight salinity; associated with deep, moderately well drained calcareous fine soils with slight erosion and slight salinity	Fine, montmorillonitic, isohyperthermic Vertic Ustropepts	Fine, montmorillonitic (calcareous), isohyperthermic Vertic Ustropepts	Soils of west coast (soils of Gujarat plain)	Soils of alluvial plains	Inceptisol	Nearly level alluvial	V.Deep-Deep	Slight	Mod. Well	Fine	Slightly alkaline	Slight Salinity	Calcareous	Medium
G	63.34	Very deep, moderately well drained, fine soils on very gently sloping alluvial plain with moderate erosion; associated with very deep, moderately well drained, fine soils on nearly level lands with slight erosion.	Fine, montmorillonitic, hyperthermic Typic Chromusters	Fine, montmorillonitic, hyperthermic Vertic Ustochrepts	Soils of west coast (soils of Gujarat plain)	Soils of alluvial plains	Vertisol	Very gently sloping	Very Deep	Sligt-Mod.	Mod. Well	Fine Soil	Slightly alkaline	Nil	Nil	Medium

H	80.95	Very deep, moderately well drained, fine soils on neraly level alluvial plain with slight erosion; associated with very deep moderately well drained, calcareous, fine soils on gently sloping lands with severe erosion	Fine, montmorillonitic, hyperthermic Typic Chromusterts	Fine, montmorillonitic (calcareous), hyperthermic Typic Chromusterts	Soils of west coast (soils of Gujarat plain)	Soils of alluvial plains	Vertisol	Nearly level aluvial	Very Deep	Slight - Severe	Mod. Well	Fine Soil	Slightly alkaline	Nil	Nil	Low-Medium
J	1.36	Very deep, moderately well drained, fine soils on very gently sloping alluvial plain with moderate erosion and moderate salinity; associated with very deep, moderately well drained calcareous, fine soils with moderate erosion	Fine, montmorillonitic, isohyperthermic Typic Chromusterts	Fine, montmorillonitic, (calcareous), hyperthermic Udic Chromusterts	Soils of west coast (soils of Gujarat plain)	Soils of alluvial plains	Vertisol	Very gently sloping	Very Deep	Moderate	Mod. Well	Fine Soil	Slightly alkaline	Moderate	Nil	Low-Medium
K	7.83	Moderately deep, moderately well drained, fine soils on nearly level alluvial plain with slight erosion and moderate salinity; associated with very deep, moderately well drained, calcareous,	Fine, montmorillonitic, isohyperthermic Typic Chromusterts	Fine, montmorillonitic, (calcareous), isohyperthermic Udic Chromusterts	Soils of west coast (soils of Gujarat plain)	Soils of alluvial plains	Vertisol	Nearly level	Mod. Deep-V.Deep	Slight Erosion	Well-Mod.	Fine Soils	Slightly alkaline	Moderate	Nil	Medium

		fine soils with slight erosion and slight salinity														
L	1.31	Very deep, moderately well drained, fine soils on nearly level alluvial plain with slight erosion and moderate salinity; associated with very deep, imperfectly drained, calcareous, very fine soils with slight erosion and moderate salinity	Fine, montmorillonitic, isohyperthermic Typic Chromusterts	Very-fine, montmorillonitic (calcareous), isohyperthermic Udit Chromusterts	Soils of west coast (soils of Gujarat plain)	Soils of alluvial plains	Vertisol	Nearly level	Very Deep	Slight Erosion	Weel Drained-	Fine Soils-V.Fine Soils	Slightly alkaline	Moderate	Nil	Medium

(Source: Environmental Information Centre, New Delhi)

SOIL CHARACTERISTICS MAP



(Source: Environmental Information Centre, New Delhi)

4.6 Climatic data from secondary sources.

Shall be incorporated in the EIA Study.

4.7 Social infrastructure available.

Depending on the growth of the company the required social infrastructure will be provided.

5.0 Planning Brief

5.1 Planning Concept (type of industries, facilities, transportation etc) Town and Country planning/Development authority classification.

Type of Industry: M/s. Mahrshee Laboratories Pvt. Ltd. (Unit-II) proposes Bulk Drug & its Intermediates unit at Plot No. 3046 A & B, Phase III, GIDC, Panoli-394116, Dist. Bharuch, Gujarat.

5.2 Population Projection

Shall be incorporated in the EIA Study.

5.3 Land use planning (breakup along with green belt etc.)

Total Plot Area: 1,500 m^2

Total 1,500 m^2 land area is available at site; out of this 150 m^2 (i.e. 10 % of total area) will be developed as greenbelt and other forms of greenery.

5.4 Assessment of Infrastructure Demand (Physical & Social)

- Employment would be as per prevailing norms of state government for skilled and unskilled people for the proposed project activity.
- Social Welfare
- Cordial relation with the industry shall be established and representation shall be made to villagers for help for creation of facilities related to health, education, etc.

5.5 Amenities/Facilities

Details of amenities available in study area

Taluka	Village	Educational	Medical	Drinking Water	Post & Telegraph	Communi cation	Approach to Village	Nearest Town	Power Supply
Ankleshwar	Bharan	P(2)	CWC, PHS	T, W	PO	BS	PR, KR	Kosamba- 8	EA
	Amboli	P(2)	-(- 5 KMS.)	W, TK	PO, Phone	BS	PR, KR	Ankleshwar-1	EA
	Boidara	P(2)	-(- 5 KMS.)	T, W	PO, Phone	BS	PR, KR	Ankleshwar-1	EA
	Nangal	P(2)	CHW	T, W	PO, Phone	BS	PR, KR	Ankleshwar-6	EA
	Hajat	P(2), Ac	-(- 5 KMS.)	T, W	PO, Phone	BS	PR, KR	Ankleshwar-12	EA
	Adol	P(2)	PHS, FPC, CHW	T, W	PO	BS	PR, KR	Ankleshwar-11	EA
	Umarwada	P(3), O	PHS, RP	T, W, HP	PO, Phone	BS	PR, KR	Ankleshwar-6	EA
	Safipura	UNINHABITED							
	Kapodara	P(2),O	PHS, CHW, FPC	T, W	PO, Phone	BS	PR	Ankleshwar-7	EA
	Bhadkodara	P(2)	CHW	T, W	PO, Phone	-(- 5 KMS.)	PR, KR	Ankleshwar-7	EA
	Piraman	P(3), Tr, O	PHS	T, W	PO, Phone	BS	PR, KR	Ankleshwar-1	EA
	Kosamadi	P(6), O	PHS, RP(3)	T, W, HP	PO, Phone	BS	PR, KR	Ankleshwar-12	EA
	Bakrol	P(2)	CHW	T, W, HP	-(-5 KMS)	BS	PR, KR	Ankleshwar-8	EA
	Sanjali	P(2), O	CHW	T, W	PO, Phone	BS, RS	PR, KR	Ankleshwar-10	EA
	Alonj	P(2), O	CHW	T, W, HP	PO	BS	PR, KR	Ankleshwar-15	EA
	Piludara	P(2)	-(10+ KMS)	T, W	PO, Phone	BS	PR	Ankleshwar-13	EA
	Telva	P(2), Ac, O	CHW	T, W	-(-5KMS)	BS	PR	Ankleshwar-16	EA
	Pardi Idris	P(2)	CHW	T, W	Po	BS	PR, KR	Ankleshwar-12	EA

	Adadara	P(2)	CHW	T, W	-(-5 KMS.)	BS	PR	Kosamba-7	EA
	Utiyadara	P(2)	-(-5 KMS)	T, W	-(-5 KMS)	BS	PR	Kosamba-3	EA
	Karmali	P(2),O	-(-5 KMS)	T, W	Phone	BS	PR	Ankleshwar-13	EA
	Ravidra	P(2), O	PHC, CHW	T, W	PO, Phone	BS	PR	Ankleshwar-10	EA
	Panoli	P(3), H, O	H, MH, CWC, PHS, D, FPC, NH, RP, SMP, CHW	T, W	PTO, Phone	BS, RS	PR	Ankleshwar-10	EA
	Kharod	P(3), H, O	CWC, PHC, CHW	T, W	PO, Phone	BS	PR, KR	Ankleshwar-10	EA
	Bhadi	P(2), O	-(-5 KMS)	T, W	PO	BS	PR, KR	Ankleshwar-12	EA
Mangrol	Hathuran	P(3), Ac(3)	PHS	T, W, TK, TW, C	PO, Phone	BS, RS	PR, KR	Kosamba-5	EA
	Nana Borsara	P, Ac	-(5-10 kms)	T, W, TK	-(-5 KMS.)	-(-5KMS)	KR	Kosamba-5	EA
	Dhamdod	P, Ac, O	CHW	T, W, TK	PO	BS	PR, KR	Kosamba-5	EA
	Nandvav	P, Ac(2)	PHS, CHW	T,W, TK, C, N	PO	BS	PR, KR	Kosamba-10	EA
	Moti Pardi	P, Ac	CWC, CHW	T, W, TK, C	-(5-10 Kms)	BS	PR, KR	Kosamba-16	
	Dinod	P	PHS, FPC, CHW	T, W, TK	PO	BS	KR	Kosamba-8	EA
	Boridara	P	CHW	T, W, TK	PO	BS	KR	Kosamba-15	EA
	Mahuej	P, Ac(2), O	PHS	T, W, TW, TK, C	PO, Phone	BS	PR, KR	Surat-31	EA
Hansot	Ghodadara	P(2), O	CHW	T, W, TK, C	PO	BS	PR, KR	Ankleshwar-8	EA
Valia	Kondh	P(4), H, O	PHS, D, FPC, RP, CHW	T, W	PO	BS	PR, KR	Ankleshwar-12	EA

(Courtesy: Census Dept., GOI)

ABBREVIATIONS

1. Education

P-Primary Elementary School
H-Matriculation or Secondary
O-Other Educational Institution
PUC-Higher Secondary/Intermediate/pre-University/junior Collage
AC – Adult literacy class
TR – Training center

2. Medical Facilities

RP-Registered Private Practitioner
PHS-Primary Health Centre
FPC-Family Planning Centre
D- Dispensary
CHW - Community Health Worker/Health Worker
H - Hospital
NH - Nursing Home
MH - Maternity Home
PHC - Public Health Centre
CWC - Child Welfare Centre
TB - T.B Clinic
O - Others

3. Drinking Water

T-Tap Water
HP-Hand Pump
TK-Tank Water

W-Well Water
R-River Water
C-Canal
N - Nallah
S - Spring

4. Post & Telegraph
PO-Post Office
PTO-Post & Telegraph
Phone-Telephone Communication

5. Transportation
RS- Railway Station
BS-Bus Station
NW-Navigable Waterway

6. Approach to Village
PR-Pucca Road
KR-Kuccha Road

7. Power Supply
EA-Electricity for all purposes
EAG - Electricity for Agriculture
ED - Electricity for domestic
EO - Electricity for other purpose like Industrial, Commercial etc.

6.0 Proposed Infrastructure

Proposed project is within Panoli GIDC.

6.1 Green Belt

M/s. Mahrshee Laboratories Pvt. Ltd. (Unit-II) shall develop an effective green belt within the factory and on periphery of the factory. In addition to this, majority of the vacant land shall be planted with trees, shrubs and grasses.

6.2 Social Infrastructure

Depending on the growth of the company the required social infrastructure will be provided.

6.3 Connectivity (Traffic and Transportation Road/ Rail/Metro/ Water ways etc)

Major factors involved in the selection of site are listed below:

- Site situated in Notified Industrial Estate.
- Site is well connected by road & Rail
- Proximity to raw material suppliers
- Availability of power and cleaner fuel - natural gas.
- Availability of water from GIDC water supply
- Availability of effluent discharge pipeline to deep Sea through NCTL pipe line via CETP of PETL, Panoli & FETP of NCTL, Ankleshwar
- Availability of common TSDF and common incineration sites in nearby area.
- Availability of skilled workmen
- Proximity to cities like Bharuch and Ankleshwar, ensure access to already existing social and commercial infrastructure.

6.4 Drinking water Management (Source & Supply of water)

Total water requirement shall be met through GIDC water supply.

6.5 Sewerage System

Sewage pipes would be laid in entire company for the removal and disposal of mainly non-harmful liquid wastes from the offices, canteen and domestic waste coming from different sections of the industry. These liquid wastes will be sent to septic tank & soak pit.

6.6 Solid Waste Management

Please refer Form-I, Annexure-V.

6.7 Power Requirement & Supply/Source

Please refer Section 3.8 of this report.

7.0 Rehabilitation and Resettlement (R & R) Plan

7.1 Policy to be adopted (central/state) in respect of the project affected including home oustees, land oustees and landless laborers (a brief outline to be given)

There is no habitation on the proposed project activity area and it is open industrial land which is purchased from GIDC for development of factory, so R & R policy is not applicable to this project.

There shall not be displacement of any population in project area. Any major activity that may lead to resettlement of the people is considered as permanent impact. Hence, there is no permanent impact on this account. The increasing industrial activity will boost the commercial and economical status of the locality up to some extent.

8. Project Schedule & Cost Estimates

8.1 Likely date of start of construction and likely date of completion (Time schedule for the project to be given).

All activities related to proposed project shall be started soon after getting Environmental Clearance.

8.2 Estimated Project cost along with analysis in terms of economic viability of the project.

Total Project Cost for proposed project activity is Rs. 500 Lakhs.

Particulars	**Amount (Rs. in Lakhs)**
	Proposed
Land Cost	50
Civil Work (Process & Utility)	200
Plant & Machinery Cost	200
Plant & Machinery cost for EMS (Including ETP Civil Work)	25
Other Cost (Contract Services, Pre-Operative Expenses, Taxes)	25
Total Project Cost	**500**

9. Analysis of Proposal (Final Recommendations)

9.1 Financial and social benefits with special emphasis on the benefit to be local people including tribal population, if any, in the area.

- Employment would be as per prevailing norms of state government for skilled and unskilled people for the proposed project.
- Social Welfare shall be done.
- Cordial relation with the industry shall be established and representation shall be made to villagers for help for creation of facilities related to health, education, etc.