PRE-FEASIBILITY REPORT

for

**PROPOSED PESTICIDE TECHNICAL (150 MT/MONTH) AND SPECIALTY CHEMICAL (100 MT/MONTH) IN EXISTING FORMULATION UNIT (4000 MT/MONTH)**

of

**M/s. NIYAM INDUSTRIES**

PLOT NO. 409/B/1, GIDC PANOLI - 394115, TAL: ANKLESHWAR, DIST: BHARUCH (GUJARAT)

***PREPARED BY:***



**ACCREDITATION DETAILS**

**(NABET/QCI Accredited EIA Consultant):**

# NABET/EIA/2023/IA0062

**(MoEF Accredited Testing Laboratory): 15018/24/2019-CPW (NABL Accredited Testing Laboratory): TC - 7328**

# (GPCB Recognized Schedule-II Environmental Auditor) ISO 9001: 2015 Certified Company

**OHSAS 18001: 2007 Certified Company**

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* 1. **EXECUTIVE SUMMARY**

# Company Profile

**M/s. Niyam Industries** Proposed Pesticide Technical (150 MT/Month) and Specialty Chemical (100 MT/Month) in Existing Formulation Unit (4000 MT/Month) at Plot No. 409/B/1, GIDC Panoli - 394115, Tal: Ankleshwar, Dist: Bharuch (Gujarat).

# Project Details

**List of Products along with Production Capacity**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No.** | **Products** | **CAS No.** | **LD50** | **QTY MT/MONTH** | | | **End Application** |
| **Existing** | **Additional** | **Total after Proposed**  **Expansio n** |
| **EXISTING (CCA Obtained Vide Order No. AWH-42570)** | | | | | | | |
| **FORMULATION** | | | | | | | |
| 1 | “Formulation Packing & Repacking of various  type of pesticides and fine chemicals (Liquid, Powder & Granules)” | | | **2500** | **---** | **2500** | **All** **products are Formulated Pesticides falling** **in different categories** **of Insecticide, Fungicide, Herbicides and are** **used** **in Crop Protection** |
| 2 | Acephate 75% SP | 30560-19-1 | 700 | **1500** | **---** | **1500** |
| 3 | Acetamiprid 20% SP | 135410-20-7 | 217 |
| 4 | Alphacypermethrin  5% EC | 67375-30-8 | 1050 |
| 5 | Alphacypermethrin 10% EC | 67375-30-8 | 1050 |
| 6 | Cartap Hydrochloride 4%  Granules | 15263-52-2 | 650 |
| 7 | Chlorpyriphos 20%  EC | 2921-88-2 | 490 |
| 8 | Chlorpyriphos 50% +  Cypermethrin 5% EC | 2921-88-25  2315-07-8 | -- |
| 9 | Cypermethrin 10%  EC | 52315-07-8 | 575 |
| 10 | Cypermethrin 25%  EC | 52315-07-8 | 575 |
| 11 | DDVP 76% EC | 62-73-7 | 100 |
| 12 | Deltamethrin 2.5%  EC | 52918-63-5 | 150 |
| 13 | Deltamethrin 2.5%  SC | 52918-63-5 | 150 |
| 14 | Fipronil 0.3% G R | 120068-37-3 | 97 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 15 | Glyphosate 41% SL | 38641-94-0 | 2000 |  |  |  |  |
| 16 | Hexaconazole 10%  EC | 79983-71-4 | 6071 |
| 17 | Hexaconazole 5% EC | 79983-71-4 | 6071 |
| 18 | Imidacloprid 30.5%  SC | 138261-41-3 | 410 |
| 19 | Imidacloprid 17.8%  SL | 138261-41-3 | 410 |
| 20 | Lambda Cyhalothrin 2.5% EC | 91465-08-6 | 612 |
| 21 | Lambda Cyhalothrin  5% EC | 91465-08-6 | 612 |
| 22 | Mancozeb 64% +  Metalaxyl 8% WP | 8018-01-7  57837-19-1 | -- |
| 23 | Mancozeb 75% WP | 8018-01-7 | 5000 |
| 24 | Mancozeb 63% +  Carbendezim 12% WP | 8018-01-7  10605-21-7 | -- |
| 25 | Monocrotophos  36% SL | 6923-22-4 | 112 |
| 26 | Profenophos 50% EC | 41198-08-7 | 620 |
| 27 | Pendimethalin 30% EC | 40487-42-1 | 1050 |
| 28 | Tricyclazole 75% WP | 41814-78-2 | 250 |
|  | **EXISTING TOTAL - A** | | | **4000** | **--** | **4000** |  |
| **PROPOSED** | | | | | | | |
| **GROUP I: FUNGICIDE** | | | | --- | **50** | **50** | 1 to 5 are Fungicide Class Crop Care Chemical with varied application. No. 6 is Intermediate |
| 1 | Hexaconazole | 79983-71-4 | 6071 |
| 2 | Tebuconazole | 107534-96-3 | 1700 |
| 3 | Tricyclazole | 41814-78-2 | 250 |
| 4 | Metalaxyl | 57837-19-1 | 566 |
| 5 | Azoxystrobin | 131860-33-8 | 5000 |
| 6 | 1,2,4 Triazole | 288-88-0 | 1750 |
| **GROUP II - HERBICIDE** | | | | --- | **50** | **50** | 7 t o 10 are Herbicide Class Crop Care Chemical with varied application. No. 11 is  Intermediate |
| 7 | Atrazine | 1912-24-9 | 3090 |
| 8 | Metribuzin | 21087-64-9 | 1100 |
| 9 | Pretilachlor | 51218-49-6 | 2200 |
| 10 | Pendimethalin | 40487-42-1 | 1050 |
| 11 | 1, 2, 4 Triazinone | 33509-43-2 | 2200 |
| **GROUP III - INSECTICIDE** | | | | --- | **50** | **50** | 12 to 17 are |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 12 | Acetamiprid | 135410-20-7 | 217 |  |  |  | Insecticide Class Crop Care Chemical with varied application.  No. 18 is intermediate |
| 13 | Imidacloprid | 138261-41-3 | 410 |
| 14 | Thiamethoxam | 153719-23-4 | 1563 |
| 15 | Thiacloprid | 111988-49-9 | 2000 |
| 16 | Netenpyram | 150824-47-8 | 1680 |
| 17 | Buprofezin | 69327-76-0 | 2198 |
| 18 | 2-Chloro-5- (4hloromethyl)pyridi ne [CCMP] | 70258-18-3 | 1200 |
| **GROUP IV: SPECIALTY CHEMICALS** | | | | --- | **100** | **100** | Raw Material for various dyes, pigments and Pharmaceutical  s |
| 19 | 2,3 Dichlorophenol | 576-24-9 | 2376 |
| 20 | 2,5 Dichlorophenol | 583-78-8 | 1580 |
| 21 | 3,5 Dichlorophenol | 591-35-5 | 1250 |
|  | **PROPOSED TOTAL - B** | | | **--** | **250** | **250** |  |
| **TOTAL (A + B)** | | | | **4000**  **MT/Mont h** | **250**  **MT/Month** | **4250**  **MT/Mon th** |  |

# Raw Materials Consumption

**Refer:** Please refer EIA Report-Chapter 2-Section 2.8, Page No. 22.

# Water Requirement, Waste Water Generation and Treatment

* + - Total water requirement will be 83.92 KL/Day (Fresh Water: 83.92KL/Day).
    - Total 58.70 KL/Day (49.4 KL/Day: Industrial + 9.3 KL/Day: Domestic) of effluent shall be generated.
    - **Stream-I: 49.4 KL/Day** (from Process, Boiler, Cooling, Washing and Scrubber) will be treated in ETP consist of primary treatment and then sent to CMEE for further Treatment and Disposal.
    - 9.3 KL/day Domestic waste water will be sent to Septic Tank & Soak Pit.

# Air Pollution Source and Control Management Flue Gas Emission

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **SR.**  **NO.** | **SOURCE OF EMISSION WITH**  **CAPACITY** | **STACK HEIGHT (METER)** | **TYPE OF FUEL** | **QUANTITY OF FUEL MT/DAY** | **TYPE OF EMISSIONS I.E. AIR POLLUTANTS** | **AIR POLLUTION CONTROL MEASURES (APCM)** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **EXISTING** | | | | | | |
| **1.** | D. G. Set (175 KVA) | 10 | HSD | 100 Lit/hr | SPM≤ 150 MG/NM3  SO2≤ 262 MG/NM3  NOx≤ 94 MG/NM3 | Adequate Stack Height |
| **PROPOSED** | | | | | | |
| 2. | Boiler (Capacity:  2 TPH) | 30 | Natural Gas | 150 M3/Hr | SPM≤ 150 MG/NM3  SO2≤ 262 MG/NM3  NOx≤ 94 MG/NM3 | Adequate Stack Height |
| 3. | TFH  (Capacity:  5 Lac Kcal/hr) | 10 | Natural Gas | 75 M3/Hr | Adequate Stack Height |
| 4. | D. G. Set  (125 KVA) | 10 | HSD | 75 Lit/hr | Adequate Stack  Height |

**Process Gas Emissions**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **SOURCE OF EMISSION** | **AIR POLLUTION CONTROL SYSTEM** | **STACK HEIGHT** | **PARAMETERS** | |
| **POLLUTANTS** | **LIMITS** |
| **EXISTING** | | | | | |
| 1 | Pulverizer | Bag Filter | Closed Loop | SPM | ≤ 150 MG/NM3 |
| **PROPOSED** | | | | | |
| 2 | Group I Plant **Drier** | Water Scrubber | 10 Meters | SPM | ≤ 150 MG/NM3 |
| 3 | Group II Plant  **Drier** | Water Scrubber | 10 Meters |
| 4 | Group III Plant  **Drier** | Water Scrubber | 10 Meters |
| 5 | **Process Vent - 4** | Two Stage Water &  Alkali Scrubber | 10 Meters | HCl | ≤ 20 MG/NM3 |
| 6 | **Process Vent - 5** | Two Stage Alkali  Scrubber | 10 Meters | H2S | ≤ 45 MG/NM3 |
| 7 | **Process Vent - 6** | Two Stage Alkali  Scrubber | 10 Meters | SO2 | ≤ 40 MG/NM3 |

# Hazardous/Solid Waste Generation and Disposal Mode

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Name of waste** | **Specific Source of generation (Name of the Activity,**  **Product etc.)** | **Catego ry** | **Qty MT/Annum** | | | **Mode of Disposal** |
| **Existin g** | **Propose d** | **Total** |
| 1 | Used/Spent oil | Equipment & | SCH-I/ | 0.01 | 0.25 KL | 0.26 | Reused for Machine |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Machinery | 5.1 |  |  | KL | Lubrication / Given to GPCB registered  reprocessor |
| 2 | Discarded Containers/ Barrels/ Liners | Raw Material and Storage | SCH-I/ 33.1 | 0.8 | 100 | 100.8 | Sold to GPCB  authorized dealer after Decontamination |
| 3 | Process wastes/ Laboratory waste containing  Pesticides | Process | 29.1 | 2.5 | 50 | 52.5 | Collection, Storage transportation for co- processing in cement industry or  incineration in common incineration facility. |
| 4 | Data expired or Off Specification  Products | From mfg. Process  (Batch failure) | SCH-I/ 29.3 | 2.5 | 25 | 25.2 |
| 5 | Used Filters/ Filter  Cloths & Materials | Filter Press | SCH-I/  29.1 | -- | 0.50 | 0.50 |
| 6 | Spent Hy-Flow | Process | SCH-I/  29.1 | -- | 0.50 | 0.50 |
| 7 | Distillation Residue | Solvent Distillation  Plant | SCH-I/ 29.1 | -- | 264 | 264 |
| 8 | Spent Solvent | Process | SCH-I/ 29.4 | -- | 18550 | 18550 | Collection, Storage, Distill inhouse and Reuse within premises for same  product. |
| 9 | Process Residue [Inorganic] | Process | SCH-I/ 29.1 | -- | 2000 | 2000 | Collection, Storage, Transportation and  Disposal at TSDF site. |
| 10 | ETP Sludge | ETP | SCH-I/ 29.2 | -- | 183 | 183 | Collection, Storage, Transportation and Disposal at TSDF site. |
| 11 | Hydrochloric Acid Solution | Process (Product No:4,  9 & 18) | SCH-II/ B15 | -- | 1546 | 1546 | Collection, Storage, Transportation and sold to end user having permission under rule-9. |
| 12 | Spent Acid | Process (Product No:10,  18 & 21) | SCH-I/ 29.6 | -- | 6069 | 6069 |
| 13 | Sodium Sulphite  Solution [Na2SO3] | Process  (Product No:18) | SCH-I/  29.1 | -- | 640 | 640 |
| 14 | Sodium Hydrogen Sulphide [NaSH] | Process (Product No:11  & 21) | SCH-I/ 29.1 | -- | 787 | 787 |
| Remarks: | | | | | | | |

1. For Land Fill and Incineration, common facility would be used.
2. All the hazardous waste generated would be segregated properly and stored properly in designated area prior to disposal to authorized agencies.
   1. **Green Belt**

Total **11990 m2** land area is available at site; out of this area about **4796 m2 (40%)** area is covered as greenbelt and other forms of greenery.

# Power & Fuel Requirements

* **Power Requirement Existing:**

Power requirement: 250 KVA DGVCL

DG Set = 175 KVA from D.G. set (Emergency power back up)

# Additional:

Power requirement: 250 KVA DGVCL

DG Set = 125 KVA from D.G. set (Emergency power back up)

# Total after Expansion:

Power requirement: 500 KVA DGVCL

DG Set = 175 KVA\*1 Nos. & 125 KVA\*1 Nos. (Emergency power back up)

# Fuel Requirement

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Name Of Fuel** | **Existing** | **Additional** | **Total After**  **Expansion** |
| **Quantity** | | |
| 1. | HSD | 100 Lit/hr | 75 Lit/hr | 175 Lit/hr |
| 2. | Natural Gas | -- | 225 M3/hr | 225 M3/hr |

* 1. **INTRODUCTION OF THE PROJECT/BACKGROUND INFORMATION**

# 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**

Proposed Pesticide Technical (150 MT/Month) and Specialty Chemical (100 MT/Month) in Existing Formulation Unit (4000 MT/Month)

# Identification of the project proponent

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Name** | **Designation** | **Qualification** | **Contact Details** |
| 1 | Mr. Vinodkumar Joshi | Partner | Diploma – Civil | 4-Ashrya Bunglows, Plot No. 2201 – 2202, Near Diamond Dye Chem Colony, GIDC, Ankleshwar, District: Bharuch  Email: [vinodjoshi6215@gmail.com](mailto:vinodjoshi6215@gmail.com)  Telephone: +91 9825684110 |
| 2 | Mr. Narayanbhai Patel | Partner | Diploma in Auyurvedic  Medicine | At – Dhamrod, Vill – Dhamrod, Tal. Mangrol, Dist. Surat  Telephone: +91 9426853148 |
| 3 | Mr. Dilip Aswar | General Manager | Diploma – Mechanical | 105 – Khush Residency, Plot No. 730, GIDC, Ankleshwar, District: Bharuch Email: [dilipaswar91@gmail.com](mailto:dilipaswar91@gmail.com)  Telephone: +91 9904709317 |

* 1. **Brief description of nature of the Project**

Proposed Pesticide Technical (150 MT/Month) and Specialty Chemical (100 MT/Month) in Existing Formulation Unit (4000 MT/Month)

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

The demand for products intended to be manufactured is increasing in domestic as well as in international market. To meet this demand, company proposes manufacturing unit. The project will also save forex as certain products import will be reduced. This will also generate direct and indirect employment opportunity for various levels of people.

# Demands-Supply Gap

Based on our informal survey of the market with various manufacturers and traders, we have found that there is a big potential for the range of the products we are planning.

# Imports vs. Indigenous production

Based on the current cost of indigenous raw materials and non availability of some materials, we will have to import some of raw materials as they are not available indigenously. This will

make us very competitive against imported finished products and we may export our finished products in the international market.

# Export possibility

We shall explore possibility of export of our products.

# Domestic/Export Markets

Our products have good demand in local & international markets. We shall explore possibility of export of our products.

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

M/s. Niyam Industries will give 144 direct employment to local skilled and unskilled people based on qualification and requirement as per prevailing norms of state government in addition to direct employment, indirect employment shall generate ancillary business to some extent for the local population.

# PROJECT DESCRIPTION

* 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.

* + Project Site Location (Google Map)



# Plot Layout:

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

Looking to the international market demand of the products it was decided by M/s. Niyam Industries to set up a new facility at GIDC, Panoli

Proposed expansion activities will be carried out the existing premises, so alternate sites is not required.

# Size or Magnitude of Operation

**Refer:** Section-1.0, Sub-section 1.2, Pages No. 2-18 of this report.

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

**Refer:** Form-1, Annexure-1, 2 & 3.

# 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 materials along with consumption quantities - **Refer:** Form-I, Annexure-IV
  + We will procure raw materials (as and when required) as much as possible from domestic market.

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

Resource optimization/recycling and reuse shall be envisaged.

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

Raw water requirement is met through GIDC water supply.

# Power & Fuel Requirement

**Refer:** Section-1.0, Sub-section 1.8, Page No. 20 of this report.

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

**Refer:** Form-I, Annexure-V, VI, VII & VIII.

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

**ACTIVITIES**

**4.0 Site Analysis**

**OVERVIEW OF**

**E. I. A. STUDIES**



MONITORING OF AIR, WATER & SOIL QUALITY & NOISE LEVELS. DATA ON METEOROLOGY SOCIO-ECONOMIC STATUS & BASIC AMENITIES. SITE VISITS BY AND INTERVIEWS WITH LOCALS

CONSEQUENCE ANALYSIS

PREPARATION OF DISASTER MANAGEMENT PLAN

DESCRIPTION OF EFFLUENT TREATMENT PLAN, AIR POLLUTION CONTROL, HAZARDOUS WASTE MANAGEMENT, GREEN BELT DEVELOPMENT MONITORING PROGRAM

IDENTIFICATION & ASSESSMENT OF IMPACTS EVALUATION OF IMPACTS BY MATRIX METHOD

RECONNAISSANCE SURVEY OF EXISTING PLANT

FACILITY DESCRIPTION

SAFETY, HEALTH & ENVIRONMENTAL POLICY, GUIDELINES BY DIRECTOR GENERAL OF FACTORY SAFETY, MINISTRY OF LABOR.

RISK ANALYSIS STUDIES & DISASTER

MANAGEMENT PLAN

ENVIRONMENTAL MANAGEMENT PLAN

IMPACTS METHODOLOGY OF IMPACT ASSESSMENT

PROPOSED PLANT

SOCIOECONOMIC

STATUS & INFRASTRUCTURE

ENVIRONMENTAL INFORMATION CENTRE CENTRAL GROUND WATER BOARD

GUJARAT POLLUTION CONTROL BOARD (GPCB) PUBLIC HEALTH ENGINEERING DEPT. AGRICULTURE DEPARTMENT

FOREST DEPARTMENT IRRIGATION DEPARTMENT EMPLOYMENT EXCHANGE HEALTH CENTER

CENSUS DEPT.

INDIAN METEOROLOGICAL DEPT.

BASELINE ENVIRONMENTAL STATUS

ANNUAL REPORT MARKET ASSESSMENT FINANCIAL REPORT PROJECT REPORT

INTRODUCTION

**SOURCE OF INFORMATION**

# SITE ANALYSIS

* 1. **Connectivity**
  + Site is very well connected by road and rail.
  + Availability of water, power, etc.

# Land Form, Land Use and Land Ownership

Land from and land use data will be incorporated in EIA Report.

# 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.

Land Use Period for the study area will be incorporated in EIA.

# Existing Infrastructure

* + Site is very well connected by road and rail.
  + Proximity to common hazardous/solid waste disposal facilities.
  + Availability of sufficient land free from cultivation.
  + Availability of water for industrial use.
  + Availability of power evacuation facilities.
  + Efficient transport facilities within the industrial estate and to & fro the city area.
  + Environment-friendly zone.
  + Uninterrupted power supply.

# Soil Classification

Soil Characteristics data will be incorporated in EIA Report.

# Climatic data from secondary sources.

Climatic data from primary & secondary sources will be incorporated in EIA Study.

# Social infrastructure available.

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

# PLANNING BRIEF

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

Proposed Pesticide Technical (150 MT/Month) and Specialty Chemical (100 MT/Month) in Existing Formulation Unit (4000 MT/Month)

# Population Projection

Data of population projection of the study area will be incorporated in EIA study.

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No.** | **LAND ALLOCATED** | **EXISTING AREA** | **PROPOSED AREA** | **TOTAL AREA** |
| 1 | Production Plant | 1026.7 | 1218.3 | 2245.0 |
| 2 | Parking | 75.0 | 45.0 | 120.0 |
| 3 | Security Block | 21.2 | 0.0 | 21.2 |
| 4 | Effluent Treatment Plant | 0.0 | 180.0 | 180.0 |
| 5 | Utility Block | 0.0 | 100.0 | 100.0 |
| 6 | Raw Material & Finished Product Storage | 618.9 | 618.8 | 1237.7 |
| 7 | Gas Tonner Station | 0.0 | 50.0 | 50.0 |
| 8 | Tank Farm Area | 241.4 | 200.0 | 441.4 |
| 9 | Green Belt | 1830.0 | 3000.0 | 4830.0 |
| 10 | Roads | 1630.0 | 882.0 | 2512.0 |
| 11 | Admin & Lab Building | 252.7 | 0.0 | 252.7 |
|  | **TOTAL AREA** | **5695.9** | **6294.1** | **11990.0** |
| **ALL AREA MENTIONED IN M2** | |  |  |  |

* 1. **Assessment of Infrastructure Demand (Physical & Social)**
  + Employment will be as per prevailing norms of state government for skilled and unskilled people.
  + 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.

# Amenities/Facilities

Details of Amenities of the study area will be incorporated in EIA report.

# Proposed Infrastructure

* 1. **Industrial Area (Processing Area)**

Processing Area (Plant facilities, R&D, ETP Area and Engineering/Utility Services) = 2525 m2

# Residential Area (Non Processing Area)

Non Processing Area (Green belt, Raw material storage area, finished storage area, Administration Building, Parking, road and open area) = 9465 m2

# Green Belt

Total 11990 m2 land area is available at site; out of this area about 4796 m2 (40%) area is covered as greenbelt and other forms of greenery.

# Social Infrastructure

* + Water Supply by GIDC.
  + Power supply by DGVCL and D.G. Set (emergency standby)

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

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

* + Site is very well connected by road and rail
  + Proximity to common hazardous/solid waste disposal facilities
  + Availability of sufficient land free from cultivation
  + Availability of water for industrial use
  + Availability of power evacuation facilities
  + Efficient transport facilities within the industrial estate and to & from the city area.
  + Environment-friendly zone.
  + Uninterrupted power supply.

# Drinking water Management (Source & Supply of water)

Total water requirement is and shall be met through GIDC water.

# Sewerage System

Sewage pipes will be laid in entire premises for the removal and disposal of mainly non-harmful liquid wastes from offices and domestic waste come from different sections of unit. These liquid wastes are sent to septic tank & soak pit/ETP. The same system will be followed after proposed expansion.

# Solid Waste Management

**Reference:** Section-1.0, sub-section 1.6, Page No. 6-7 of this report.

# Power Requirement & Supply/Source

**Reference:** Section-1.0, sub-section 1.8, Page No. 7 of this report.

# REHABILITATION AND RESETTLEMENT (R & R) PLAN

* 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)**

Proposed activity will be carried out on land no habitation, so R & R policy is not applicable to this project. There shall not be displacement of any population in proposed expansion project. Proposed expansion project will likely boost the commercial and economical status of the locality up to some extent.

# PROJECT SCHEDULE & COST ESTIMATES

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

We shall start construction after getting EC and shall start operation after applying for CCA.

* 1. **Estimated Project cost along with analysis in terms of economic viability of the project.** Total costs of the project will Rs. 6.40 Crores (Existing Project Cost – Rs. 1.70 Crores + Proposed Project Cost – Rs. 4.70 Crores).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No.** | **Purpose** | **Existing (Rs. In Crore)** | **Proposed (Rs. In Crore)** | **Total (Rs. In Crore)** |
| 1 | Total Cost of Project | 1.50 | 4.05 | 5.55 |
| 2 | Capital cost of air & water pollution control system and environmental monitoring equipments | 0.15 | 0.45 | 0.60 |
| 3 | Recurring Cost for EMS | 0.05 | 0.20 | 0.25 |
|  | **Total** | **1.70** | **4.70** | **6.40** |

# Analysis of Proposal (Final Recommendations)

* 1. **Financial and social benefits with special emphasis on the benefit to be local people including tribal population, if any, in the area.**
  + Employment will 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.