FORM I

FOR

ENVIRONMENTAL CLEARENCE

FOR

PROPOSED PROJECT

OF

POLYESTER RESINS

AT

JAY INDUSTRIAL RESINS PVT. LTD.

PLOT NO. 1502, GIDC ESTATE

PHASE-I, GIDC, NARODA, AHMEDABAD-382 330

GUJARAT

(M) 9825223666

APPENDIX I

(See paragraph – 6)

FORM 1

(I) Basic Information

Sr. No.	Item	Details
1	Name of the project/s	JAY INDUSTRIAL RESINS PVT. LTD.
2	S. No. In the schedule	5(f)
3	Proposed capacity/area/length/tonnage to be handled/command area/lease area/number of wells to be drilled	Unsaturated Polyester Resins: 205 MT/Month Please Refer **Annexure -1**
4	New/Expansion/Modernization	Expansion Project Project cost: 22 lacs
5	Existing Capacity/Area etc.	Area: 968 Sq. m
6	Category of Project i.e. 'A' or 'B'	'B'
7	Does it attract the general condition? If yes, please specify	No
8	Does it attract the specific condition? If yes, please specify	No
9	Location	
	Plot/Survey/Khasra No.	Plot No 1502, GIDC Estate, Phase-I
	Village	Naroda
	Tehsil	Ahmedabad
	District	Ahmedabad
	State	Gujarat
10	Nearest railway station / air port along with distance in kms.	Railway Station: Ahmedabad (8.12 km) Air port: Ahmedabad (3.10 km)
11	Nearest Town, city, District Headquarters along with distance in kms	Nearest Town: Ahmedabad (0.0 km) Nearest city: Ahmedabad (0.0 km)
12	Village Panchayats, Zilla Parishad, Municipal Corporation, Local body (complete postal addresses with telephone nos. to be given)	Local body: AMC Address: Sardar Patel Bhavan, Danipith, Ahmedabad- 380 001 Ph: 079-25391811 / 25391830
13	Name of applicant	Mr. Rajendra Patel
14	Registered Address	Plot No 1502, GIDC Estate, Phase-I, GIDC, Naroda, Ahmedabad
15	Address for correspondence	
	Name	Mr. Rajendra Patel
	Designation (Owner/Director/CEO)	Mr. Rajendra Patel - Director
	Address	28, Jay Mangal Society,

		Naranpura, Ahmedabad
	Pin Code	382 325
	E-mail	Jay_resin81@yahoo.com
	Telephone No.	(M) 9825223666
	Fax No.	-
16	Details of Alternative Sites examined, if any. Location of this site should be shown on a topo sheet.	No
17	Interlinked Projects	No
18	Whether separate application of interlinked project has been submitted?	No
19	If yes, date of submission	No
20	If no, reason	The mfg. process is single stage mixing process.
21	Whether the proposal involves approval/clearance under: if yes, details of the same and their status to be given. (a) The Forest (Conservation Act, 1980? (b) The Wildlife (Protection) Act, 1972? © The C.R.Z Notification, 1991?	No
22	Whether there is any Government Order/Policy relevant/relating to the site?	No
23	Forest land involved (hectare)	None
24	Whether there is any litigation pending against the project and/ or land in which the project is propose to be set up? (a) Name of the Court (b) Case No. (c) Orders/direction of the Court, if any and its relevance with the proposed project.	None

(II) Activity

1. Construction, operation or decommissioning of project involving action, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

Sr. No.	Information /checklist confirmation	Yes/No	Details thereof (with approximate quantities/rate, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of local land use plan)	No	The existing constructed area will be utilized for proposed project.
1.2	Clearance of existing land, vegetation and buildings?	No	-

1.3	Creation of new land use?	No	-
1.4	Pre-construction investigation e.g. bore house, soil testing?	No	-
1.5	Construction work	Yes	The existing constructed area will be utilized for proposed project. Only renovation work will be done.
1.6	Demolition works?	No	-
1.7	Temporary sites used for construction works or housing of construction works?	No	-
1.8	Above ground building, structures or earth works including liner structures, cut and ill or excavations	Yes	The proposed project will be planned within the existing premises of around 968 sq.m of area. Please refer **Annexure-1I**
1.9	Underground works including mining or tunneling?	No	-
1.10	Reclamation works?	No	-
1.11	Dredging?	No	-
1.12	Offshore structures?	No	-
1.13	Production and manufacturing processes?	Yes	Please refer **Annexure-III**
1.14	Facilities for storage of goods or materials?	Yes	The industry has facilities for storage of goods/materials
1.15	Facility for treatment or disposal of solid waste or liquid effluent?	Yes	Treated effluent will be evaporated. Please Refer **Annexure-IV** For disposal of the solid waste the unit will apply for the membership of TSDF site.
1.16	Facility for long term housing of operational workers?	No	-
1.17	New road, rail or sea traffic during construction or operation?	No	-
1.18	New road rail. Air waterborne or other transport infrastructure including new or altered routes and station, ports airport etc.	No	-
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	-
1.20	New or diverted transmission lines or pipelines?	No	-
1.21	Impoundment, damming. Culver ting. Realignment or other changes to the hydrology of watercourses or aquifers?	No	-
1.22	Stream crossing?	No	-
1.23	Abstraction or transfer of water from ground or surface waters?	No	Water will be supply by GIDC Naroda..
1.24	Changes in water bodies or the land Surface affecting drainage or run-off?	No	-
1.25	Transport of personnel or material for construction, operation or Decommissioning?	Yes	Transportation of personnel's and production will be primarily by road only.
1.26	Long-term dismantling, decommissioning,	No	-

	or restoration works?		
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	-
1.28	Influx of people to an area in either temporarily or permanently?	No	-
1.29	Introduction of alien species?	No	-
1.30	Loss of native species or genetic diversity?	No	-
1.31	Any other actions?	No	-

2. Use of Natural resources for construction or operation of the project (such as land, water material or energy any resources which are non-renewable or in short supply):

Sr.No.	Information/checklist confirmation	Yes/No	Details there of (with approximate quantities/rates, wherever possible) with source of information data
2.1	Land especially undeveloped or agricultural land (ha)	No	Existing Facilities will use for proposed project.
2.2	Water (expected source & competing users)	Yes	Please refer Water Balance as **Annexure-V**
2.3	Minerals	No	-
2.4	Construction material-stone, aggregates, and/soil (expected source-MT)	Yes	Existing Facilities will use for proposed project.
2.5	Forests and timber (sources MT)	No	-
2.6	Energy including electricity and fuels (source, competing users) Units. Fuel (MT) energy (MW)	Yes	Please refer to **Annexure-VI**
2.7	Any other natural resources (appropriate standards units)	No	-

a. Uses, Storage, Transport, Handling or production of substances or materials, which could be harmful to production to human health or the environment or raise concern about actual or perceived risks to human health

Sr.No.	Information/checklist confirmation	Yes/No	Details there of (with approximate quantities/rates, Wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora fauna and water supplies)	Yes	Some of the materials are hazardous. The MSDS are available and due care will be taken for handling them. For MSDS please refer to **Annexure-VII**
3.2	Changes in occurrence of diseases of affect disease vectors (e.g. insect or water borne disease)	No	-
3.3	After the welfare of people (e.g. by changing living condition?	Yes	Direct/Indirect employment of the personnel due to project.
3.4	Vulnerable groups of people who could be affected by the projects e.g. hospital	No	-

	patients, children, the elderly etc.		
3.5	Any other cause	No	-

b. Production of solid waste during construction or operation or decommissioning MT/month):

Sr. No.	Information/checklist confirmation	Yes/No	Details there of (with approximate quantities/rates, Wherever possible) with source of information data
4.1	Spoil, overburden or mine waste	No	-
4.2	Municipal waste (domestic and or commercial wastes)	No	Domestic waste water will be disposed off to Soak Pit.
4.3	Hazardous waste (as per Hazardous waste Management rules)	Yes	Please refer Please refer to **Annexure-VIII**
4.4	Other industrial process waste	No	-
4.5	Surplus project	No	-
4.6	Sewage sludge or other sludge from effluent treatment	Yes	ETP sludge & Evaporation Residue
4.7	Construction or demolition waste	No	-
4.8	Redundant machinery or equipment	No	-
4.9	Contaminated soils or other materials	No	-
4.10	Agriculture waste	No	-
4.11	Other solid waste	No	-

c. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr):

Sr.No.	Information/checklist confirmation	Yes/No	Details there of (with approximate quantities/rates, Wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	Yes	Please refer Please refer to **Annexure-IX**
5.2	Emission from production processes	No	-
5.3	Emissions from materials handling including storage or transport rules)	Yes	Fugitive emission during materials handling to be controlled by good materials handling practice shall be trained.
5.4	Emissions from construction activities including plants and equipment	No	-
5.5	Dust or orders from handling of materials including construction materials, sewage and waste	No	-
5.6	Emissions from incineration of waste	No	-
5.7	Emission from burning of waste in open air (e.g. slash materials, construction debris)	No	-
5.8	Emissions from any other sources	No	-

6. Generation of Noise, vibration, Emissions of Lights and Heat.

Sr.No.	Information/checklist confirmation	Yes/No	Details there of (with approximate quantities/rates, Wherever possible) with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers.	Yes	Noise will remain within the statutory limits. Ear plug shall be provided to all the workers in the high-noise areas.
6.2	From Industrial or similar processes	Yes	Noise will remain within the statuary limits. Earplugs shall be provided to all the workers in the high noise area.
6.3	From construction or demolition	No	-
6.4	From blasting or piling	No	-
6.5	From construction or operational traffic	No	-
6.6	From lighting or cooling system	No	-
6.7	From any other sources	No	-

7. Risk of accidents during construction or operation of the Project, which could affect human or the environment.

Sr.No.	Information/checklist confirmation	Yes/No	Details there of (with approximate quantities/rates, Wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	No	All the flooring will be made impervious and precaution will be taken while storing chemicals.
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	Yes	Sewage is disposed off to the AMC drain. Treated Effluent will be evaporated.
7.3	By deposition of pollutants emitted to air, into the land or into water	No	-
7.4	From any other source	No	-
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?	No	All EMS components shall run round the clock, and in case of failure of any of the system there will be safe storage arrangement, which will help for safe storage of waste/effluent. In case of closed till the system gets operational.

8. Risk of accidents during construction or operation of the project, which could affect human of the environment

Sr.No.	Information/checklist confirmation	Yes/No	Details there of (with approximate quantities/rates, Wherever possible) with source of information data
8.1	From explosions, spillages, handling, use	No	-

	or production of hazardous substances		
8.2	From any other causes	No	-
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landsides, cloudburst etc.)?	No	-

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality.

Sr.No.	Information/checklist confirmation	Yes/No	**Details there of (with approximate quantities/rates, Wherever possible) with source of information data**
9.1	Lead to development of supporting facility ancillary development or development stimulated by the project which could have impact on the environment e.g. • Supporting infrastructure (roads, power supply, wastewater treatment, etc. • Housing development • Supply industry Others	No	-
9.2	Lead to after-use of the site, which could have impact on the environment.	No	-
9.3	Set a precedent for later development	No	-
9.4	Have cumulative effects due to proximity to other existing or planned project with similar effects.	No	-

(III) Environmental Sensitivity

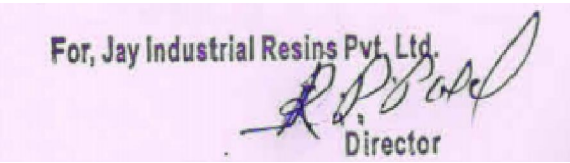
Sr. No.	Areas	Name/Identity	Aerial distance (with 15 km) proposed project location boundary
1.	Areas protected under international conventions, national or local legislation for their ecological landscape, cultural or other related value	No	-
2	Areas which are important or sensitive for ecological reasons –Wetlands, waster courses or other water bodies coastal zone, biospheres, mountains, forests	No	-
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting foraging, resting, over wintering, migration.	No	-
4	Inland, coastal, marine or underground waters	No	-

5	States, National boundaries	No	-
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas]	-	Public transportation
7	Defense installations	No	-
8	Densely populated or built-up area	No	-
9	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	No	-
10	Areas containing important, high quality or scarce resources (ground water resources, surface resource, forestry, agriculture, fisheries tourism, minerals)	No	-
11	Areas already subjected to pollution or environmental damage (Those where existing legal environmental standards are exceeded.)	No	-
12	Areas susceptible to natural hazard which could cause the project to present environmental problems.(earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climates condition)	No	-

III) Proposed Terms of Reference for EIA studies: Please refer Annexure-**X**

"I hereby given undertaking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance give, if any to the project will be revoked at our risk and cost."

Date: April 28, 2016
Place: Ahmedabad



Signature of the applicant
(Project Proponent / Authorized Signatory)
Name: Mr. Rajendra Patel
Full Address: Plot No 1502,
GIDC Estate,
Phase_I, Naroda,
Ahmedabad-382330
Gujarat

ANNEXURE-I

NAME OF PROPOSED PRODUCTS WITH QUANTITY

Detail of Product

Sr. No.	Name of Product	Quantity (MT/ Month)		
		Existing	Proposed	After Proposed
1	PVA Emulsion	25	-	25
2	Polyurethane Resin	25	-	25
3	Orthophthalic Resin	00	150	150
4	Isophthalic Resin	00	40	40
5	Vinyl Ester Resin	00	10	10
6	Gelcoats (Resin Derivatives)	00	5	5
Total		**50**	**205**	**255**

PACKING AND STORAGE

Detail of Packing & Storage

Name of Product	Type of Packing	Storage
Polyurethane Resin, PVA Emulsion, Orthophthalic Resin, Isophthalic Resin, Vinyl Ester Resin, Gelcoats (Resin Derivatives)	HDPE Carboys or HDPE / MS Drum	Storage in Finished Goods Area

RAW MATERIALS DETAILS

Name of Product	Name of Raw Material	Total Quantity(MT/Month)
Polyurethane Resin	Glycol	10.000
	Phthalic Anhydride	6.250
	Ethyl Acetate/ Styrene	8.750
	Potassium hydroxide	1.000
	Total	**26.000**
PVA Emulsion	Poly Vinyl Alcohol (PVA Powder)	25.000
	Vinyl Acetate Monomer	0.250
	Emulsifier	0.125
	Catalyst	0.125
	Plasticizer	0.500
	Total	**26.000**
Orthophthalic Resin	Di ethylene Glycol	22.500
	Mono Ethylene Glycol	7.500
	Propylene Glycol	15.000
	Phthalic Anhydride	37.500
	Maleic Anhydride	22.500
	Styrene Monomer	52.500
	Total	**157.500**
Isophthalic Resin	Di ethylene Glycol	4.000
	Propylene Glycol	8.000
	Iso Phthalic Anhydride	10.000
	Maleic Anhydride	6.800
	Styrene Monomer	13.600
	Total	**42.400**
Vinyl Ester Resin	Epoxy Resin	4.000
	Metha Acrylic Acid	1.200
	Tri Ethyl Amine	0.010
	Maleic Anhydride	0.300
	Styrene Monomer	4.500
	Total	10.010
Gelcoats (Resin Derivatives)	Ortho/Iso Resins	4.500
	Fumed Silica	0.150
	Antimony Trioxide	0.350
	Total	**5.000**

ANNEXURE-II

PLANT LAYOUT

JAI INDUSTRIAL RESINS PVT. LTD.
PLOT NO. 1502, GIDC ESTATE, PHASE-I, NARODA,
AHMEDABAD-382 330

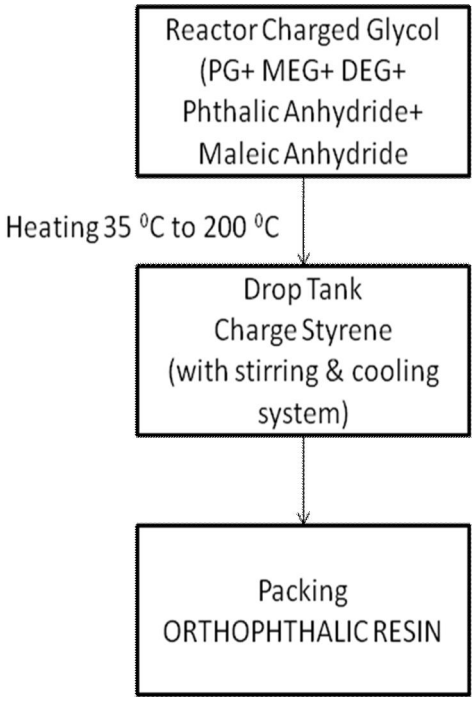
ANNEXURE-III

MANUFACTURING PROCESS OF PROPOSED PRODUCT

- ORTHOPHTHALIC RESIN

Stage-1
Formula quantities of glycols & anhydrides are charged in to reactor and heated up to desired temperature. The water of reaction collected and recorded provides rough estimate of the course of reaction. Intermittent sample are drawn and react to an acid value less than 40 mg KOH/gm.
Stage-2
Cool pre polymer to below 160 ^{0}C. Then hot blend in drop tank with styrene and cool up to room temperature. Final adjustments are made so as to meet normally required specification. The resin is than filtered & transferred in to required packing container. Process removal waste water collected into plastic carboys for ETP and than evaporation.

✓ **Process Flow Diagram**



MASS BALANCE OF PRODUCT

✓ **Mass Balance**

Input	**Quantity (MT)**		**Output**	**Quantity (MT)**
Di ethylene Glycol	0.150	Orthophthalic Resin **1 MT**	**Product**	**1.0**
Mono Ethylene Glycol	0.050		By Product	-
Propylene Glycol	0.100		Water of Reaction	0.050
Phthalic Anhydride	0.250		Gaseous	-
Maleic Anhydride	0.150		Solid Waste	-
Styrene Monomer	0.350			
Total	**1.050**		**Total**	**1.050**

- **ISOPHTHALIC RESIN**

Stage-1

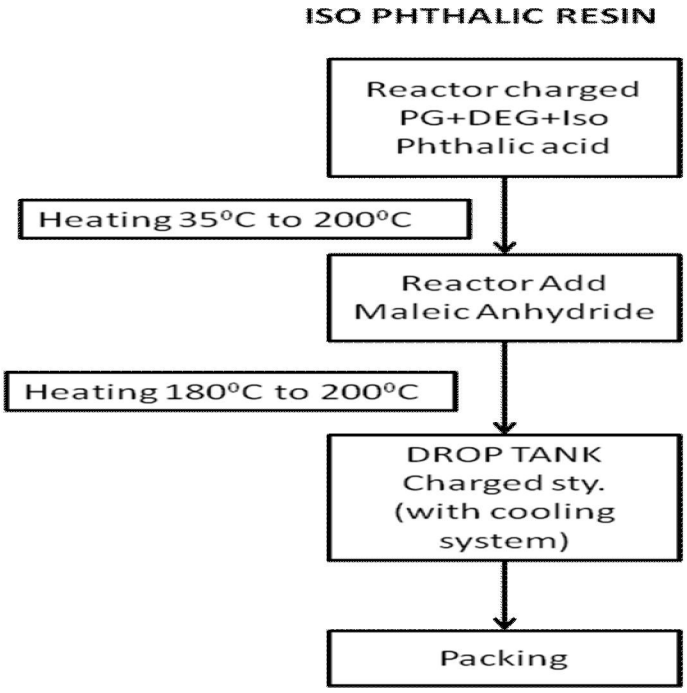
Formula quantities of glycols & Isophthalic acid are charged into reactor and heats up to desired temperature . the water of reaction collected and recorded provide rough estimate of the course of reaction. Intermittent sample are drawn and react to an acid value lass than 10 mg KOH/gm.

Stage-2

Cool pre polymer to below 150^0c. Then add formula quantity of Maleic Anhydride and recorded provides rough estimate of the course of reaction. Intermittent sample are drawn and react to an acid to an acid value less than 30 mgKOH/gm.

Stage-3

Cool pre Cool pre polymer to below 150^0c. Then hot blend in drop tank with styrene and cool up to room temperature. Final adjustment is made so as to meet normally required specification.



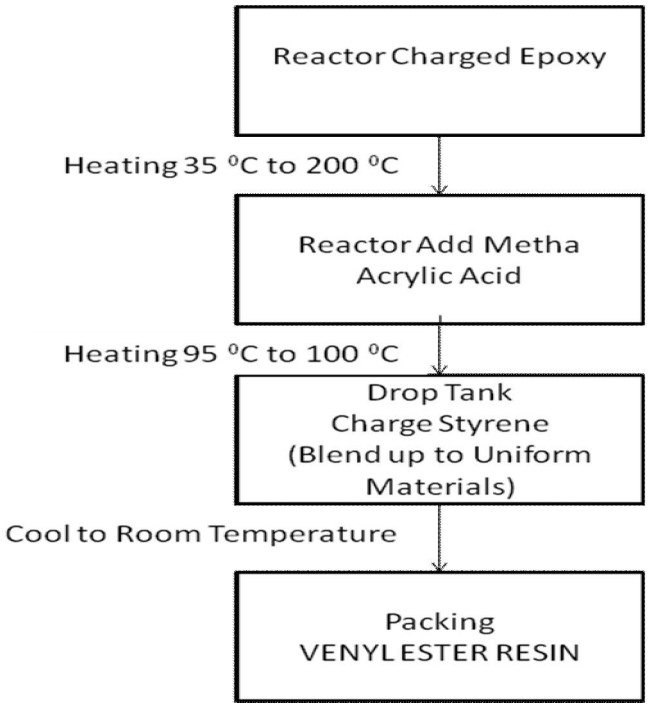
MASS BALANCE OF PRODUCT

✓ **Mass Balance**

Input	**Quantity (MT)**		**Output**	**Quantity (MT)**
Di ethylene Glycol	0.100	**Isophthalic Resin** **1 MT**	**Product**	**1.0**
Propylene Glycol	0.200		Water of Reaction	0.060
Iso Phthalic Anhydride	0.250		Gaseous	-
Maleic Anhydride	0.170		Solid Waste	-
Styrene Monomer	0.340			
Total	**1.060**		**Total**	**1.060**

- **VINYLESTER RESIN**

Formula quantities of epoxy resin charged in reactor. And heated up to 90-100^{0}c . then add Metha Acrylic acid and Maleic Anhydride. Maintain tha temperature 90-100^{0}c up to compete courses of reaction. When reaction found acid value lass than 20 mgKOH/gm. Add styrene in to reactor and blend with polymer. After complete reaction cool up to room temperature. After getting desired specification filtered and transferred the resin into required container.



MASS BALANCE OF PRODUCT

- ✓ **Mass Balance**

Input	Quantity (MT)	Vinyl Ester Resin 1 MT	Output	Quantity (MT)
Epoxy Resin	0.400		**Product**	**1.0**
Meth Acrylic Acid	0.120		Yield Loss	0.001
Tri Ethyl Amine	0.001		Gaseous	-
Maleic Anhydride	0.030		Solid Waste	-
Styrene Monomer	0.450			
Total	**1.001**		**Total**	**1.001**

4 GELCOATS (RESIN DERIVATIVES)

Formula quantities of resin and fumed silica charged in blending vessel contain high speed stirrer. Grind up to uniform gravy and thickening stop stirring fill in to required container.

ANNEXURE-IV

MANAGEMENT AND DISPOSAL OF WASTE STREAM

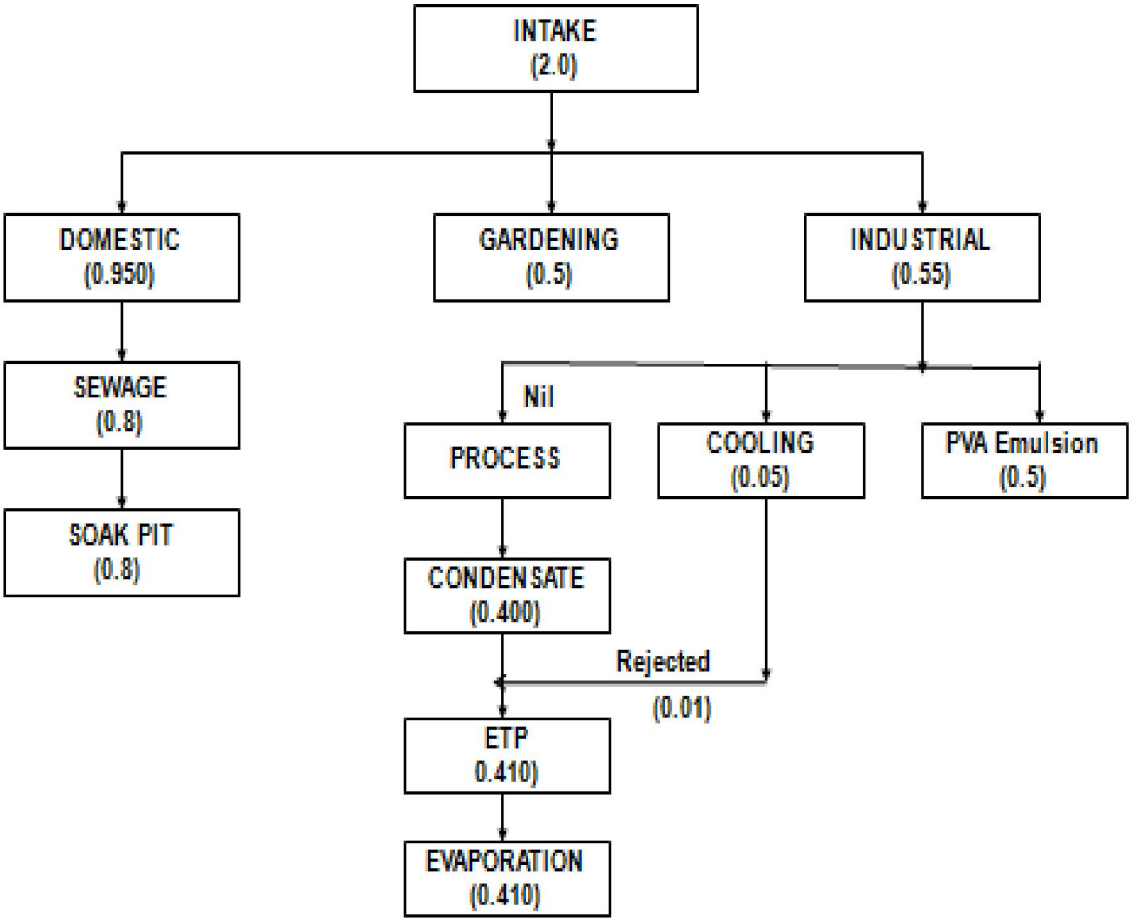
- **Management and disposal of waste stream to be generated from spillage:**

Sr. No.	Scenario	Vulnerability zone	Remarks
1.	Spill of LDO	Area close to spill area	Isolate the area immediately and ensure no ignition source comes near by. Reclaim the material if possible or cover the spill with sand/mud/foam.
2.	Liquid leakage/spillage in confined space	Confined area	Spillage to be collected in dyke area and transfer to the separate drum for reuse purpose. Fresh air inlet/ventilation system to be fully opened. Ventilation exhaust of vapors

Impervious flooring will be done at manufacturing process and materials storage area. The preventive maintenance was planned and carried out as per plan to avoid the failure of valve, pipe lines and other component of transferring line. The spillage will be confined to the dyke area underneath the vessel. The resultant splash of the above chemicals will result in exposure of toxic chemicals to employees. The spillage materials will collect and reuse in process again.

ANNEXURE-V

WATER CONSUMPTION AND WASTEWATER GENERATION



Note: All figures are in KL/Day

ANNEXURE-VI

POWER REQUIREMENT OF THE PLANT

Detail of Power

Sr. No.	Existing (kw)	Proposed (kw)	Total after proposed (kw)	Source of Supply
1	38	-	38	UGVCL

ANNEXURE-VII

SAFETY DETAILS / PROVISIONS FOR VARIOUS HAZARDOUS CHEMICALS

- MSDS of all the chemicals will be available at the plant site.
- We will follow all the specific / general safety provision as per the MSDS.
- Proper earthling connections for the all the equipments, i.e. lines and similar operations will be given.
- All the drums transferring will be done after providing the suitable earthing, and with transferring hose and dip pipe separately.
- For opening the bunks of the drums the company will use wooden opener or non sparking tools only.
- Utmost care will be taken to avoid source of spark or shifting of drums, when flammable chemicals transferring are on.
- Drum trolley will be used for shifting of drums from one place to another place.
- **PROPERTIES OF CHEMICALS**

Sr. No.	Name of Raw Material	State	B.P °C	Fl.P °C	LD_{50} mg/Kg	Specific Gravity (water = 1)	IDLH
1	Di ethylene Glycol	Liquid	245.8	143	12565	1.12	N.A
2	Mono Ethylene Glycol	Liquid	197.6	111	4700	1.10	N.A
3	Propylene Glycol	Liquid	188	107	20000	1.036	N.A
4	Phthalic Anhydride	Solid	295	165	1530	1.53	60 mg/m^3
5	Maleic Anhydride	Solid	202	103.3	481	1.48	10 mg/m^3
6	Styrene Monomer	Liquid	145.2	36.7	2650	0.906	700 ppm
7	Iso Phthalic Powder	Solid	N.A	N.A	10400	N.A	N.A

- N.A: Not Available; N.a: Not Applicable

QUANTITY OF HAZARDOUS CHEMICAL WITH MSIHC RULE

Major Hazardous Chemicals as per MSIHC Rules

Sr. No.	Name of Chemicals	State	MOC	Packing	Maximum Storage MT	Threshold Storage Quantity as per MSIHC Rules (Tonnes)
1	Diethylene Glycol	Liquid	HDPE / MS Drum	230 kg	10	15,000
2	Maleic Anhydride	Solid	HDPE Bag	25 kg	10	
3	Phthalic Anhydride	Solid	HDPE Bag	25 kg	10	
4	Propylene Glycol	Liquid	MS Drum	215 kg	10	
5	Styrene Monomer	Liquid	HDPE / MS Drum	190 kg	10	

ANNEXURE-VIII

HAZARDOUS WASTER MANAGEMENT AND STORAGE

Sr. No.	Types of Waste	Category	Quantity	Storage Area	Mode of Disposal
1.	ETP Sludge	34.3	400 Kg/Month	10 Sq. m	Collection, Storage, Transportation, Disposal at TSDF site.
2.	Evaporation Residue	-	100 Kg/Month		
3	Used oil/ spent oil	5.1	15 Lit/Year	2 Sq.m	Collection, Storage, Transportation, Sell to Registered Preprocessor
4.	Discarded Container / Drum	33.3	100 Nos./Month	10 Sq. m	Sold to Registered re processor.
	Bags				Sold to Registered Recycler

ANNEXURE-IX

TYPE OF FLUE GAS EMISSION

- **Flue Gas Emission**

Sr. No.	Stack Attached to	Stack Height (m)	Pollutants
1.	Thermic Fluid Heater	11	PM<150 mg/Nm^3 SO_2 < 100 ppm NO_x < 50 ppm
2.	D.G. Set (65 KVA) (Stand by)	5	

- **Process Gas Emission**

There is no process gas emission from manufacturing process

TYPE OF FUEL AND QUANTITY

Details of Fuel

Sr. No.	Type of Fuel	Fuel used in	Quantity
1.	Natural Gas	Thermic Fluid Heater	2.34 Kcal/ Scm/hr
2.	Diesel	DG Set (65 KVA) (Stand by)	10 Lit/hr

ENCLOSURE-I

OCCUPATIONAL HEALTH HAZARDS FROM THE PROPOSED MANUFACTURING ACTIVITIES AND PROPOSED MEASURES TO PREVENT THEM.

Company has planned all the necessary control measures for no health hazards to the workers and to keep the risk of accidents to a minimum from the proposed manufacturing activities.

- Storage & Handling of Hazardous Chemicals:

✓ Storage of hazardous chemicals will be kept as minimum as possible.
✓ All drum / barrels with hazardous chemicals have labels indicating the contents and warning of the hazard.
✓ Necessary information on safe handling and first aid measures will be available on the label.
✓ Workers dealing with hazardous chemicals will be trained on health risk and safe handling.
✓ Exposures to hazardous chemicals will be minimized.
✓ Hazardous chemicals will be transferred through closed piping system.
✓ We will provide separate storage section for storage of hazardous and non – hazardous raw materials.

- Process Vessel and other Equipment related:

✓ Checking of process vessels and equipment will be carried out regularly.
✓ Records related to maintenance and its planning schedules will be maintained.

- Fire related:

✓ Overhead water storage tank with adequate capacity will be provided.
✓ Emergency power supply through DG set.
✓ Fire extinguisher will be provided. Contact numbers of nearest fire agency will be provided.

- Electrical related:

✓ Checking of all earthling, wiring & connection will be carried out regularly.

- Safety related:

✓ Adequate types of personal protective equipment will be provided and also safety training will be provided.

✓ Emergency shower and eye wash station will be available at the worksite.

✓ Arrangement for 24 hr medical facilities by contact with nearest health care center / hospital.

✓ Pre – employment medical check – up and annual medical check up will be carried out and its records will be maintained.

✓ Monitoring of occupational hazards like noise, ventilation, chemical exposures etc will be carried out regularly and its records will be maintained.

ENCLOSURE-II

EFFLUENT TREATMENT PLANT

There is no water consumption in manufacturing process in proposed products only existing product PVA Emulsion required @0.5 KL/day. The condensate water and cooling blow down will be generated as effluent @ 0.410 KL/day. The effluent will be treated in the ETP plant and will be evaporated. The nature of different batch cycle is as follows:

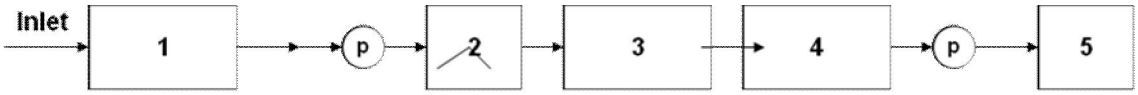
Sr. No.	pH	TDS (mg/L)
1	2.32	6894
2	2.89	5526
3	3.14	2112
4	3.97	1416
5	4.10	1364

EFFLUENT TREATMENT PLANT

The 410 Lit/day of effluent shall be generated during the manufacturing process and cooling blow down. The effluent will be collected in collection tank. From collection tank effluent will be transferred in to Neutralization Tank. The neutralize effluent will be passed through the filtered notch. The filtered treated effluent will be colleted in to the final collection tank. The treated effluent from the final collection tank will be evaporated.

The domestic wastewater shall be generated @ of 800 Lit/day. The domestic effluent shall be disposed off to the soak pit.

SCHEMATIC FLOW DIAGRAM OF ETP



Sr. No.	Name of Unit	Size (m)	Capacity (Cu. m)	Detention Time (Days)
1	Collection Tank	1.0 x 1.0 x 1.2	1.2	4
2	Neutralization Tank	0.7 x 0.7 x 1.0	0.45	1.6
3	Filter Notch	1.0 x 0.5 x 1.2	0.6	1.75
4	Holding Tank	1 x 1 x 1.2	1.2	4
5	Evaporator	-	125 Lit/hr	-

ADEQUACY REPORT

The unit shall generate 0.410 KL/ day effluent per day. The proposed units of ETP are as follows

Name Units	No. of Tank	Compartment Nos.	Capacity of Tank cum	Detention Time In Days	**Remark**
Collection Tank	1	1	1.20	4	Adequate
Neutralization Tank	1	1	0.45	1.6	Adequate
Filter Notch	1	1	0.60	2.4	Adequate
Final Collection Tank	1	1	1.20	4	Adequate

ENCLOSURE-III

GREEN BELT DEVELOPMENT PROGRAM

- Tree plantation is one of the effective remedial measures to control the Air pollution and noise pollution. It also causes aesthetics and climatologically improvement of area as well as sustains and supports the biosphere.
- The annual budget for the plantation will be Rs. 30,000/ -.

ENCLOSURE-IV

TOR

The Terms of reference is prepared as per the guidelines of MoEF for EC.

1. To prepare the details of various manufacturing process, methods and production capacity of proposed products along with the flow diagrams.
2. To collect the details of the generation of pollutants.
3. To collect the details of the treatment provided for liquid, gaseous and solid waste.
4. To collect the details regarding flue gas emissions discharge through each stack.
5. To study about the mean of transportation of raw materials handling as well as products handling.
6. To study about the details of storage of raw materials and finished products.
7. To quantify the wastewater generation.
8. To study about the disposal method of the treated effluent and its impact on final disposal point for the present discharge.
9. To study about the quality and quantity about the sludge and other solid waste.
10. To collect the details regarding potential noise source of the project.
11. To identify environmental and safety hazards, also to suggest the measures for prevention and control it.
12. To predict and assess the impact on water environment due to raw water consumption, effluent disposal, and emission from the plant and solid waste generation.

(7)

GUJARAT INDUSTRIAL DEVELOPMENTCRPORATION
Office of the Regional Manager 3rd Floor *Fadia* Chambers, Ashram Road, Ahmedabad-380009 Telephone No.6580591 Fax No. 6580460

No. GIDC/RM/ABD/TFR/NRD/PLT/ 1274 Date 21 /03/2007.

Sub : - Transfer of Plot No. 1502 at Naroda Industrial Estate.

OFFICE ORDER

A plot of land **No. 1502** admeasuring about 968.00 Sq.mtrs was allotted to **M/s. Mital Industries.** The License agreement and lease deed was executed on 22.7.1982 & 28.9.1995.. The Lessee has applied to the Corporation for transfer of the said plot in favour of **M/s. Jay Industrial Resins Pvt. Ltd..** Permission for transfer has been given by the Regional Manager, Ahmedabad as per letter No. RMA/AD/ALT/T/FR/PLT/NRD/PLT/1082 dated 08.03.2007.

The Lessee has paid all dues of the Corporation upto year **2006-07.** He has also paid the Corporation's share in **"Transfer fees"** amounting to Rs. **72600/-** @ the rate of Rs. 75/- per sq.mtr. The Supplementary agreement has therefore been executed on 21/03/2007, between the Corporation/Licensee and Transferee. The Plot now therefore stands transferred in the name of **M/s. Jay Industrial Resins Pvt. Ltd..** with effect from 19/03/2007. This transfer shall not be considered as valid under the building byelaws of the Corporation, if any unauthorized construction is carried out by the transferee. If any un-authorized construction is carried out, the same shall not be considered that Corporation has regularized the same. Transferee shall have to remove/demolish, non-violative construction or shall have to be got approved from the Corporation. The water requirement as per transfer application for process ---- Litrs. for sanitation **500** Ltrs. for cooling ---Litrs per day for normal use only.

ASSISTANT MANAGER
G.I.D.C. AHMEDABAD

To:
1 **M/s. Jay Industrial Resins Pvt. Ltd..**
Plot No. 1502
GIDC Indl. Estate Naroda
Ahmedabad.

2) **M/s. Mital Industries.**
Plot No.1502
GIDC Indl. Estate Naroda,
Ahmedabad.

Copy to:.- 1) The Executive Engineer, GIDC, Ahmedabad,
2) The Dy. Executive Engineer, GIDC, Naroda.
3) The Account Officer, GIDC, Ahmedabad.