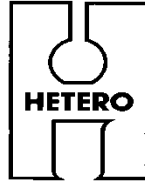


ENVIRONMENTAL STATEMENT (FORM - V)
FOR THE FINANCIAL YEAR ENDING MARCH-2016.



M/S. HETERO LABS LIMITED – UNIT -III

N.NARASAPURAM(V),NAKKAPALLI(M)

VISAKHAPATNAM DISTRICT.

SUBMITTED TO :

ANDHRA PRADESH POLLUTION CONTROL BOARD,

REGIONAL OFFICE,

VISAKHAPATNAM.

INTRODUCTION

This report known as “**ENVIRONMENTAL STATEMENT**” is basically a report for bringing awareness on the part of the industrial management and giving guidance in meeting their responsibilities for better and quality environment over the previous or already existing conditions. The present report is the outcome of pollution surveys i.e. for establishing the types and amounts of polluting materials in the atmosphere, brackish waters and also because of the solid wastes thrown out in the regular running or processing of the industry concerning. The type of survey required also depends upon the local conditions and legislation by the municipal authorities. These surveys are as per policy statement for abatement of pollution by the ‘**GOVERNMENT OF INDIA**’, and the same is also imperative that the industry management shall implement such steps in fulfilling, keeping in view their technical capabilities and professional/industrial activities for a smooth running of the industry without any prejudice to the cleanliness of the Environment.

A notification under the ‘**ENVIRONMENT PROTECTION RULES**’ was issued on April 22nd, 1993 requiring all the industries to submit an environmental statement for every financial year in “FORM V” to the relevant state pollution control boards by September 30th every year, and shall be effective year 1993. This was also agreed by the departments of various industries. The preparation of report is mandatory and is applicable inevitably in the following cases of industries :

- (a) The industries which require consent under the water (prevention and control of pollution) Act, 1974.
- (b) The industries which require consent under the ‘AIR’ (Prevention and control of pollution) Act, 1981., and
- (c) The industries which require authorization under hazardous wastes rules (Management and handling) 1989.

In principle this ‘**Environmental Statement**’ aims at prevention of any wastage i.e., by work improvement and cost reduction (WICR) programmers, while keeping a clear and good image of the establishment and keeping things transparent to the public, regarding any pollution problems despite certain measures taken by the industry management. Quantities from individual sources like stacks, generators, treatment plants and its discharges are very small, collectively they may be substantial and in all these cases expensive control or disposal measures may not be practicable. However, where as those in industry should be responsible for pollution abatement and cooperate with their communities in solving such problems and thereby promote better understanding and public relations with industrial activity.

Public relations should never be over looked and steps shall be taken in solving any Environmental problems relating to the industry. For example, in case like atmospheric air pollution / other discharges, the problems will be complicated normally by the following events.

- (a) Wide variations in wind direction - which should be known through meteorological data of the industry location.
- (b) Intermittent or emergence discharges of the brackish materials.

A collective information as a survey over a period will help in making a report / historical record, while bringing out this Environmental Statement' and ultimately the information helps in taking decisions or conclusions for a clean environment.

Environmental statement has to be submitted to the concerned pollution control board for the year period ending on 31st march in prescribed format by 30th September every year beginning from 1993. As per statutory requirement the industry is submitting Environmental Statement i.e., Form - V for the financial year ending 31st March 2015. The prescribed proforma has nine parts and covers items like water raw material consumption, pollution discharged to environment / unit of output, solid waste from process and from the pollution control facilities. As per statutory requirement the industry is submitting Environmental Statement i.e., Form - V for the financial year ending 31st March 2015.

- covering various areas of study including Ambient Air Monitoring, Stack Gas Analysis, Solid waste, Effluent discharges and Noise Pollution levels in their premises as per the format given in 'FORM-V'. The study also includes the project details, resources requirement, process and sources of pollution.

PROFILE

M/s. Hetero Labs Ltd, Unit III obtained consent for establishment for the manufacture of Bulk Drug intermediates and also got Consent for operation for the same Bulk Drug Intermediates. The product profile is identified to forward integrate the intermediate manufacturing profile and also to add new active pharmaceutical ingredients. The proposed manufacturing process is batch consisting of 2 groups of products. These products shall be manufactured on Regular & campaign basis. Manufacturing of the same groups is being undertaken as per the consent conditions.

The technology for the proposed product profile is indigenous based on synthetic process. The product profile has been finalized based on the market demand and the technology compatibility. The process involves essentially reacting the raw materials drawn from various sources in a water & solvent medium, followed by separation and purification. The product profile is finalized taking into consideration the reaction yields, waste profile, hazardous nature of raw materials.

**SALIENT FEATURES OF
M/s. HETERO LABS LTD, UNIT - III**

Total Site Area	60 Acres
Built up Area	40 Acres
Area of Green Belt Developed	18 Acres
Area available for Green Belt Development	02 Acres
Year of Establishment	2008
Year of Commissioning	2008
Capital Cost	191 Crores
Type of plant	Bulk Drug Manufacturing
Water Consumption	769 KLD
Investment on Pollution Control	
• Capital Investment	1605 Lakhs
• Recurring O & M	400 Lakhs/annum
Employment	1810



HETERO

Health, Safety and Environment Policy

We at Hetero develop, manufacture & market pharmaceutical products globally. We are committed to safeguard the Health & Safety of all the people connected with our operations and minimise impact on the Environment. To meet this commitment, we follow the below guiding principles:

- ▶ Ensure that all our activities are carried out to avoid & control all foreseeable risks to the health and safety of all people involved in the operations.
- ▶ Protect the natural environment by prevention of pollution.
- ▶ Optimize the use of resources through reduction, reuse, recycling, continuous research and using efficient technologies.
- ▶ Comply with all applicable Health, Safety & Environment laws, regulations and other requirements applicable to our business.
- ▶ Continually evaluate and improve the processes by setting the objectives in the direction to minimize hazards & environmental impacts arising out of our operations.
- ▶ Provide safe working environment to everyone on our premises with necessary infrastructure.
- ▶ Inculcate Health, Safety & Environment awareness across the organisation through recognition, training & development.
- ▶ Seek involvement of our employees and all stake holders in improving the operations to ensure clean environment, safe & healthy work place for all.

We are dedicated to the continual improvement of the Health, Safety and Environment performance across our operations. We are of the firm belief that all our employees identify and share this commitment, which would go a long way in earning the confidence of our customers, stakeholders and the society.

Dr. B. P. S. Reddy
CMD, Hetero Group of Companies

May 1st, 2014

MINISTRY OF ENVIRONMENT AND FORESTS NOTIFICATION

New Delhi, the 22nd April 1993

(PART II, SECTION 3, SUB-SECTION (1))

"FORM - V"

ENVIRONMENTAL STATEMENT FOR

THE FINANCIAL YEAR ENDING THE 31st MARCH 2016.

PART - A

Name and address of the owner/ Occupier of the industry, operation Or process	C. Mohan Reddy, Director-operations 7-2-A2, Hetero Corporate, Industrial Estate Sanathnagar Hyderabad -5000082.
Registered Office Address	: M/s. Hetero Labs Ltd, 7-2-A2, Hetero Corporate Industrial Estate Sanathnagar Hyderabad -5000082 Tel:3704923/24/25
Works address	: M/s. Hetero Labs Ltd, Unit-III, Sy.No.151/1 & 151/2 N.Narsapuram (V), Nakkapally (Md), Visakhapatnam Dist.
Industry Category	: Red.
Production Capacity	: 270 TPM
Month and Year of Establishment	: 2008.
Date of Last Environmental Statement Submitted	: September 2013

PART- B

WATER CONSUMPTION DETAILS :

1) Water Consumption (as per CFO):

S. No	Water Consumption	Quantity (KL/day)
1	Process & Washing	261
2	Boiler Feed	89
3	Cooling Tower Make Up	161
4.	Domestic	70
5	RO Feed	188
Total		769

2) Process Water consumption of production output in KL

Enclosed as Annexure – II

3) Raw material Consumption

Enclosed as Annexure - III

PART - C

POLLUTION DISCHARGED TO ENVIRONMENT (PARAMETERS AS SPECIFIED IN THE CONSENT ISSUED)

	Concentration of Pollutants in discharges (mass/volume)	Percentages of Variation from prescribed standards with reasons.
1. Ambient Air quality	Analysis reports enclosed at Annexure -IV	Within the limits
2. Stack Emissions		
3. Noise levels		
4. Effluent		

PART - D

HAZARDOUS WASTE (AS SPECIFIED UNDER HAZARDOUS WASTES/MANAGEMENT AND HANDLING RULES, 1989)

Description of waste	Total quantity (Tons/ Annum)	
	During the current financial year (2015-2016)	During the current financial year (2014-2015)
Organic Residue	979.24	781.1
Spent Carbon	117.9	203.83
Forced Evaporation Salts	590.5	812.2
Inorganic Waste	385.9	211.9
Used Carboys	23319 (209.871 T) 9645 (173.61 T)	10463 No's (94.167 T) 15483 No's (278.694T)
Waste Oil	NILL	2.986

PART - E

SOLID WASTE

The sources of solid waste generated from the plant are process and fly ash from boiler. Detailed quantities of solid wastes are given below.

Solid waste	Total quantity (T/ Annum)	
	During the current financial year (2015-2016)	During the current financial year (2014-2015)
Boiler ash	Shown in Hetero Infrastructure SEZ Ltd	Shown in Hetero Infrastructure SEZ Ltd

PART - F

CHARACTERISTICS INTERMS OF COMPOSITION AND QUANTUM OF HAZARDOUS AS WELL AS SOLID WASTES AND THE DISPOSAL PRACTICES ADOPTED BY THEM

Fly Ash from Boiler	: To Brick Manufacturers
Spent Carbon from Process	: To TSDF , Parawada / Cement Industries
Forced Evaporation Salts	: To TSDF , Parawada
Organic Residue	: To TSDF , Parawada and Cement Industries

PART - G

IMPACT OF THE POLLUTION CONTROL MEASURES TAKEN ON CONSERVATION OF NATURAL RESOURCES AND ON COST OF PRODUCTION.

The industry has adopted following measures for the conservation of natural resources:

- Sea water Desalination Plant for meeting the water requirement of the Industry.
- Sewage Treatment Plant for reuse of Domestic waste water for gardening purposes.
- Usage of vermicompost for Green belt and grounding purpose as a replacement for chemical fertilizers.
- Green belt Development for abatement of pollution

The Industry adopted all possible pollution control measures which includes Equipments for Conservation of water, Effluent Treatment Plants (Stripper , MEE, ATFD Bio-tower & Dual stage aerobic Treatment plant based on ASP), Sewage Treatment plants, Equipments for controlling fugitive emissions (Scrubbers, Condensers) for the abatement of pollution. To avoid any chances of ground water/ Soil contamination, the industry is installing Above Ground Effluent Tanks in the production area by discarding old underground sumps.

Further the industry has installed online monitoring equipments like CAAQM, Online TOC and pH meters, Portable VOC meters for measuring organic vapours concentration in and around factory area for continuous monitoring of waste being discharged from the Industry.

With the installation of above equipments & its operations, the cost of production is being increased to some extent, but Management's perception towards environment protection and their social responsibility to abate pollution is nullifying the cost of production.

ADDITIONAL INVESTMENT PROPOSAL FOR ENVIRONMENTAL PROTECTION INCLUDING ABATEMENT OF POLLUTION.

The industry has already invested around Rs. 100.00 Crores towards installation of pollution control devices (In Hetero Infrastructure SEZ Ltd) and developed green belt in and around the industry. Green belt is being developed continuously by adding new trees. Green belt consists of various plants like Ganuga, Neem, Almond, Silver oak, Plintoform, casurina, Eucalyptus etc.

All installed Pollution control equipments are periodically evaluated and necessary modifications/replacements are being made for improvement in their performances.

The industry proposed to invest following amount during 2016-17 for the abatement of pollution:

- Construction of new Hazardous waste Storage shed for storage of Waste at a cost of **Rs. 100 Lac..**
- Installation of third Online equipments i.e online VOC Analyzers, Continuous effluent Quality Monitoring Equipment (Flow, pH, TSS, COD & BOD), Online Stack monitoring and related Soft wares at a cost of **Rs. 80.00 Lac**
- New Bag filters for 20 TPH boiler at a cost of **Rs. 50.00 Lac** for controlling particulate matter as per APPCB norms.
- Covering all equalization tanks with FRP floods and scrubbers to avoid fugitive gas emissions at a cost of Rs **30.00 Lac.**
- Installation of Scrubbers for controlling fugitive emissions at a cost of **Rs. 20.00 Lac.**

ANY OTHER PARTICULARS IN RESPECT OF ENVIRONMENTAL PROTECTION AND ABATEMENT OF POLLUTION

- Increasing the greenbelt area by planting more plants, lawns, bushes etc.
- Industry is maintaining good housekeeping, mitigating fugitive emissions, reducing spills of raw material by taking all possible measures.
- Recovering of solvents at the source itself to avoid transport losses, evaporation losses thereby reducing the organic vapours entry into the atmosphere.
- Installation of secondary condensers for reactor vents, wherever there are chances of escaping solvent vapours from the reactors.
- Replacing most of the traditional centrifuges with Agitated Nuetch Filter and Drier (ANFD) to avoid open operations like filtration & drying.
- Rain water harvesting by collecting complete run off of the factory in an open pond for recharging of ground water as well as for reuse.

CONCLUSION

Hetero Labs Ltd, Unit - III is taking all possible measures for the abatement of pollution and also certain steps are in consideration for work improvement and cost reduction. The following are the pollution abatement measures taken by the industry:

1. Taking all steps required to assure low emission levels, without any prejudice to the quantum of production.
2. Utilization of domestic waste water discharges for development of greenery.
3. Giving due importance to the greenery and ultimately taken care in abating the pollution.
4. Rainwater harvesting being carried by collecting rain water in a pond created by the industry
5. Online instruments for monitoring the pollution levels in and around factory premises.
6. Operating Effluent Treatment Plant (Common) for bringing the pollution levels well within the norms of the Board.
7. Regular monitoring of air, water, effluent by Third party once in a month to keep watch on the pollution levels.

ANNEXURE – I

S. No	PRODUCTS	QUANTITY (Kg/day)
GROUP –A (Regular Products)		
1	Abacavi sulphate	666.67
2	Atorvastatin calcium	333.3
3	Cefditorine pivoxil	300
4	Cefidener	366.7
5	Cefixime	200
6	Ceforoxime Axetil	333.3
7	Cefoxitin sodium	333.3
8	Cefpodoxime proxetil	166.7
9	Citalopram hydrobromide	266.7
10	Efavirenz	166.67
11	Escitalopram Oxalate	600
12	Fosamprevavir	1000
13	Hydralazine HCL	400
14	Indinavir	600
15	Irbesartan	600
16	Lamivudine	1666.63
17	Leviteracetam	666.67
18	Losartan Potassium	333.33
19	Maraviroc	666.67
20	Nevirapine	600
21	Pioglitazone HCL	600
22	Quetiapine fumerate	333.33
23	Raltagravir	1166.63
24	Ritonavir	333.33
25	Rosiglitazone Maleate	666.7
26	Stavudine	1333.33
27	Telmisartan	333.33
28	Tenofovir Disproxil fumerate	666.67
29	Terbinafine HCL	666.67
30	Venilafaxine	666.7
31	Zidovudine	833.33
Total 16 products will be manufactured out of 31 products		12333.27
GROUP – B (Campaign Products)		
1	Acyclovir	33.33
2	Agomelatine	16.67
3	Afluzosin HCL	33.33
4	Alendronate sodium	3.33
5	Aliskiren Hemifumarate	6.67
6	Amlodipine Besylate	25
7	Aripiprazole	3.33
8	Atazanavir Sulphate	33.33
9	Atomoxetine HCL	3.33
10	Benzapril HCL	3.33

S. No	PRODUCTS	QUANTITY (Kg/day)
11	Butenafine HCL	0.67
12	candesartan cilexetil	16.67
13	Cilazapril Monohydrate	3.33
14	Cilostazol	25
15	Clopidogrel Hydrogen sulfated	33.33
16	Dapoxetine HCL	25
17	Darunavir	25
18	Deflazcort	1.67
19	Desloratadine	1.67
20	Didanosine	33.33
21	Dorzolamide HCL	5
22	Duloxetine HCL	25
23	Emtricitabine	33.33
24	Eplerenone	1.67
25	Eprosartan Mesylate	16.67
26	Esomeprazole Magnesium	33.33
27	Ezetimibe	33.33
28	Famcyclovir	33.33
29	Feropenem Sodium	3.33
30	Fluticasone	0.33
31	Fosinopril Sodium	33.33
32	Glimpiride	33.33
33	Itraconazole	25
34	Lansoprazole	33.33
35	Levofloxacin	25
36	Lisinopril dehydrate	33.33
37	Lopinavir	33.33
38	Loratidine	6.67
39	Maliniciparm HCL	1.67
40	Mifepristone	3.33
41	Miglitol	1.67
42	Montelukast sodium	33.33
43	Moxifloxacin	33.33
44	Moxatidine	33.33
45	Nadifloxacin	0.67
46	Nebivolo HCL	25
47	Nelfinavir	33.33
48	Olanzapine	33.33
49	Omeprazole	33.33
50	Osaltamivir phosphate	25
51	Ozagrel HCL	3.33
52	Pantoprazole Sodium	25
53	Pamidronate sodium	3.33
54	Posaconazole	33.33
55	Rabeprazole Sodium	25
56	Ranolazin di HCL	16.67
57	Ramipril	33.33
58	Rasagiline Mesylate	3.33

S. No	PRODUCTS	QUANTITY (Kg/day)
59	Residronate Sodium	3.33
60	Rufinamide	20
61	Rupatadine fumarate	3.33
62	Sertraline HCL	33.33
63	Sequinavir Mesylate	26.67
64	Sildenafil citrate	33.33
65	Simvastatin	26.67
66	Sumatriptan Succinate	3.33
67	Tazarotane	1.67
68	Tegaserod Maleate	1.67
69	Tiagabine	33.33
70	Ticonazole	26.67
71	Torsemide	8.33
Total 19 products will be manufactured out of 76 products		666.61
Total production capacity for worst case from Group A & Group B		13 MT

ANNEXURE – II**PROCESS WATER CONSUMPTION PER TON OF PRODUCTION OUT PUT**

S.no	Product Name	Water Consumption per Ton
1	ALENDRONATE SODIUM	15.11 KL
2	ARIPIPRAZOLE	12.64 KL
3	ATORVASTATIN CALCIUM	4.44 KL
4	CEFIXIME	21.81 KL
5	CEFOXITIN SODIUM	5.94 KL
6	CILOSTAZOL	19.02 KL
7	DEFLAZACORT	16.13 KL
8	EFAVIRENZ	16.78 KL
9	ESCITALOPRAM OXALATE	7.32 KL
10	EZETIMIBE	35 KL
11	IRBESARTAN	3.76 KL
12	LEVETIRACETAM	3.88 KL
13	LOSARTAN POTASSIUM	9.38 KL
16	NADIFLOXACIN	11.91 KL
17	PIOGLITAZONE HCL	8.24 KL
18	QUETIAPINE FUMARATE	6 KL
19	RAMIPRIL	33.97 KL
20	RUPATADINE FUMARATE	13.46 KL
21	SIMVASTATIN	18.63 KL
22	SUMATRIPTAN SUCCINATE	10.94 KL
23	TERBINAFINE HYDROCHLORIDE	5.81 KL
24	TIOCONAZOLE	11.58 KL
25	VALSARTAN	53.22 KL

ANNEXURE - III
List of Raw Material Consumption

S. NO	DESCRIPTION	UOM	QTY
1	[1(S)-BENZYL-2(S),3-EPOXYPROPYL]-CARBAMIC ACID TERT.BUTYL ESTER	KG	7564
2	1-(3-CHLOROPROPYL)-1,3-DIHYDRO-2H-BENZIMIDAZOLE-2-ONE	KG	8783
3	1,1,3,3-TETRAMETHYLGUANIDINE	KG	17614
4	1,4 DIOXANE	KG	1051
5	1-CHLORO ETHYL ISOPROPYL CARBONATE	KG	30398
6	4 NITRO BENZENE SULFONYL CHLORIDE	KG	7940
7	4 PHENYL-1-BUTENE	KG	27786
8	4-(4-FLUORO PHENYL)-2-ISOBUTYL-3-PHENYL -4-OXO-PHENYL BUTYRAMIDE	KG	11191
9	4-CHLORO BUTYROYL CHLORIDE	KG	108494
10	5-CHLORO-1-PIPERIDIN-4-YL-1,3-DIHYDRO-2H-BENZIMIDAZOLE	KG	10895
11	5 % PALLADIUM ON CHARCOAL T 5T39K	KG	3991
12	7-AMINO CEPHALOS PORANIC ACID	KG	60700
13	7-PHENYLACETAMIDODEO3CHLOROMETHYLCEPHALOS PORANICACID(P-METHOXYBENZYLESTER)	KG	186485
14	ABSOLUTE ALCOHOL	KG	349104
15	ACETIC ACID	KG	397892
16	ACETIC ANHYDRIDE	KG	47831
17	ACETONE	KG	671808
18	ACETONITRILE	KG	72848
19	ACETOPHENONE	KG	9000
20	ACETYL CHLORIDE	KG	6000
21	ACRYLONITRILE	KG	2566
22	ACTIVATED CARBON	KG	16085
23	ALLUMINIUM CHLORIDE	KG	414715
24	ALLYL BROMIDE	KG	55
25	AMINO ACETALDEHYDE DI METHYL ACETAL	KG	1139
26	AMMONIUM ACETATE	KG	3550

27	AMMONIUM FORMATE	KG	225
28	AMMONIUM SULPHATE	KG	118703
29	ANHYDROUS AMMONIA	KG	134250
30	ANILINE	KG	4770
31	BENZALDEHYDE	KG	2420
32	BENZENE	KG	90883
33	BENZOYL CHLORIDE	KG	21563
34	BENZYL ALCOHOL	KG	49700
35	BENZYL AMINE	KG	6519
36	BENZYL BROMIDE	KG	1625
37	BENZYL CHLORIDE	KG	212802
38	BENZYL CHLORO FORMATE 95 % W/W	KG	8260
39	BETA THYMIDINE (TECHNICAL GRADE)	KG	200
40	BIS (TRICHLORO METHYL) CARBONATE/ (TRIPHOSGENE)	KG	8378
41	BIS(TRIPHENYLPHOSPHINE)PALLADIUM(II)DICHLORIDE	KG	18
42	BROMO CHLORO METHANE	KG	22471
43	BUTYL ACETATE	KG	58830
44	BUTYRAMIDE	KG	82400
45	CALCIUM ACETATE	KG	2179
46	CALCIUM CHLORIDE	KG	4430
47	CAUSTIC POTASH FLAKES	KG	260967
48	CAUSTIC SODA FLAKES	KG	407138
49	CAUSTIC SODA LYE	KG	1240159
51	CESIUM CARBONATE	KG	2117
52	CHLOROFORM	KG	408360
53	CITRIC ACID MONOHYDRATE	KG	93090
54	COBALT CHLORIDE	KG	27
55	COPOVIDONE USP/NF (PLASDONE S 630)	KG	154
56	CYANO DIOL BASE	KG	5
57	CYCLOHEXANE	KG	38577
58	CYTOSINE	KG	2384
60	DECALIN	KG	180
61	DI CYCLO HEXYL AMINE	KG	135
62	DI ETHYL CARBONATE	KG	13162
63	DI ETHYL METHOXY BORANE 50% IN THF	KG	2000
64	DI ETHYL P-TOLUENE SULPHONYL OXY METHYL PHOSPHONATE	KG	35600
65	DI ISO PROPYL AZO DICARBOXYLATE(2446-83-	KG	1
66	DI ISO PROPYL ETHYL AMINE	KG	3382
67	DI METHYL ACETAMIDE	KG	231983
68	DI METHYL AMINE HCL	KG	16304

69	DI METHYL GLYOXIME	KG	293
70	DI METHYL SULFIDE BORANE	KG	825
71	DI METHYL SULFOXIDE	KG	141618
72	DI METHYL SULPHATE	KG	26250
73	DI POTASSIUM HYDROGEN ORTHO PHOSPHATE	KG	690
74	DI SODIUM HYDROGEN PHOSPHATE DIHYDRATE	KG	353
75	DI SODIUM PHOSPHATE ANHYDROUS	KG	4
76	DI TERT.BUTYL DI CARBONATE	KG	151700
77	DIETHANOLAMINE	KG	1860
78	DIETHYL2-THIENYLMETHYLMALONATE(CAS NO: 26420-00-8)	KG	18346
79	DIMETHYL AMINO PROPYL CHLORIDE HCL	KG	4000
80	DIMETHYL GLYOXIME (LR GRADE)	KG	2500
81	DIMETHYL OXALATE	KG	2798
82	DIPHENYL PHOSPHINIC CHLORIDE	KG	26
83	ETHYL (S)-2-(((S)-1-(2-(TERT-BUTOXY)-2-OXOETHYL)-2-OXO-2,3,4,5-TETRAHYDRO-1H-BENZO[B]AZEPIN-3-YL)AMINO)-4-PHENYLBUTANOATE	KG	100
84	ETHYL 2-(3-CYANO-4-ISOBUTOXYPHENYL)-4-METHYL-5-THIAZOLECARBOXYLATE.CAS[160844-75-7]	KG	800
85	ETHYL 2-BROMO VALERATE	KG	193
86	ETHYL 4,5 EPOXY 3-(1-ETHYLPROPOXY)-CYCLOHEX-1-ENE-1-CARBOXYLATE	KG	550
87	ETHYL ACETATE	KG	1409815
88	ETHYL BROMO ACETATE	KG	4918
89	ETHYL CHLORO FORMATE	KG	8112
90	ETHYL-2-BROMO BUTYRATE	KG	59830
91	ETHYLENE DI BROMIDE	KG	32
92	ETHYLENE DI CHLORIDE	KG	266090
93	FERRIC SULPHATE	KG	362
94	FERROUS SULPHATE	KG	1000
95	GLYOXALIC ACID 50 %	KG	58808
96	HEXA METHYL DI SILAZANE	KG	69360
97	HEXA METHYLENE TETRAMINE	KG	125
98	HOMOTEREPHALIC ACID	KG	31
99	HYDRAZINE HYDRATE 100%	KG	6230
100	HYDROBROMIC ACID	KG	21200
101	HYDROCHLORIC ACID (COM)	KG	4025433
102	HYDROGEN GAS	KG	59860
103	HYDROGEN HYDRIDE 80 %	KG	7015
104	HYDROGEN PEROXIDE	KG	133867
105	HYDROXYL AMINE HCL	KG	2491
106	HYFLOW SUPERCELL	KG	59534

107	HYPOPHOSPHORUS ACID	KG	128760
108	IMIDAZOLE	KG	128
109	INDENE	KG	992
110	INOSINE	KG	409
111	IODINE	KG	915
112	IRON POWDER	KG	91024
113	ISO AMYL ALCOHOL	KG	20902
114	ISO BUTYL AMINE	KG	15114
115	ISO BUTYL BROMIDE	KG	70
116	ISO BUTYRALDEHYDE	KG	23530
117	ISO PROPYL ACETATE	KG	15276
118	ISO PROPYL ALCOHOL	KG	645020
119	ISOBUTYRL CHLORIDE	KG	775
120	ISOPROPYL-(S)-(PERFLUOROPHENOXY)(PHENOXY) PHOSPHOPRL)-L-ALANINATE	KG	1470
121	L (+) MANDILIC ACID	KG	4172
122	L (+) TARTARIC ACID	KG	14929
123	L(-)-MALIC ACID	KG	306
124	L-ASPARAZINE	KG	8168
125	L-GLUTAMIC ACID	KG	10936
126	MAGNESIUM CHLORIDE ANHYDROUS	KG	514
127	MAGNESIUM METAL TURNINGS	KG	626
128	MAGNESIUM TERT.BUTOXIDE	KG	8700
129	MALEIC ANHYDRIDE	KG	153235
130	MALONIC ACID	KG	38607
131	M-AMINO PHENOL / 3-AMINO PHENOL	KG	1780
132	MANGANESE ACETATE TETRA HYDRATE	KG	3
133	M-CHLORO-BENZYL CYANIDE	KG	1
134	MENTHOL	KG	326325
135	META CHLORO PER BENZOIC ACID	KG	2
136	METHACRYLIC ACID	KG	5535
137	METHANE SULFONYL CHLORIDE	KG	14792
138	METHANE SULPHONIC ACID	KG	73841
139	METHANOL	KG	4813433
140	METHOXYCARBONYL-L-VALINE CAS NO [74761-42-5]	KG	68
141	METHYL CHLORO FORMATE	KG	30306
142	METHYL FORMATE	KG	837
143	METHYL HYDROGEN 17 ALPHA – HYDROXY -3- OXOPREGNA-4,9 (11)-DIENE – 7 ALPHA, 21 – DICARBOXYLATE ,GAMA-LACTONE	KG	975
144	METHYL IODIDE	KG	1133
145	METHYL ISO BUTYL KETONE	KG	2948

146	METHYL TERT.BUTYL ETHER	KG	48944
147	METHYL-4-METHOXY ACETOACETATE CAS NO [41	KG	1349
148	METHYLENE CHLORIDE	KG	3028873
149	MONO CHLORO ACETIC ACID	KG	17595
150	MONO CHLORO BENZENE	KG	657431
151	MONO METHYL AMINE 25 % IN METHANOL	KG	16428
152	MONO METHYL CHLORO ACETATE	KG	5117
153	MORPHOLINE	KG	1685
154	N BROMO SUCCINAMIDE	KG	354
155	N N DI ISO PROPYL ETHER	KG	250468
156	N N DI METHYL FORMAMIDE	KG	317111
157	N-(2E)-6,6-DIMETHYL-2-HEPTEN-4-YNYL)-N-METHYL-1-NAPHTHALENEMETHANAMINE HCL	KG	3083
158	N-(2-OXO-1,2-DIHYDRO-4-PYRIMIDINYL)BENZAMIDE	KG	32045
159	N,N,DICYLOHEXYL CARBIDIMIDE	KG	3405
160	N,N-DI METHYL FORMAMIDE DI METHYL ACETAL	KG	1632
161	N,O-BIS-(TRIMETHYLSILYL)-ACETA MIDE	KG	5043
162	N-ACETYL CYSTEINE	KG	66
163	N-BUTANOL	KG	32480
164	N-BUTYL LITHIUM	KG	22050
165	N-HEPTANE 99 %	KG	9363
166	N-HEXANE	KG	472990
167	NITRIC ACID 72 %	KG	8943
168	NITROGEN GAS	KG	1421
169	N-METHYL MORPHOLINE	KG	36209
170	N-METHYL PIPERAZINE	KG	1355
171	N-METHYL-1-NAPHTHALENE METHYL AMINE HYDROCHLORIDE	KG	21100
172	N-METHYL-2-PYRROLIDONE	KG	3220
173	N-METHYL-N-PHENYL-3-AMINOACROLEIN	KG	520
174	NORTROPINONE HCL	KG	1024
175	N-PROPANOL	KG	4
176	N-VALERYL CHLORIDE	KG	1499
177	ORTHO CHLORO NITRO BENZENE	KG	32265
178	ORTHO CRESOL 99%	KG	6706
179	ORTHO DICHLORO BENZENE	KG	10
180	ORTHOXYLENE	KG	20728
181	OXALIC ACID	KG	3253
182	PARA FLUORO ANILINE	KG	4913
183	PARA FLUORO ANISOLE	KG	141045
184	PARA FLUORO NITRO BENZENE	KG	8460
185	PARA FORMALDEHYDE 96 %	KG	6221
186	PARA HYDROXY BENZALDEHYDE	KG	8865

187	PARA TOLUENE SULPHONIC ACID	KG	7081
188	PARA TOLUENE SULFONYL CHLORIDE	KG	53249
189	PARA TOLUIC ACID	KG	9933
190	PARAANISIDINE	KG	1501
191	PHENOL	KG	58910
192	PHENYL CHLORO FORMATE	KG	42310
193	PHENYL ISO CYANATE	KG	13134
194	PHOSPHORIC ACID 85%	KG	191
195	PHOSPHOROUS OXY CHLORIDE	KG	48713
196	PHOSPHOROUS PENTA CHLORIDE	KG	5697
197	PHTHALIC ANHYDRIDE	KG	52094
198	PIPERDINE	KG	541
199	PIPERZINE ANHYDROUS	KG	3
200	PIVOLYL CHLORIDE	KG	3205
201	PIVALIC ACID	KG	838
202	PLASTIC STRIP SEALS	KG	161200
203	POLYPHOSOHORIC ACID	KG	160251
204	POTASSIUM ACETATE	KG	7764
205	POTASSIUM BROMIDE	KG	165
206	POTASSIUM CARBONATE	KG	234564
207	POTASSIUM DI HYDROGEN ORTHO PHOSOHATE	KG	3049
208	POTASSIUM HYDROGEN SULPHATE	KG	1355
209	POTASSIUM HYDROXIDE POWDER	KG	73432
210	POTASSIUM IODIDE	KG	258
211	POTASSIUM PERMANGANATE	KG	3
212	POTASSIUM PHOSPHATE TRIBASIC	KG	288
213	POTASSIUM TERTIARY BUTOXIDE	KG	2650
214	PROPARGYL BROMIDE	KG	17
215	PROPIONIC ACID	KG	1397
216	PROPIONYL BROMIDE	KG	37675
217	PTHALAMIDE	KG	43990
218	PYRIDINE	KG	52671
219	PYRROLIDINE	KG	1077
220	QUINALDIC ACID	KG	9450
221	R-(+) ALPHA METHYL BENZYL AMINE	KG	1111
222	R-(+)-1-(1-NAPHTHYL)ETHYLAMINE	KG	78
223	RANEYNICKEL	KG	615
224	RECYCLE CATALYST(RCAT)	KG	38
225	S-2-BENZOTHIAZOL-2-(2-AMINO THIAZOL-4-YL)-2-MITHOXYCARBONYL METHOXYIMINO THIOACETATE.	KG	111745
226	SODIUM ACETATE ANHYDROUS	KG	4971
227	SODIUM AMIDE	KG	21052

228	SODIUM AZIDE	KG	15167
229	SODIUM BI CARBONATE	KG	355594
230	SODIUM BI SULPHITE	KG	64139
231	SODIUM BORO HYDRIDE	KG	61088
232	SODIUM BROMIDE	KG	43755
233	SODIUM CARBONATE	KG	155252
234	SODIUM CHLORITE 30%	KG	50
235	SODIUM DI HYDROGEN ORTHO PHOSPHATE 1-HYDRATE	KG	75
236	SODIUM FORMATE	KG	29
237	SODIUM HYDRIDE	KG	13380
238	SODIUM HYDRO SULPHITE	KG	8327
239	SODIUM HYPOCHLORITE SOLUTION	KG	44200
240	SODIUM IODIDE	KG	31913
241	SODIUM META BI SULPHITE	KG	5454
242	SODIUM META PERIODATE	KG	210
243	SODIUM METAL	KG	1500
244	SODIUM METHOXIDE SOLUTION 30 %	KG	18972
245	SODIUM NITRITE	KG	9
246	SODIUM PER SULPHATE	KG	7250
247	SODIUM SULPHATE	KG	115718
248	SODIUM THIO SULFATE	KG	35808
249	SODIUM TUNGSTATE	KG	105
250	SODIUM-2-ETHYL HEXANOATE	KG	22
251	SULFOLANE	KG	55235
252	SULPHUR(7704-34-9)	KG	2
253	SULPHURIC ACID (CP)	KG	868978
254	SULPHURYL CHLORIDE	KG	3425
255	SYNHYDRIDE / VITRIDE(SODIUMDIHYDROBIS(2-METHOXYETHOXY)ALUMINTETOLUNE.	KG	41036
256	SYN-METHOXY-IMINO-2-FURANYL-ACETIC ACID	KG	98
257	TERT. BUTYL CARBAZATE	KG	1928
258	TERTIARY BUTYL (1R,3S,4S)- 3-6-(4,4,5,5-TETRAMETHYL-1,3,2-DIOXABOROLAN-2-YL)-1H-BENZO[D]IMIDAZOL-2-YL-2-AZABICYCLO[2.2.1]HEPTANE-2-CARBOXYLATE CAS NO [1256387-87-7]	KG	100
259	TERTIARY BUTYL (S)-6-(5-7-BROMO-9,9-DIFLUORO-9H-FLUOREN-2-YL-1H-IMIDAZOL-2-YL)-5-AZASPIRO[2.4]HEPTANE-5-CARBOXYLATE CASNO[1441670-89-8]	KG	134
260	TERTIARY BUTYL 4R, CIS 6-ACETYLOXYMETHYL 2,2DIMETHYL 1,3DIOXANE 4-ACETATE (CAS NO 154026-	KG	4391

	95-6)		
261	TERTIARY BUTYL ACETATE	KG	100015
262	TERTIARY BUTYL ALCOHOL	KG	30070
263	TETRA BUTYL AMMONIUM BROMIDE	KG	19095
264	TETRA BUTYL AMMONIUM FLUORIDE	KG	82
265	TETRA BUTYL AMMONIUM HYDROGEN SULFATE(CAS.NO.32503-27-8)	KG	1610
266	TETRA BUTYL AMMONIUM IODIDE	KG	165
267	TETRA HYDRO FURAN	KG	468845
268	TETRAKIS(TRIPHENYLPHOSPHINE) PALLADIUM.	KG	30300
269	THIONYL CHLORIDE	KG	91286
270	THIOPHENE-2-ETHANOL	KG	3
271	THIOPHENOL	KG	20701
272	THYMINE	KG	496
273	TIC-D-HYDRDE (S) - BUTYLDECCAHYDRO-3-ISO QUINONE	KG	6949
274	TITANIUM TETRA CHLORIDE	KG	2881
275	TOLUENE	KG	1233248
276	TRANS-4-HYDROXY-L-PROLINE	KG	17025
277	TRI ETHYL AMINE	KG	168431
278	TRI METHYL SILYL CHLORIDE	KG	57553
279	TRIAZOLO PYRIDAZINE DERIVATIVE (CAS : 62221-98-1)	KG	210
280	TRIPHENYL PHOSPHINE	KG	107119
281	TRITYL CHLORIDE	KG	19650
282	TROMETHAMINE	KG	1
283	VACCUM SALT	KG	49039
284	VALEIONITRILE	KG	6705
285	VINCELACTIM	KG	58041
286	ZINC DUST	KG	20058

ANNEXURE -IV

1. Ambient air quality analysis report (**Annexure –IV A**)

2. Effluent Analysis (**Annexure – IV B**)

3. Stack Analysis (**Annexure –IV C**)