Natco Pharma Limited

Regd. Off. : 'NATCO HOUSE', Road No. 2, Banjara Hills, Hyderabad-500 034.
Telangana, INDIA. Tel : +91 40 23547532, Fax : +91 40 23548243
CIN : L24230TG1981PLC003201, www.natcopharma.co.in

O/C

19th September 2024

To
The Environmental Engineer
TGPCB, Regional Office – Hyderabad
4th Floor, Spoorthi Bhavan, Opp: Metro Pillar No.-1202,
Hyderabad Collectorate Complex, Lakdikapool,
HYDERABAD 500 004

Sir,

Sub: Submission of Environmental Statement in Form-V for the Year 2023-24.

We M/s. Natco Pharma Limited-Chemical Division are herewith submitting the Environmental Statement in Form–V for the year 2023-24 for your kind perusal.

Kindly acknowledge the receipt of the same.
Thanking you,

Yours faithfully
For Natco Pharma Limited – Chemical Division

(Ch. Srinivasa Rao)
Sr. General Manager – EHS

Enclosed: Form-V with annexures

Copy to: Member Secretary, TGPCB, Paryavaran Bhavan, Sanathnagar, Hyderabad.

POLLUTION CONTROL BOARD-REGIONAL OFFICE-HYDERABAD * TELANGANA
Inward No.....
19 SEP 2024

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T.S. POLLUTION CONTROL BOARD
19 SEP 2024
Paryavaran Bhavan, A-3, Sanathnagar

(Ch. Srinivasa Rao)
Sr. General Manager – EHS

Enclosed: Form-V with annexures

Copy to: Member Secretary, TGPCB, Paryavaran Bhavan, Sanathnagar, Hyderabad.

ENVIRONMENT STATEMENT – FORM - V

For the year 2023 – 24

Submitted By

M/s. NATCO PHARMA LIMITED
(CHEMICAL DIVISION)
Mekaguda Village, Nandigama Mandal,
Ranga Reddy District, Telangana State, India
PIN: 509 223

INDEX

PART - A

Environmental Statement 2023 – 24

Natco Pharma Limited-Chemical Division

FORM – V
(See rule 14)

Environmental Statement for the year ending 31 March'2024

PART – A

i	Name and address of the owner / occupier of the Industry operation or process.	Mr. P.S.R.K. Prasad NATCO PHARMA LIMITED "NATCO HOUSE", Road No. 2, Banjara Hills, Hyderabad – 500 034.
ii	Industry Category	Red Category – Hazardous
iii	Production Capacity	At any given time a maximum of 15 products, 5 from Group–A, 5 from Group–B and 5 from Group–C shall be manufactured so that the total production capacity at any point of time shall not exceed 1782.67 kg/day (53.480 TPM) List of products with capacities given below.
iv	Year of establishment	1993
v	Date of the last Environmental Statement submitted	August – 2023

Environmental Statement 2023 – 24

Natco Pharma Limited-Chemical Division

List of Products with capacities

(As per CFO Expansion Order: 200522472438, 21.07.2020)

Group	S. No.	Name of the Product	Capacity (TPM)	Remarks
A	1	Alendronate	3.00	Any 15 products (5 products from each group) on compaign products out of total 66 products at any part of time & R&D activity
	2	Citalopram Hydrobromide	3.00	
	3	Chloroquine Phosphate	5.10	
	4	Clozapine	3.00	
	5	Deferasirox	0.30	
	6	ErlotinibHCl	1.05	
	7	Escitalopram Oxalate	0.51	
	8	Geftinib	1.05	
	9	Glatiramer Acetate	0.21	
	10	Ibandronate Sodium	1.05	
	11	Imatinib Mesylate	2.10	
	12	LapatinibDitosylate Monohydrate	0.51	
	13	Macitentan	0.51	
	14	OndansetronHCl Dihydrate	1.05	
	15	Sertraline HCl	3.00	
	16	Sofosbuvir	2.10	
B	17	ACDMQ	2.10	
	18	Armodafinil	0.51	
	19	Benzyloxy aniline HCl	2.10	
	20	Bosentan Monohydrate	1.05	
	21	Dimethyl Fumarate	5.10	
	22	Lansoprazole	2.10	
	23	Lanthanum Carbonate Dihydrate	2.10	
	24	L-Biopterin	0.12	
	25	Ledipasvir	0.51	
	26	Minodronic Acid Hydrate	0.51	
	27	Omeprazole	3.00	
	28	Pantoprazole Sodium Monohydrate	2.10	
	29	Pazopanib Hydrochloride	1.05	
	30	SorafenibTosylate	1.05	
	31	Sumatriptan Succinate	0.51	

Group	S. No.	Name of the Product	Capacity (TPM)	Remarks
C	32	(1S, 2S, 3R, 5S)-Pinanediol-L-Phenylalanine-L-leucine boronate Hydrochloride (Intermediate of Bortezomib)	0.06	Any 15 products (5 products from each group) on compaign products out of total 66 products at any part of time & R&D activity
	33	5-fluoro2-oxindole (Intermediate of Sunitinib)	0.15	
	34	Ambrisentan	0.12	
	35	AmifostineTrihydrate	0.12	
	36	Anastrozole	0.12	
	37	Apixaban	0.12	
	38	Argatroban Monohydrate	0.06	
	39	BCC / NRC-2694-A	1.05	
	40	[(2S)-2-[[4-Methyl-2-[[(2S)-2-[(2-morpholinoacetyl) amino]-4-phenyl-utanoyl]amino]pentanoyl] amino]-3-phenyl-propanoic acid] (Intermediate of Carfilzomib Acid)	0.06	
	41	Dasatinib Monohydrate	0.30	
	42	Entecavir Monohydrate	0.06	
	43	Ethyl-4-[5-(Bis(2-Hydroxyethyl) amino)-1-Methyl-1H-benzo[d] imidazol-2-yl]Butanoate (Intermediate of BendamustineHCl)	0.30	
	44	[N-[3-Hydroxy-1,1-bis-Hydroxymethyl-3-(4-octyl-phenyl)-propyl]-acetamide] (Intermediate of Fingolimod)	0.12	
	45	GranisetronHCl	0.12	
	46	Letrozole	0.12	
	47	Liraglutide Acetate	0.01	
	48	N-(2-(diethylamino)ethyl)-5-formyl-2,4-dimethyl-1H-pyrrole-3-carboxamide (Intermediate of Sunitinib Malate)	0.30	
	49	Nilotinib Hydrochloride Hydrate	0.06	
	50	NRC/AN/019	0.12	
	51	Plerixafor	0.01	
	52	Pomalidomide	0.12	
	53	Ponatinib	0.30	
	54	Regorafenib	0.21	
	55	Rizatriptan Benzoate	0.12	

Group	S. No.	Name of the Product	Capacity (TPM)	Remarks
C	56	SalmeterolXinafoate	0.12	Any 15 products (5 products from each group) on compaign products out of total 66 products at any part of time & R&D activity
	57	Sapropterin.2HCl	0.12	
	58	Teriflunomide	0.12	
	59	Tigecycline	0.12	
	60	1,1-Dimethylethyl(S)-4-formyl-2,2-dimethyl-3-oxazolidine-carboxylate (TRB / D-5)	0.12	
	61	Ethyl-2-bromo-2-(6-(methoxymethoxy)-7-methyl benzo [D][1,3]dioxol-4-yl) acetate (TRB / TMR)	0.12	
	62	(S)-1-Hydroxy-3-(3-hydroxy-4-methoxy-5-methylphenyl) propan-2-aminium chloride (TRB-5 / LT-VIII)	0.12	
	63	Tri HexyphenidylHCl	0.12	
	64	Zoledronic acid	0.06	
	65	Zolmitriptan	0.12	
	66	Schiff's Base	20.00	
	R&D Products		0.03	

PART - B

PART – B

Water and Raw Material Consumption

i. Water Consumption (m^3/day):

S. No.	Description	Average water consumption for the year 2023 – 24			Consented Quantity (m^3/day)
		Fresh Water (m^3/day)	Recycle Water (m^3/day)	Total (m^3/day)	
01	Process	81.2		81.2	165.0
02	DM Regeneration				10.0
03	Washings				80.0
04	QC and R&D				5.0
05	Boiler	69.2		69.2	120.0
06	Cooling Towers	139.8		139.8	480.0
07	Scrubbers	7.3		7.3	20.0
08	Domestic	60.9		60.9	75.0
09	Fire Hydrant System	0.5		0.5	5.0
10	Gardening	72.0		72.0	165.0
	Total	**430.9**		**430.9**	**1125.0 (Fresh water :763 + Recycled water: 362)**

S. No.	Name of the Products manufactured for the year 2023 – 24	Process water consumption per unit of product output.	
		During the Previous financial year 2022 – 23	During the Current financial year 2023 – 24
01	Anastrazole	6.783 KL / kg of product. Products are being manufactured on campaign basis	6.783 KL / kg of product. Products are being manufactured on campaign basis
02	Apixaban		
03	Armodafinil		
04	Bosentan Monohydrate		
05	Citalopram Hydrobromide		
06	Erlotinib HCl		
07	Geftinib		
08	Glatiramer Acetate		
09	Granisetron Hydrochloride		
10	Ibandronate Sodium		
11	Imatinib Mesylate		
12	Lansoprazole		
13	Lanthanum Carbonate Dihydrate		
14	Lapatinib Ditosylate Monohydtate		
15	Letrozole		
16	Nilotinib Hydrochloride Monohydrate		
17	Ondansetron Hydrochloride		
18	Regorafenib		
19	Rizatriptan Benzoate		
20	Salmeterol Xinafoate		
21	Sorafenib Tosylate		
22	Tri Hexyphenidyl HCl		
23	Zoledronic acid		
24	Zolmitriptan		
25	R & D Products		

ii. Raw Material Consumption

The industry has obtained consent for operation to manufacture 66 products in three groups A, B and C. Any given time a maximum of 15 products will be manufactured groups A, B and C. The details of raw materials consumed for the production during the year 2023-24 presented in **Annexure-1.**

PART - C

Environmental Statement 2023 – 24

Natco Pharma Limited-Chemical Division

PART – C

(a) Pollution Discharged to environment / per unit of out put
(Parameters as specified in the Consent issued)

Pollutant	Average quantity of pollutants discharged mass / day (Recycled)	Concentrations of pollutants in discharges mass / volume (Recycled)	Percentage of variation from prescribed standards With reasons
a) Water	**Zero Liquid Discharge system**		
pH	--	7.29	The unit adopts Zero Liquid Discharge concept for wastewater treatment and Recyclying. All the parameters are with in the acceptable limits for recycling. Reports enclosed as **Annexure-2**
Total Dissolved Solids (TDS)	--	148.2 mg/L	
Total Suspended Solids (TSS)	--	Below Detection Limit	
Chemical Oxygen Demand (COD)	--	79.6 mg/L	
Biochemical Oxygen Demand (BOD@27°C)	--	3.9 mg/L	
Chlorides	--	41.5 mg/L	
Sulphates	--	22.2 mg/L	
Ammonical Nitrogen as NH_3-N	--	12.6 mg/L	
Oil & Grease	--	Below Detection Limit	
Hexavalent Chromium (as Cr^{+6})	--	Below Detection Limit	
Total Chromium as Cr	--	Below Detection Limit	
Lead as Pb	--	Below Detection Limit	
Nickel as Ni	--	Below Detection Limit	
Zinc as Zn	--	Below Detection Limit	
Cyanide as CN	--	Below Detection Limit	
Arsenic as As	--	Below Detection Limit	
Mercury as Hg	--	Below Detection Limit	
Silica as SiO_2	--	2.2 mg/L	
Total Hardness as $CaCO_3$	--	73.1 mg/L	

Pollutant	Average concentrations of pollutants in discharges mass / volume	Percentage of variation from prescribed standards With reasons
b) Air		
AAQ		
Particulate Matter (PM-10)-$\mu g/m^3$	21.7	All parametrs are within the permissible Limits Reports enclosed as **Annexure-2**
Particulate Matter (PM-2.5)-$\mu g/m^3$	10.6	
Sulphur Dioxide (SO_2)-$\mu g/m^3$	14.7	
Oxides of Nitrogen (NO_2)-$\mu g/m^3$	BDL	
Ammonia (NH_3)-$\mu g/m^3$	4.2	
Carbon Monoxide (CO)-$\mu g/m^3$	BDL	
Ozone (O_3)-$\mu g/m^3$	23.9	
Lead (pb)-$\mu g/m^3$	BDL	
Nickel (Ni)-ng/m^3	BDL	
Arsenic (As)-ng/m^3	BDL	
Benzo (a) pyrene (BaP)-particulate phase only-(ng/m^3)	BDL	
Benzene (C_6H_6)-$\mu g/m^3$	BDL	

Pollutant	Average concentrations of pollutants in discharges mass / volume	Percentage of variation from prescribed standards With reasons
Incinerator Stack Emissions		
Particulate Matter (PM) mg/Nm^3	As a part of environmentally sound engineering practice, Incinerable organic wastes sendig to cement industry for coprocessing and AFRF followed by Co processing at GGEPIL & TSDF Ramky. Hence onsite incinerator not using for disposal of incinerable hazardous wastes (Incienrator is in working codition. Can be operational at any point of time as and when required).	--
Sulphur Dioxide (SO_2) mg/Nm^3		
Oxides of Nitrogen (NO_x) mg/Nm^3		
Carbon Monoxide (CO) mg/Nm^3		
HCl mg/Nm^3		
Total Organic Compound (TOC) mg/Nm^3		
HF mg/Nm^3		
Carbon Dioxide (CO2) mg/Nm^3		
Boiler Stack Emissions		
Particulate Matter (PM)	33.9 mg/Nm^3	Within the permissible limitss Reports enclosed as **Annexure-2**
Sulphur Dioxide (SO_2)	284.9 mg/Nm^3	
Oxides of Nitrogen (NO_x)	219.0 mg/Nm^3	
D.G. Sets Stack Emissions		
Particulate Matter (PM)	57.4 mg/Nm^3	Within the permissible limits Reports enclosed as **Annexure-2**
Sulphur Dioxide (SO_2)	155.0 mg/Nm^3	
Oxides of Nitrogen (NO_x)	179.0 mg/Nm^3	
Non Methane Hydrocarbons	20.6 mg/Nm^3	
Carbon Monoxide (CO)	42.8 mg/Nm^3	

PART - D

PART – D
Hazardous Wastes

[As specified under Hazardous and Other Wastes (Management, Handling and Transboundary Movement) Rules, 2016 and amendments thereof]

Hazardous Waste	Total Quantity (Tons)		
	During the Previous Financial year 2022-23	During the current financial year 2023-24	Consent quantity as per CFO Order No. 200522472438, dated 21.07.2020
Generation			
a) From Process			
Spent Carbon	11.326	16.870	216.000
Process Organic Residue	90.058	61.595	2062.800
Distillation Residues	157.991	131.264	180.000
Inorganic & Evaporation Salts (Process & Non-Process)	938.735	786.729	5158.800
Spent Hydrobromic Acid	6.000	--	428.400
Spent Succinamide	16.978	7.228	126.000
Gypsum	24.590	39.295	455.000
Spent Raney Nickel Catalyst	--	--	36.500
Spent Solvents	4760.437	3061.874	66600.000 KL
Rocovered Spent Solvents	2850.703	2761.810	63000.000 KL
Spent Mixed Solvents	365.017	329.874	2880.000 KL
Waste Oils & Grease	4.600 KL	4.995 KL	10.000 KL
Misc. Waste (Spill Control waste)	0.090	0.016	60 TPA
Rejects (Off specification / date expired / rejected raw materials / chemicals / intermeiates / APIs)	1.988	30.913	72.000
Used Insulation waste	13.700	37.440	25.200
E-Waste	1.290	2.780	3.600
b) From Pollution Control Facilities			
ETP Sludge	391.200	130.972	1800.000

Hazardous Waste	Total Quantity (Tons)		
	During the Previous Financial year 2022-23	During the current Financial year 2023-24	Consent quantity as per CFO Order No. 200522472438, dated 21.07.2020
Disposal			--
a) From Process			
Spent carbon (AFRF-HWMP).	9.860	17.420	
Process Organic Residue (Cement Industry)	96.939	50.970	
Process Organic Residue (HWMP-AFRF)	--	12.081	
Distillation Residues (Cement Industry).	143.410	151.120	
Distillation Residues (AFRF-HWMP)	5.670	--	
Inorganic & Evaporation Salts (Process & Non-Process) to HWMP-TSDF	503.713	222.020	
Inorganic & Evaporation Salts (Process & Non-Process) to GGEPIL-AFRF	314.730	540.628	
Spent Hydrobromic Acid (Recyclers)	6.340	--	
Spent Succinamide (Manufacturer)	26.920	3.500	
Gypsum (Kesoram-Cement Industry)	--	71.490	
Gypsum (Moisture Loss)	--	3.650	
Spent Raney Nickel Catalyst (Recyclers)	--	--	
Rocovered Spent Solvents (Recyclers)	2843.100	2496.550	
Rocovered Spent Solvents (re-used in process)	1058.646	272.368	
Spent Mixed Solvents (Cement Industry).	372.762	366.015	
Spent Solvents (Taken for Recovery at SRP)	4760.437	3061.874	
Waste Oils & Grease (Recycler)	2.810	5.805	
Misc. Waste-Spill Control waste (HWMP-TSDF)	0.090	--	
Misc. Waste-Spill Control waste (GGEPIL-AFRF)	--	0.012	
Misc. Waste-Spill Control waste (EWMS-AFRF)	--	0.004	
Rejects (Off specification / date expired / rejected raw materials / chemicals / intermeiates / APIs) to Cement Industry/AFRF	3.178	28.778	
Rejects (Off specification / date expired / rejected raw materials / chemicals / intermeiates / APIs) in ETP Treatment	--	2.135	
Used Insulation waste to TSDF (HWMP-TSDF)	15.450	39.290	
E-Waste (M/s. Enviro Care Center)	1.310	2.270	
b) From Pollution Control Facilities			
ETP sludge (GGEPIL-AFRF)	88.830	80.774	
ETP sludge (EWMS-AFRF)	282.660	79.048	

Bio-Medical waste	Total Quantity (Kgs)	
	During the Previous Financial year 2022-23	During the current financial year 2023-24
Generation		
Yellow Category – MBL waste	3039.90	3490.830
Yellow Category – Soiled Waste (Occupational Health Center waste)	54.115	53.600
Yellow Category – Expired & Discarded Medicines (OHC)	5.700	7.470
White Category – Needles (Occupational Health Center waste)	56.120	55.550
Blue Category – Glassware & Sharps (Occupational Health Center waste)	99.165	92.130
Red Category – Plastic Waste (Occupational Health Center waste)	122.075	127.009

Bio-Medical waste	Total Quantity (Tons)	
	During the current financial year 2022-23	During the current financial year 2023-24
Disposal		
Yellow Category – MBL waste	3044.9	3479.830
Yellow Category – Soiled Waste (Occupational Health Center waste)	54.255	53.330
Yellow Category – Expired & Discarded Medicines (OHC)	5.700	7.470
White Category – Needles (Occupational Health Center waste)	56.240	55.250
Blue Category – Glassware & Sharps (Occupational Health Center waste)	99.375	91.680
Red Category – Plastic Waste (Occupational Health Center waste)	122.325	126.489

PART - E

Environmental Statement 2023 – 24

Natco Pharma Limited-Chemical Division

PART – E

Solid Wastes

Source of solid waste	During the current Financial year 2022-23	During the current Financial year 2023-24	Consent quantity as per CFO Order No. 200522472438, dated 21.07.2020
	Quantity (Tons)		
a) Generation-From process			
Detoxified Containers / Liner drums, HDPE Carboys, Fiber drums and PP Bags	9821 Nos. (11.745 Tons)	15112 Nos. (11.680 Tons)	18000 Nos.
Used Thermo Cole waste	1.540	1.656	7.200
HDPE & PP Scrap	37.860	49.558	72.000
Brown Shippers waste	10.690	12.728	--
Shredded Paper waste	2.236	2.215	--
b) Form pollution control facility	Nil		
Others	Nil		
c) 1) Quantity recycled or re-utilized within the unit.	Nil	Nil	--
2) Sold	Nil	Nil	
3) Disposed			
Detoxified Containers / Liner drums, HDPE Carboys, Fiber drums and PP Bags (AFRF)	4206 Nos. (10.789 Tons)	4802 Nos. (11.080 Tons)	
Used Thermo Cole waste (AFRF)	1.540	1.656	
HDPE & PP Scrap (AFRF)	37.860	49.758	
PP Bags (Used for evaporation packing)	5540 Nos. (0.830)	10630 Nos. (0.847)	
Brown Shippers waste	10.290	12.728	
Shredded Paper waste	2.180	2.215	

PART – F

PART – F

Please specify the characterizations (in terms of composition of quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

HAZARDOUS WASTE:

The total amount of hazardous waste generated during the year 2023-24 is 4345.608 Tons. Hazardous wastes segregated based on the characteristics of the wastes such as Spent Carbon, Distilaltion Residue, Process Organic Residue, Spent Mixed Solvents, ETP Sludge, Spent Succinamide, Gypsum, Recovered Spent Solvents, Waste Oil, Rejects, Insulation Waste, Bio-Medical Waste, E-Waste and Inorganic & Evaporation Salts.

Spent Carbon collected in HDPE bags from process, stored in covered shed and then disposed to AFRF-HWMP for pre-processing.

Rejects and Process Organic Residue collected in HDPE bags and drums from process stored in covered shed, and then disposed to HWMP / GGEPIL / EWMS for pre-processing and cement plants for co-processing.

Distillation Residue collected in HDPE drums, stored in covered shed and then disposed to cement plants for co-processing.

Spent Mixed Solvents collected in HDPE drums, stored in covered shed and then disposed to cement plants for co-processing.

Evaporation Salt generated from ATFD, collected in HDPE Bags, stored in covered shed and disposed to HWMP / GGEPIL for pre-processing followed by co-processing in cement kilns.

ETP Sludge collected in HDPE bags from ETP (Paddle Dryer) and Spill Control waste collected in HDPE bags from production blocks, stored in covered shed, and then disposed to GGEPIL & EWMS for pre-processing.

Insulation waste collected in HDPE bags from production blocks, stored in covered shed and then disposed to HWMP (TSDF) for secure landfill.

Spent Succinamide collected in HDPE bags, Recovered Spent Solvents and Waste Oil collected in drums and disposed to Authorised Recyclers.

Gypsum collected from Gypsum plant, stored in covered platform and disposed to cement companies as raw material.

Bio-Medical waste collected in colour coding bags and disposed to authorised CBMWDF.

E-Waste collected from IT and Maintenance and disposed to authorised recyclers.

2. SOLID WASTE (NON-HAZARDOUS):

Generation of Non-hazardous solid wastes are in the form of fly ash, packaging material, paper & paperboard waste general waste (garbage waste) etc. Fly ash is being disposed to brick manufacturers. Packing materials after detoxification sent to outside agencies for recycling. The Paper and paperboard waste sent to ITC Limited through Nish Elgha Technologies Pvt.Ltd and sent to Pre-processing facility for Pre-processing followed by co-processing.

PART - G

PART – G

Impact of pollution abatement measures taken on conservation of natural resources and on the cost of production:

Installed three additional new IP camaras and connected to TSPCB server (total 8 IP camaras installed and 5 connected to TSPCB server remaining 3 are under process to connect TSPCB server) showing the near by water body, storm water drain outlet and plant premises as advised by the TSPCB.

Roof top rainwater collection systesm implemented and utilizing the roof top rainwater to boilers.

Installed water efficient fixtures low flow aerated type at all washing areas (toilets, canteen & employees change rooms) to conserve water.

Installed high-pressure jet pumps for equipment cleaning while special cleaning and routine cleaning in production block.

Install auto tube cleaning system for chillers.

Installed 3.40 MW solar power plant for captive consumption, which in turn will reduce the grid power consumption. Hence, the proportionate quantity of GHG emissions (generated during the generation of grid power from fossil fuels) minimized.

Solar power purchase agreement made with the renewal energy generators. Achieved 35% of plant power demand meeting from renewable energy sources (from onsite solar power plant & through solar power purchase agreements).

Wastewater treated in ZLD plant and recycled to reduce the freshwater consumption.

Spent sulphuric acid segregated and converted into gypsum and sold as a raw material to cement industries.

Spent catalysts segregated and sent back to manufacturers for reprocessing.

PART - H

PART – H

Additional measures/investment proposal for environmental protection including abatement of pollution, prevention of pollution.

"Eco Forest" a new afforestation project launched by Natco – Mekaguda unit using "Miyawaki concept" invented and named after Japanese botanist Akira Miyawaki a unique technique to grow multi-layered dense forests with native species.

"Eco Forest is developed in an area of about 3000 sq.mts area with 7600 plants of 45 varieties of native species within the premises and another 500 aq.mts area with 1800 plants with 45 varieties of native species along the south side boundary towards the village and 2000 plants newly planted in 2022-23 inside the plant at greenbelt area.

Under this concept, number of native species planted in this area close to each other (at 60 cm distance between plants). The plant growth is 10 times faster and the resulting plantation is 30 times denser than usual. This will lead to co-existence of plants and in fact each plant draws from the other vital nutrients and they grow to become strong and healthy and becomes maintenance-free after the first two years. A substantial decrease in noise and dust control and more Carbon-dioxide absorption as compared to conventional forest.

Greenbelt area (12 month old)

Newly developed Greenbelt area in 2022-23

PART - I

PART – I

The proposed projects for improving the quality of the Environment:

Working with recyclers / pre-processessors to utilize the insulation waste.

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