

#### HETERO LABS LIMITED (UNIT-III)

S.No. 120 & 128, 150 (PART), 150/1, 151/2, 158/1, N.Narasapuram (Village), Nallamattipalem (V), Nakkapalli (Mandal), Anakapalli (Dist) - 531 081., A.P., INDIA. Tel: +91 891 2877900, Fax: +91 891 2877933 CIN: U24110AP1989PLC009723

30th September 2023

Letter No: HLL-III/EHS/APPCB/2023-24/10

The Environmental Engineer Regional Office Andhra Pradesh Pollution Control Board Visakhapatnam.

Dear Sir

Sub: Submission of Environmental Statement in Form-V of M/s Hetero Labs

Ltd, Unit-III for the Financial Year 2022-2023 - Regarding

Ref: APPCB/VSP/ CFO/HO/137/2017 Dated 10/02/2023.,

With reference to above, here with submitting the Environmental Statement in Form-V of M/s Hetero Labs Ltd, Unit-III for the financial year 2022-2023 for your information and perusal.

Kindly acknowledge the receipt of the same.

Thanking You Sir,

Yours Faithfully

For Hetero Labs Limited, Unit-III

S. Kullayi Reddy

**Associate Vice President - EHS** 

Enclosures: As above

## **PROFILE**

M/s. Hetero Labs Ltd, Unit III obtained consent for operation from AP Pollution Control Board vide order No: APPCB/VSP/ CFO/HO/137/2017- dated 10/02/2023 valid upto 31<sup>st</sup> December 2027 and got CFO amendment order dated 28/04/2023 for manufacturing of Bulk Drugs and its Intermediates. The products are manufactured in two categories i.e. regular & campaign products. Manufacturing of the same groups is being undertaken as per the consent conditions.

## SALIENT FEATURES OF M/s HETERO LABS LIMITED, UNIT-III

Total Site Area

130 Acres

Built up Area

75 Acres

Area of green belt developed

45 Acres

Area available for green belt development

10 Acres

Year of establishment

2008

Year of commissioning

2008

Capital cost

428.26crores

Type of plant

Bulk drug manufacturing

Water consumption

492KLD

Effluent generation

353KLD

Investment on pollution control

Capital investment

1000 LAKHS

Recurring O & M

: 200 LAKHS/ANNUM

**Employment** 

: 2000

#### Other details:

- The total water requirement of the unit is being met from the Sea water Desalination plants of M/s Hetero Infrastructure SEZ Ltd
- 2. The required steam for the unit is being supplied from boilers installed in the premises of M/s Hetero Infrastructure SEZ Ltd.
- 3. The effluent generated from the unit is being treated in the Common ETP installed in the premises of M/s Hetero Infrastructure SEZ Ltd.
- 4. Sewage Treatment Plant, Hazardous waste storage yard and scrap yard are installed in the premises of M/s Hetero Infrastructure SEZ Ltd

#### MINISTRY OF ENVIRONMENT AND FORESTS NOTIFICATION

New Delhi, the 22<sup>nd</sup> April 1993

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

#### <u>"FORM - V"</u> **ENVIRONMENTAL STATEMENT FOR** THE FINANCIAL YEAR ENDING THE 31st MARCH 2023

#### 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.126, 150,151/1 & 151/2

N.Narsapuram (V),

Nakkapally (M), Visakhapatnam Dist.

Industry category

: Red

**Production capacity** 

: 390 TPM (As per CFO)

Month and Year of Establishment

: 2008

Date of last environmental statement : September 2022

Submitted

#### PART - B WATER CONSUMPTION DETAILS

S.No	Water Consumption	Quantity (KL/day) (as per CFO)	Quantity (KL/day) (Actual)
1	Process & Washing	261.0	250.9
2	Cooling tower Make up & Boiler Feed	161.0	92.54
3	Domestic	70.0	58.3
	Total	492.0	401.74

<sup>\*\*</sup>Indicated the water is inclusive of floor washing and other washings of the plant.

Process water consumption of production output in KL: Enclosed as Annexure-I

Raw material consumption

Enclosed as Annexure-II

**PART-C** POLLUTION DISCHARGED TO ENVIRONMENT (PARAMETER AS SPECIFIED IN THE CONSENT ISSUED)

Pollutants	Quality of Pollutants discharged (mass/day)	Concentrations of Pollutants discharges (Mass/volume)	Percentage of variation from prescribed standards with reasons.
<ol> <li>Ambient Air quality</li> </ol>			
2. Stack Emissions	Analysis reports encl	asad at Ammazuma III	SAPALL ALL III III
3. Noise levels	. Allaysis reports effect	Osed at Annexure-III	Within the limits
4. Effluent			

PART - D HAZARDOUS WASTE (AS SPECIFIED UNDER HAZARDOUS WASTES/MANAGEMENT AND **HANDLING RULES-2016)** 

	Total Quantity (Kg)			
Hazardous Wastes	During the previous financial Year (2021-2022)	During the curren financial Year (2022-2023)		
Organic Residue	596.45 T	618.17 T		
Spent Carbon	633.77 T	418.79T		
Process Inorganic waste	56.15 T	72.38 T		
Used Carboys- HDPE Drums	239.08T	90.459T		
Used Carboys- MS Drums	374.77T	35.235T		
Spent solvents	5252.062T	642.72T		
Detoxification Liners (LDPE bags)	57.950T	164-14T		
Waste oil	8.389T	8.389T		

#### PART - E SOLID WASTES

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

	Total Qu	uantity (T/annum)
Solid waste	During the previous financial year (2021-2022)	During the current financial year (2022-2023)
Boiler ash	Generated in Hetero Infrastructure SEZ Ltd	Generated in Hetero Infrastructure SEZ Ltd

Note: The required steam for the unit is being supplied by M/s Hetero Infrastructure SEZ Ltd.

PART - F

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

Fly Ash from Boilers	NA NA
Spent Carbon from process	To cement Industries for Co-processing (Incineration)
Forced Evaporation salts	NA
	(Generated in CETP of M/s Hetero Infrastructure SEZ Ltd)
Process Inorganic salts	To TSDF, Parawada for secured land filling
Organic Residue	To Cement Industries for Co-processing (Incineration)

#### **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 thereby avoiding the usage of natural resources (either ground water or surface water).
- Sewage Treatment Plant for reuse of Domestic wastewater for gardening purposes by avoiding usage of fresh water for gardening purpose.
- Usage of Vermi-compost for green belt and gardening purpose as a replacement for chemical fertilizers.
- Green belt Development for abatement of pollution.
- Rainwater harvesting by way of collecting the storm water in a pond within the industry in its premises.
- Hazardous waste which is having higher calorific value is being sent to cement industries as an alternate fuel.
- Initiated selling used salts for authorized recyclers for reuse/recycling purpose.

The industry adopted all possible measures for controlling the pollution there by conserving the natural environment as listed below:

- Common Effluent Treatment Plant (Stripper, MEE, ATFD Bio-tower & Dual stage aerobic Treatment plant based on ASP) for treatment of trade effluent and sewage treatment plant for the treatment of Domestic wastewater in the premises of M/s Hetero Infrastructure SEZ Ltd.
- > Scrubbers are installed for the vents of reactor where acidic reactions are being carried for controlling fugitive emissions for abatement of air pollution
- > Constructed all the above ground tanks for the collection and treatment of effluents to avoid chances of ground water/ Soil contamination.
- Adequate stack height has been provided to all DG sets for safe dispersion of pollutants as per CPCB guidelines and all DG sets are provided with acoustic enclosures for abatement of noise pollution.
- ➤ Installed online monitoring equipment like CEQMS, CAAQM and VOC meters for measuring pollutants in and around factory premises.
- > Thick greenbelt in and around factory premises.

#### PART - H

# 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 in an area of more than 40% of the total area of the Industry. Green belt consists of various plants like Ganuga, Neem, Almond, Silver oak, Plintoform, casurina, Eucalyptus and Conacorpous etc.

All installed Pollution control equipments are periodically evaluated and necessary modifications/replacements are being made for improvement in their performances from time to time as and when required irrespective of Budget allocations.

The industry proposed to invest additional amount of Rs 10 crore towards installation of Multistage scrubbers and Effluent tanks etc during 2022-23.

# PART - I ANY OTHER PARTICULARS IN RESPECT OF ENVIRONMENTAL PROTECTION AND ABATEMENT OF POLLUTION

- Increasing the greenbelt area by planting more plants.
- Industry is maintaining good housekeeping, mitigating fugitive emissions, reducing spills of raw material by taking all possible measures.
- Solvents are being recovered to the maximum possible extent at the production area itself thereby reducing the organic vapours entry into the atmosphere.
- Installation of dual stage condensers for all reactor vents to avoid escaping of solvent vapours from the reactors.
- Replaced most of the traditional centrifuges & Tray Driers with Agitated Nuetch Filter and Drier (ANFD) for safe and clean operations.

#### **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 ensure low emission levels, without any prejudice to the quantum of production.
- 2. Utilization of domestic wastewater for development of greenery after treatment in STP.
- 3. Giving due importance to the greenery and ultimately taken care in abating the pollution.
- 4. Rainwater harvesting by collecting rainwater in a pond created by the industry
- 5. Online instruments for monitoring the pollution levels in and around factory premises.
- 6. Regular monitoring of air, water, effluent by Third party once in a month to keep watch on the pollution levels.

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## **ANNEXURE - I**

## WATER CONSUMPTION DATA FOR THE YEAR 2022-2023

S.No		Process water consumption per un of product output in KL		
	Name of the product	During the previous financial year (2021-22)	During the current financial year (2022-23)	
1.	AMLODIPINE BESYLATE		12.0	
2.	ARIPIPRAZOLE	53.14	53.14	
3.	ATAZANAVIR SULPHATE	42.35	42.35	
4.	ATOMOXETINE HCL	38.63	38.63	
5.	ATORVASTATIN CALCIUM		50.3	
6.	AZACITIDINE			
7.	BICALUTAMIDE	66.66	66.66	
8.	BORTEZOMIB			
9.	CAPECITABINE	19.18	19.18	
10.	CILOSTAZOL		42.0	
11.	CITICOLINE SODIUM		38.1	
12.	DACLATASVIR DIHYDROCHLORIDE IH		67.56	
13.	DARUNAVIR	24.0	24	
14.	DOCETXEL			
15.	DOLUTEGRAVIR SODIUM IHS	57.53	57.53	
16.	DOMPERIDONE IP		33.1	
17.	EFAVIRENZ IP			
18.	EPLERENONE		20.0	
19.	ESCITALOPRAM OXALATE	8.72	8.72	
20.	ETORICOXIB	25.5	25.5	
21.	EZETIMIBE	43.1	43.1	
22.	FLUCONAZOLE IP		21.82	
23.	IMATINIB MESYLATE			
24.	IRBISATRAN	10.03	10.03	
25.	LACOSAMIDE	29.58	29.58	
26.	LAMIVUDINE	3.29	3.29	
27.	LETROZOLE	59.8	59.8	
28.	LEVETIRACETAM	1.1	1.1	
29.	LEVOMILNACIPRAN HCL IH		••	
30.	LOPINAVIR	102.92	102.92	
31.	LORATADINE USP		3.5	
32.	LOSARTAN POTASSIUM		16.71	
33.	MILACIPRAN		7	
34.	OSELTAMAVIR PHOSPHATE			

35.	PANTOPRAZOLE SODIUM IP		29.5
36.	PAZOPANIB		
37.	PIOGLITAZONE HCL	36.25	36.25
38.	QUTIAFINE HEMIFUMARATE	6	6
39.	RAMIPRIL IP		30.0
40.	RITONAVIR	18.0	18
41.	RIZATRIPTAN		48.51
42.	ROSUVASTATIN CALCIUM		16.0
43.	RUPATADINE FUMARATE		
44.	SIMVASTATIN USP		
45.	SOFOSBUVIR S		60.49
46.	STAVUDINE IP		
47.	TELMISARTAN	48.1	48.1
48.	TEMOZOLOMIDE	29.41	
49.	TENOFOVIR		
50.	TERBINAFINE HYDROCHLORIDE		7.5
51.	TIOCONAZOLE BP	***	0.56
52.	VALSARTAN		30.95
53.	VELPATASVIR PREMIX IH		35.75
54.	VOGLIBOSE IP		112.6
55.	ZIDOVUDINE IP	***	22.6

## **ANNEXURE - II**

	RAW MATERIAL CONSUMPTION						
S.NO	NAME OF THE PRODUCT	RAW MATERIAL DESCRIPTION	UOM	TOTAL QTY			
1	ABACAVIR SULPHATE	2,5-DI AMINO-4, 6-DI HYDROXY PYRIMIDINE	KG	27901			
2	AMLODPINE	PHTHALIC ANHYDRIDE	KG	54639.5			
		ETHYL-4-(2-PHTHALIMIDO) ETHOXY ACETOACET	KG	35727			
3	ARA	DIETHYL (3-PYRIDINYL)BORANE (4S,5R)-3-BENZOYL-2(4- METHOXYPHENYL-4-PH	KG	172.8			
4	ARIPIPRAZOLE	3-CHLORO PROPIONYL CHLORIDE	KG KG	7927			
		META AMINOPHENOL	KG	6004			
		2-BROMOPYRIDINE	KG	560			
_		4-FORMYL BENZENE BORONIC ACID	KG	465			
5	ATAZANAVIR SULPHATE	TERT BUTYL CARBAZATE	KG	318.5			
	'\$ I	[1(S)-(OXIRAN-2(R)-YL)-2- PHENYLETHYL]CAR	KG	153.3			
		(TERT-BUTYL 2-(4-(PYRIDIN -2- YL)BENZYL)H	KG	0.2			
6	ATOMOXETINE HCL	O-CRESOL	KG	75041.			
7	BICALUTAMIDE	4-AMINO-2-TRIFLUOROMETHYL BENZONITRILE	KG	2880.0			
		METHACRYLIC ACID	KG	2281.0			
8	BRIVERACETUM	(S)-4-BENZYL-2-OXAZOLIDINONE	KG	1148			
9	CAPECITABINE	5-FLUORO CYTOSINE	KG	20524.			
		D-RIBOSE	KG	50807.			
		N-PENTYL CHLOROFORMATE  1,1-CYCLOBUTANE DICARBOXYLIC	KG	187.			
10	CARBOPLATIN	ACID	KG	3.5			
11	CDA	CYCLO HEXANONE	KG	18200			
12	СРМР	ALPHA PICOLINIC ACID / 2-PYRIDINE CARBOXYLIC	KG	1179			
		L-PHENYL ALANINE	KG	2004.			
40	B 4 B 1 B 1 4 4 5	P-NITRO BENZENE SULFONYL CHLORIDE	KG	19050.7			
13	DARUNAVIR	TERT-BUTYL((S)-1-((S)-OXIRAN-2-YL)	KG	18203.65			
		(3AS,4S,6AR)-4-METHOXY- TETRAHYDROFURO-[3	KG	9752.4			
		ISO BUTYLAMINE	KG	26006.52			
		N-ACETYL SULPHANILYL CHLORIDE	KG	6100			
		BIS (4-NITROPHENYL)CARBONATE	KG	3208			
14	DHS	(3S,8R,9S,10R,13S,14S)-3-HYDROXY- 10,13-D	KG	600			
15	DOCETXEL	10-DEACETYL BACCATIN-III / 4a- ACETOXY	KG	36			
	DOLUTEGRAVIR	(3R)-3-AMINOBUTANOL	KG	34740			
16	SODIUM IHS	1-(2,2-DIMETHOXYETHYL)-5- METHOXY-6-METHO	KG	96900			
		1-(TETRAHYDRO-2H-PYRAN-2-YL)-5- (4,4,5,5-	KG	532.5			
17	DORLATAMIDE	TERT-BUTYL(S)-(1- HYDROXYPROPAN-2-YL)CARB	KG	463.9			
		4-BROMO-2-CHLORO BENZONITRILE	KG	347.5			

18	ELECTRON	D-PROLINE	KG	264
19	ELIGLUSTATAR	1,2-ETHYLENEDIOXY BENZENE / 2,3- DIHYD	KG	200
20	ENTACAPONE	VANILLIN	KG	780
21	ENZALATAMIDE	2-FLUORO-4-NITRO BENZOIC ACID	KG	180
		CHLORO ACETYL CHLORIDE	KG	28183.8
22	ETORICOXIB	2-(4- METHYL)THIO)PHENYL)ACETINITRILE	KG	22975
		METHYL 6-METHYL NICOTINATE	KG	22893
23	EZETIMIBE	PARA HYDROXY BENZALDEHYDE	KG	10585
		PARA FLUORO ANILINE 5-FLUOROISATIN/ 5-	KG	13786.2
24	FDI	FLUOROINDOLINE-2,3-DIO	KG	180
24	T DI	3-CHLORO-4-FLUORO ANILINE	KG	290
25	GEFITINIB	7-METHOXY-6-(3-	NG	290
25	GELITINIS	MORPHOLINOPROPOXY)-3,4-DI	KG	600
26	IMATINIB MESYLATE	3- ACETYL PYRIDINE	KG	9183.5
20	IMATINID MESTLATE	4-BROMO METHYL BENZONITRILE	KG	6565.5
27	LACOSAMIDE	D-SERINE	KG	6553.4
28	LAMIVUDINE	CYTOSINE	KG	121365.5
		2,5, DI HYDROXY 1,4, DITHIANE	KG	537506
		MENTHOL	KG	704717
		3-CHLORO-4-(3-FLUORO	L/C	406.0
29	LAPATINIB	BENZYLOXY) ANILINE	KG	486.8
		2-AMINOBENZONITRILE	KG	325
30	LETROZOLE	1, 2, 4-TRIAZOLE	KG	0.15
		N-METHYL PIPERAZINE	KG	4215
31	LEVETIRACETAM	GAMMA BUTYROLACTONE	KG	809727
	LEVOMILNACIPRAN HCL			
32	IH	2-PHENYL ACETONITRILE	KG	1500
00	LOCADTAN DOTACCIUNA	[(PENTANIMIDOYL) AMINO] ACETIC	140	04050
33	LOSARTAN POTASSIUM	ACID	KG	21050
		NORTROPINONE HCL	KG	3002
34	MARAVIROC	(S)-METHYL-3-(TERT- BUTOXYCARBONYLAMINO)-	KG	1050
34	WARAVIROC	8-BENZYL-3-(3-ISOPROPYL-5-	NG	1050
		METHYL-4H-1,2,	KG	335
35	MELAPHALAN	4-NITRO-3-PHENYL-L-ALANINE	KG	45
36	MILACIPRAN	2-PHENYL ACETONITRILE	KG	.520
- 30	WILAGII TVAT	METHYL-2-OXOINDOLINE-6-	NO	.020
37	мос	CARBOXYLATE	KG	75
		(TRIMETHOXYMETHYL) BENZENE	KG	418
38	NEVROPINE	2-CHLORO NICOTINIC ACID	KG	1995
- 00	THE VICOI INC	2,2-(5-METHYL-1,3-PHENYLENE) -	I.O	1000
39	New Prod.	DIACETONI	KG	1.5
		POTASSIUM TETRACHLORO		.,,,
40	New Prod.	PLATINATE	KG	27
		METHYL-3-GUANIDINO-4-METHYL		
	NILOTINIB	BENZOATE NIT	KG	380
41	MILOTHAD			
41	OSELTAMAVIR			
41		SHIKIMIC ACID	KG	2000
	OSELTAMAVIR	SHIKIMIC ACID BACCATIN-III	KG KG	2000 301.835
42	OSELTAMAVIR PHOSPHATE			
42 43	OSELTAMAVIR PHOSPHATE PACLITAXEL	BACCATIN-III	KG	301.835
42 43	OSELTAMAVIR PHOSPHATE PACLITAXEL	BACCATIN-III  3-METHYL-6-NITRO-1H-INDAZOLE  2,4-DICHLORO PYRIMIDINE	KG KG KG	301.835 501 1100.4
42 43 44	OSELTAMAVIR PHOSPHATE PACLITAXEL PAZOPANIB	BACCATIN-III 3-METHYL-6-NITRO-1H-INDAZOLE	KG KG	301.835 501

47	QUTIAFINE HEMIFUMARATE	O-CHLORO NITRO BENZENE	KG	63201.2
		THIOPHENOL	KG	41061
		4-NITRO PHENYL CHLOROFORMATE	KG	29132.1
		5-HYDROXY METHYL THIAZOLE	KG	13655.25
48	RITONAVIR	ISOBUTARAMIDE	KG	78982.6
		(2S,3S,5S)-2-AMINO-3-HYDROXY-5-(T-BUTYLO	KG	55.36
		(S,E)-5 AMINO-2-(DIBENZYLAMINO)- 1,6-DIPH	KG	85128.6
49	RIZATRIPTAN	1-(BROMO METHYL)-4-NITRO BENZENE	KG	252
		3-METHYL-4-NITRO BENZOIC ACID	KG	13200.5
50	TELMISARTAN	N-METHYL-1,2-BENZENEDIAMINE DIHYDROCHLOR	KG	11641
		2-PROPYL-1-H-IMIDAZOLE-4,5-DI- CARBOXYLIC ACID	KG	2602
51	TEMOZOLOMIDE	5-AMINO – 1H-IMIDAZOLE-4- CARBOXAMIDE HC	KG	216.9
52	TENOFOVIR FUMIRATE	DIETHYL PARA TOLUENE SULFONYL OXY METHYL	KG	6261
		(R) PROPYLENE CARBONATE	KG	23738
		ADENINE	KG	26000
53	TORSEMIDE	4-HYDROXY PYRIDINE-3-SULFONIC ACID	KG	0.04
54	VORICANAZOLE	2,4-DIFLUORO-2-(1H-1,2,4-TRIAZOLE- 1-YL)	KG	3306.5
55	ZONISAMIDE	4-HYDROXY COUMARIN	KG	16200.9



**Environmental Engineers & Consultants in Pollution Control** 

Enviro House,B-1, Block - B, IDA Autonagar,Visakhapatnam Phone: 9440338628

Email:info@svenvirolabs.com

( Recognized by GOI, Ministry of Environment & Forests )

( An ISO 9001 Certified and NABET Accredited for EIA )



**Ref Code** 

SVELC/HLL3/23-03/001

Date: 21-03-2023

Name and Address

M/s. HETERO LABS LIMITED (UNIT-III)

Nallamatipalem Village, Nakkapally Mandal,

Visakhapatnam (Dt).

Sample Particulars

Ambient Air Quality

**Source of Collection** 

Near Canteen Area

Sample Code

SVELC/23/AAQ/0301

**Date and Time of Start** 

: 11-03-2023 11:45 hr

**Duration of Sampling** 

24 Hours

**Atmosphere Condition** 

**CLEAR SKY** 

#### **TEST REPORT**

S.NO	PARAMETER	UNIT	RESULT	METHOD	NAAQ STANDARD
1	Particulate Matter – PM <sub>10</sub>	μg/m³	64.1	IS : 5182 – P-23	100
2	Particulate Matter – PM <sub>2.5</sub>	μg/m³	25.6	IS : 5182 – P-24	60
3	Sulphur Dioxide – SO <sub>2</sub>	μg/m³	14.7	IS : 5182 – P-2	80
4	Oxides of Nitrogen – NO <sub>X</sub>	µg/m³	13.4	IS : 5182 – P-6	80

ANALYZED BY



**Environmental Engineers & Consultants in Pollution Control** 

Enviro House,B-1, Block - B, IDA Autonagar,Visakhapatnam Phone: 9440338628

Email:info@svenvirolabs.com

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**Ref Code** 

: SVELC/HLL3/23-03/002

Date: 21-03-2023

Name and Address

: M/s. HETERO LABS LIMITED (UNIT-III)

Nallamatipalem Village, Nakkapally Mandal,

Visakhapatnam (Dt).

Sample Particulars

: Ambient Air Quality

**Source of Collection** 

: Near Production Area (Block-A)

Sample Code

: SVELC/23/AAQ/0302

**Date and Time of Start** 

: 11-03-2023 12:00 hr

**Duration of Sampling** 

24 Hours

**Atmosphere Condition** 

**CLEAR SKY** 

#### **TEST REPORT**

S.NO	PARAMETER	UNIT	RESULT	METHOD	NAAQ STANDARD
1	Particulate Matter – PM <sub>10</sub>	μg/m³	67.4	IS: 5182 – P-23	100
2	Particulate Matter – PM <sub>2.5</sub>	μg/m³	26.8	IS: 5182 – P-24	60
3	Sulphur Dioxide – SO <sub>2</sub>	μg/m³	15.2	IS : 5182 – P-2	80
4	Oxides of Nitrogen – NOx	μg/m³	12.5	IS : 5182 – P-6	80

VISAKHAPATHA

ANALYZED BY

**Environmental Engineers & Consultants in Pollution Control** 

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Phone: 9440338628

Email:info@svenvirolabs.com ( Recognized by GOI, Ministry of Environment & Forests )

( An ISO 9001 Certified and NABET Accredited for EIA )

Ref Code : SVELC/HLL3/23-03/003

M/s. HETERO LABS LIMITED (UNIT-III)

Nallamatipalem Village, Nakkapally Mandal,

Visakhapatnam (Dt).

Sample Particulars : Ambient Air Quality

Source of Collection : Near Production Block

Sample Code : SVELC/23/AAQ/0303

Date and Time of Start : 11-03-2023 12:15 hr

**Duration of Sampling** : 24 Hours **Atmosphere Condition** : CLEAR SKY

Name and Address

#### **TEST REPORT**

S.NO	PARAMETER	UNIT	RESULT	METHOD	NAAQ STANDARD
1	Particulate Matter – PM <sub>10</sub>	μg/m³	68.5	IS : 5182 – P-23	100
2	Particulate Matter – PM <sub>2.5</sub>	μg/m³	27.1	IS: 5182 – P-24	60
3	Sulphur Dioxide – SO <sub>2</sub>	μg/m³	16.4	IS : 5182 – P-2	80
4	Oxides of Nitrogen – NOx	μg/m³	14.9	IS : 5182 – P-6	80

ANALYZED BY

SV ENVIRO LABS & CONSULTANTS

Date: 21-03-2023



**Environmental Engineers & Consultants in Pollution Control** 

Enviro House,B-1, Block - B, IDA Autonagar,Visakhapatnam

Phone: 9440338628

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(An ISO 9001 Certified and NABET Accredited for EIA)

**Ref Code** 

: SVELC/HLL3/23-03/004

Date: 21-03-2023

Name and Address

: M/s. HETERO LABS LIMITED (UNIT-III)

Nallamatipalem Village, Nakkapally Mandal,

Visakhapatnam (Dt).

Sample Particulars

: Effluent Analysis

Source of Collection

: ETP INLET

Sample Code

SVELC/23/EFF/0304

Date of Collection

Date of Receipt

: 11-03-2023 : 11-03-2023

#### **TEST REPORT**

S No	Parameter	Unit	Result	Method
1	рН	-,-11	7.51	APHA 4500-H+B, 23 <sup>rd</sup>
2	Suspended Solids – SS	mg/l	178	APHA 2540-D, 23 <sup>rd</sup> Ed,2017
3	Total Dissolved Solids – TDS	mg/l	13348	APHA,2540-C,23 <sup>rd</sup> Ed, 2017
4	Chemical Oxygen Demand – COD	mg/l	11496	APHA 5220-B, 23 <sup>rd</sup> Ed,2017
5	BOD 3d 27°C	mg/l	4434	IS 3025 Part 44
6	Chlorides as Cl-	mg/l	2986	APHA,4500-CI B,23 <sup>rd</sup> Ed, 2017
7	Oil & Grease	mg/l	6.4	APHA,5520-D,5-38,23 <sup>rd</sup> Ed, 2017
8	Sulphide as S	mg/l	8.02	APHA,4500S <sup>2</sup> D, 23 <sup>rd</sup> Ed,2017
9	Phenolic Compounds (C <sub>6</sub> H <sub>5</sub> OH)	mg/l	0.31	APHA,5530-C, 23 <sup>rd</sup> Ed,2017
10	Cyanide as CN	mg/l	BDL	APHA,4500-CN-E, 23rd Ed,2017
11	Hexavalent Chromium as Cr+6	mg/l	BDL	APHA,3500-Cr B , 23rd Ed,2017
12	Lead as Pb	mg/l	BDL	APHA,3120-B, 23rd Ed,2017

Note: BDL denotes Below Detectable Level

ANALYZED BY



**Environmental Engineers & Consultants in Pollution Control** 

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Q.C

**Ref Code** 

SVELC/HLL3/23-03/005

Date: 21-03-2023

Name and Address

M/s. HETERO LABS LIMITED (UNIT-III)

Nallamatipalem Village, Nakkapally Mandal,

Visakhapatnam (Dt).

Sample Particulars

: Stack Monitoring

Source of Collection

: 725 KVA Generator

Sample Code

SVELC/23/SE/0305

**Date and Time of Start** 

: 11-03-2023 13:00 hr

**Duration of Sampling** 

30 MINS

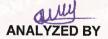
#### **TEST REPORT**

#### STACK DETAILS

S No	Description	Unit	Result
1	Pitot Coefficient		0.87
2	Specific Gravity of Fluid	-	1.0
3	Temperature @ DGM	°C	34
4	Stack Temperature	°C	152
5	Nozzle diameter	mm	10
6	Exit Velocity	m/sec	13.4
7	Fuel Used		HSD

#### EMISSION DATA

S.No	Parameter Parameter	Unit	Result	Method	Standard
1	Particulate Matter – PM	mg/nm³	63.4	IS:11255 - P-1	115
2	Sulphur Dioxide - SO₂	mg/nm³	28.9	IS:11255 - P-2	- EUP
3	Oxides of Nitrogen – NOx	mg/nm³	46.7	IS:11255 - P-7	





## SV ENVIRO LABS & CONSULTANTS Environmental Engineers & Consultants in Pollution Control



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Date: 21-03-2023

**Ref Code** 

: SVELC/HLL3/23-03/006

Name and Address

: M/s. HETERO LABS LIMITED (UNIT-III)

Nallamatipalem Village, Nakkapally Mandal,

Visakhapatnam (Dt).

Sample Particulars

: Stack Monitoring

**Source of Collection** 

1165 KVA DG SET - I

Sample Code

: SVELC/23/SE/0306

**Date and Time of Start** 

: 11-03-2023

13:45 Hr

**Duration of Sampling** 

30 MINS

#### **TEST REPORT**

S No	Description	Unit	Result
1	Pitot Coefficient		0.87
2	Specific Gravity of Fluid		1.0
3	Temperature @ DGM	°C	33
4	Stack Temperature	°C	184
5	Nozzle Diameter	mm	10
6	Exit Velocity	m/sec	15.6
7	Duration of Sampling	minutes	30
8	Fuel Used	<u>-</u>	HSD

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S.No	Parameter	Unit	Result	Method	Standard
1	Particulate Matter – PM	mg/nm <sup>3</sup>	70.1	IS:11255 - P-1	115
2	Sulphur Dioxide - SO <sub>2</sub>	mg/nm <sup>3</sup>	45.4	IS:11255 - P-2	
3	Oxides of Nitrogen – NOx	mg/nm³	61.8	IS:11255 - P-7	a Cui



P.B.S. & C.O.S.

P.B.S.



Name and Address

**Ref Code** 

# **SV ENVIRO LABS & CONSULTANTS Environmental**

**Engineers & Consultants in Pollution Control** 

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Phone: 9440338628 Email:info@svenvirolabs.com

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: SVELC/HLL3/23-03/007

M/s. HETERO LABS LIMITED (UNIT-III)

Nallamatipalem Village, Nakkapally Mandal,

Visakhapatnam (Dt).

Sample Particulars Stack Monitoring

Source of Collection : 1165 KVA DG SET - II

Sample Code SVELC/23/SE/0307

**Date and Time of Start** 11-03-2023 14:30 Hr **Duration of Sampling** 

30 MINS

#### **TEST REPORT**

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S.No	Description	Unit	Result
1	Pitot Coefficient		0.87
2	Specific Gravity of Fluid	- 1	1.0
3	Temperature @ DGM	°C	33
4	Stack Temperature	°C	212
5	Nozzle Diameter	mm	10
6	Exit Velocity	m/sec	16.1
7	Duration of sampling	minutes	30
7	Fuel Used		HSD

#### **EMISSION DATA**

S.No	Parameter	Unit	Result	Method	Standard
1	Particulate Matter – PM	mg/nm³	70.5	IS:11255 - P-1	115
2	Sulphur Dioxide - SO <sub>2</sub>	mg/nm³	38.4	IS:11255 - P-2	
3	Oxides of Nitrogen - NO <sub>X</sub>	mg/nm³	59.2	IS:11255 - P-7	- 48

VISAKYAPATNAM

SV ENVIRO LABS & CONSULTANTS

Date: 21-03-2023



**Environmental Engineers & Consultants in Pollution Control** 

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**Ref Code** 

SVELC/HLL3/23-03/008

Name and Address

: M/s. HETERO LABS LIMITED (UNIT-III)

Date: 21-03-2023

Nallamatipalem Village, Nakkapally Mandal,

Visakhapatnam (Dt).

**Sample Particulars** 

Stack Monitoring

**Source of Collection** 

: 2030 KVA Generator - I

Sample Code

: SVELC/23/SE/0308

**Date and Time of Start** 

: 11-03-2023 15:00 hr

**Duration of Sampling** 

30 MINS

#### **TEST REPORT**

#### STACK DETAILS

S No	Description	Unit	Result
1	Pitot Coefficient	- 1	0.87
2	Specific Gravity of Fluid	- 1	1.0
4	Temperature @ DGM	°C	32
5	Stack Temperature	°C	228
6	Nozzle Diameter	mm	10
7	Exit Velocity	m/sec	17.9
8	Fuel Used		HSD

#### **EMISSION DATA**

S.No	Parameter	Unit	Result	Method	Standard
1	Particulate matter – PM	mg/nm³	74.6	IS:11255 - P-1	115
2	Sulphur Dioxide - SO <sub>2</sub>	mg/nm³	41.5	IS:11255 - P-2	
3	Oxides of Nitrogen - NOx	mg/nm³	64.8	IS:11255 - P-7	





Name and Address

## **SV ENVIRO LABS & CONSULTANTS**

**Environmental Engineers & Consultants in Pollution Control** 

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Ref Code : SVELC/HLL3/23-03/09

M/s. HETERO LABS LIMITED (UNIT-III)

Nallamatipalem Village, Nakkapally Mandal,

Visakhapatnam (Dt).

Sample Particulars : Stack Monitoring

Source of Collection : 2030 KVA Generator - II

Sample Code : SVELC/23/SE/0309

Date and Time of Start : 11-03-2023 15:45 hr

Duration of Sampling : 30 MINS

#### **TEST REPORT**

#### STACK DETAILS

S No	Description	Unit	Result	
_1	Pitot Coefficient		0.87	
2	Specific Gravity of Fluid		1.0	
4	Temperature @ DGM	°C	32	
5	Stack Temperature	°C	224	
6	Nozzle Diameter	mm	10	
7	Exit Velocity	m/sec	17.4	
8	Fuel Used		HSD	

#### EMISSION DATA

S.No	Parameter	Unit	Result	Method	Standard
1	Particulate Matter – PM	mg/nm <sup>3</sup>	80.1	IS:11255 - P-1	115
2	Sulphur Dioxide - SO <sub>2</sub>	mg/nm³	40.3	IS:11255 - P-2	
3	Oxides of Nitrogen – NOx	mg/nm³	61.7	IS:11255 - P-7	

ANALYZED BY



SV ENVIRO LABS & CONSULTANTS

Date: 21-03-2023