

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE
BENCH AT CHENNAI**

Original Application No. 80 of 2020

Between:

**KALUSHYA PARIRAKSHANA SAMITHI
(Erstwhile Society)**

Through its authorised representatives

1. Jala Venkatesham
S/o J. Maisaiah R/o 3-529/A,
Choutuppal (Post & Mandal)
Yadadri Bhuvanagiri District,
Telangana-508252
2. Yerrasani. Sathishkumar
S/o Y. Premkumar, R/o 1-87,
Choutuppal (Post & Mandal)
Yadadri Bhuvanagiri District,
Telangana-508252.
3. Sappidi. Linga Reddy
S/o S.SriRamReddy, R/o1-87,
Choutuppal (Post&Mandal)
Yadadri Bhuvanagiri District,
Telangana-508252
4. Gunamgiri. Manohar Reddy
S/o G.Malla Reddy, R/oPlot No:3,
Tirumala Hills, Malakpet, Hyderabad,
Telangana-500036.

...Applicants

-versus-

1. Union of India
Rep. by its Secretary
Indira Paryavaran Bhavan
Jorbagh, New Delhi-110003
2. State of Telangana
Rep. by its Chief Secretary, Secretariat,
Hyderabad-500022
3. Telangana State Pollution Control Board,
Rep. by its Member Secretary,
A-3, Paryavaran Bhavan,
Sanath Nagar Industrial Estate,
Sanath Nagar, Hyderabad-500018
4. Director
Drugs Control Administration
State of Telangana
Vengalrao Nagar, Hyderabad-500038
5. Agriculture Commissioner & Director
Fathe Midan, Basheer Bagh
Near Nizam College, Basheer Bagh
Hyderabad, Telangana 500001

6. The District Collector
Yadradri-Bhuvanagiri District,
Bhuvanagiri, Telengana State-508116
7. District Medical & Health Officer
Yadradri-Bhuvanagiri District,
Bhuvanagiri, Telengana State-508116
8. M/s Divi's Laboratories Pvt. Ltd.
Rep. by its Managing Director
Lingojigudem Village
Choutuppal Mandal, Yadadri Bhuvanagiri District
Telengana State – 508252
9. M/s. Srini Pharmaceuticals Pvt. Ltd.
Rep. by its Managing Director
Choutuppal, Yadadri District
Telengana – 508252
10. M/s. Maruthi Cottex Ltd.
Rep. by its Managing Director
Choutuppal, Yadadri District
Telengana-508252
11. Central Pollution Control Board
Rep. by its Member Secretary
Parivesh Bhavan, Eash Arjun Nagar
Delhi-32. ...Respondents

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Certified to be true copies of the original

Dated at Chennai on this the 28th day of September, 2023



COUNSEL FOR 8th RESPONDENT

17-01-2020
Inspection by the RO-PCB Nalgonda Team
(EE, AEE, AES & FAs)

Inspection of ZLD-ETP by PCB-RO team on 17.01.2020

2



Effluent collection tanks



Aeration tank



Vagu and rain water flow details



Verifying the records



Sludge Beds Area



Online Effluent Monitoring Sytem

5



RO permeate & Discharge flow meter



MEE & ATFDs

6



2020/01/17 16:54



2020/01/17 16:51



2020/01/17 17:06



2020/01/17 17:06



2020/01/17 16:53



2020/01/17 17:03

Cooling tower of MEE vacuum pump



MEE Reject storage area





TELANGANA STATE POLLUTION CONTROL BOARD
REGIONAL OFFICE: NALGONDA

B.RAJENDER,
ENVIRONMENTAL ENGINEER

H. No. 8-15, 1st Floor
Sri Lakshmi Complex
Near RTO Office, Sri Vinayaka Nagar
Hyderabad Road, Nalgonda-508 001

Lr. No. HRC 207/2020/PCB/ RO-NLG/2020 - 58,

Date: 05.02.2020

To,
The Member Secretary,
T.S. Pollution Control Board,
Board Office, Sanathnagar,
Hyderabad.

Respected Madam,

Sub: TSPCB, RO, NLG – **Legal** - HR Case No:207/2020 filed by Sri Jala Venkatesham and others regarding Air, Water & land Pollution caused by M/s. Divis Laboratories Ltd., M/s. Srinu Pharmaceuticals Pvt Ltd., & M/s. Maruthi Cottex Ltd, Choutuppal (V&M), Yadadri Bhuvanagiri District – Report submitted – Reg.

Ref: HR Case No:207/2020, dated:20.01.2020 (forwarded by Board office mail dated 01.02.2020)

With reference to the above, it is to submit that Sri Jala Venkatesham & others (Kalushya Parirakshana Samithi), Choutuppal (V&M), Yadadri Bhuvanagiri District have filed a HR case No. 207 of 2020 in Hon'ble TSHRC alleging that several chemical companies such as M/s. Divis Laboratories Ltd., M/s. Srinu Pharmaceuticals Pvt Ltd., & M/s. Maruthi Cottex Ltd etc are creating water, air and soil pollution in the village. The petitioners have alleged that farmers are losing their livelihoods due to pollution by chemical companies in Choutuppal. The Hon'ble HRC called for report from the Member Secretary about the allegation made in the petition by 07.02.2020 and listed the case for hearing on 07.02.2020.

The Board office vide mail dated 01.02.2020 has forwarded the petition and directed this office to submit detailed report immediately.

In this regard, it is to submit that the Board officials have inspected the 3 industries and surrounding agricultural lands and collected samples of ground water from the bore wells and also from the industries. The status of the 3 industries is submitted herewith for kind information and for necessary action.

This is submitted for kind information and necessary action.

Encl: As above

Yours faithfully

B Rajender
05/02/2020
ENVIRONMENTAL ENGINEER
ENVIRONMENTAL ENGINEER
T.S. Pollution Control Board,
Regional Office, Nalgonda.

REPORT OF THE ENVIRONMENTAL ENGINEER, TSPCB, REGIONAL OFFICE, NALGONDA IN HR Case No.207/2020 FILED BY SRI JALA VENKATESHAM & OTHERS (KALUSHYA PARIRAKSHANA SAMITHI), CHOUTUPPAL (V&M), YADADRI BHUVANAGIRI DISTRICT ALLEGING THAT SEVERAL CHEMICAL COMPANIES SUCH AS M/S. DIVIS LABORATORIES LTD., M/S. SRINI PHARMACEUTICALS PVT LTD., & M/S. MARUTHI COTTEX LTD IN THE HON'BLE TS HUMAN RIGHTS COMMISSION.

It is to submit that Sri Jala Venkatesham & others (Kalushya Parirakshana Samithi), Choutuppal (V&M), Yadadri Bhuvanagiri District have filed a HR case No. 207 of 2020 in Hon'ble TSHRC alleging that several chemical companies such as M/s. Divis Laboratories Ltd., M/s. Srinu Pharmaceuticals Pvt Ltd., & M/s. Marthi Cottex Ltd are creating water, air and soil pollution in the village. The petitioners have alleged that farmers are losing their lively hoods due to pollution by chemical companies.

In this regard, it is to submit that TSPCB also recently received complaints from the villagers of Thangadapally (V), Aregudem (V), Katrevu (V) against M/s. Divis Laboratories Ltd., and M/s. Srinu Pharmaceuticals Pvt Ltd., regarding pollution problems caused by these industries and also affecting the crops, cattle of the area. On receipt of the complaints, the Board Officials have inspected these 2 industries and surrounding agricultural fields. After receipt of the HRC Case No.207/2020, the Board officials have inspected M/s. Maruthi Cottex Ltd., Choutuppal (V&M), Yadadri Bhuvanagiri District on 03.02.2020. During inspection, the Board officials have collected ground water samples from the bore wells located in the surrounding agricultural fields and also from the industries for analysis.

The details of the inspection report is as submitted below:

The Board officials attended the complaints on 17.01.2020. During the inspection, the Board officials contacted the complainant Sri G. Manohar Reddy over Telephone to accompany. But he has informed that he is out of station and sent his representative Sri Chappidi Lingareddy. Other villagers of Thangadapally and Aregudem were also present.

The Board officials along with the villagers have visited the agricultural fields of Thangadepally and Aregudem villages which are located back side of these industries. During the inspection, it was observed that cotton cultivation is done in majority of the agricultural lands and paddy is also cultivated in small area. The Board officials on 17.01.2020 have collected ground water samples from the following bore wells located in the agricultural fields and submitted to Board Laboratory for analysis.

1. Water sample collected from Bore well in Agriculture land of Sri Balike Sattaiah, S/o. Mallaiah, Sy.No. 66 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
2. Water sample collected from Bore well in Agriculture land of Sri Balike Mallaiah, S/o. Sattaiah, Sy.No. 52 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
3. Water sample collected from Bore well in Agriculture land of Sri Arige Veera swamy, S/o. Kistaiah, Sy.No. 80 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
4. Water sample collected from Bore well in Agriculture land of Sri Jala Mallaiah, S/o. Rajaiah, Sy.No. 251 of Choutuppal (V&M), Yadadri Bhuvanagiri District.
5. Water sample collected from Bore well in Agriculture land of Sri Katta Narsimha, S/o. Lakshmaiah, Thangad pally (V), Choutuppal (M), Yadadri Bhuvanagiri District.

It is to submit that, earlier on 26.11.2019 the Board officials collected ground water samples from the following bore wells located in the agricultural fields in connection with the public complaints.

1. Water sample collected from Bore well in Agriculture land of Sri Arige Veeraiah, S/o. Kistaiah, Sy.No. 80 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
2. Water sample collected from Bore well in Agriculture land of Sri Arige Veera swamy, S/o. Naraiah, Sy.No. 78 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
3. Water sample collected from Bore well in Agriculture land of Sri Arige Bheeraiah, S/o. Sattaiah, Sy.No. 78 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
4. Water sample collected from Bore well in Agriculture land of Sri Gundeboina Satyanarayana, S/o. Istaari, Sy.No. 250 of Choutuppal (V&M), Yadadri Bhuvanagiri District.
5. Water sample collected from Bore well in Agriculture land of Sri Jala Maisaiah, S/o. Muthyalu, Sy.No. 266 of Choutuppal (V&M), Yadadri Bhuvanagiri District.
6. Water sample collected from Bore well in Suramamba Kantamaheshwara Swamy Temple Aregudem (V), Choutuppal (M), Yadadri Bhuvanagiri District.
7. Water sample collected from Bore well in Agriculture land of Sri Ananthula Mutyalu, S/o. Yellaiah, Sy.No. 472 of Aregudem (V), Choutuppal (M), Yadadri Bhuvanagiri District.
8. Water sample collected from Bore well in Agriculture land of Sri Sama Janardhan Reddy, S/o. Mallareddy, Sy.No. 501&502 of Panthangi (V), Choutuppal (M), Yadadri Bhuvanagiri District.

The samples collected from the bore wells in the above agricultural fields were analyzed at Board laboratory for finger printing analysis to identify any chemical compounds present in the ground water. As per the analysis results, no compounds were detected in the above bore well samples. The analysis results are submitted below: **(Samples collected on 26.11.2019)**

Sample code : Sample details / collection point

- 11392 - Water sample collected from Borewell in Agriculture land of Sri Arige Veeraiah, S/o. Kistaiah, Sy.No. 80 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District
- 11393 - Water sample collected from Borewell in Agriculture land of Sri Arige Veera swamy, S/o. Naraiah, Sy.No. 78 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District
- 11394 - Water sample collected from Borewell in Agriculture land of Sri Arige Bheeraiah, S/o. Sattaiah, Sy.No. 78 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District
- 11395 - Water sample collected from Borewell in Agriculture land of Sri Gundeboina Satyanarayana, S/o. Istaari, Sy.No. 250 of Choutuppal (V&M), Yadadri Bhuvanagiri District

Parameters	Unit	Results				Drinking water standards as per IS 10500: 2012
		11392	11393	11394	11395	
pH	-	7.92	7.96	7.82	7.77	6.5-8.5
Electrical conductivity	µS/cm	3370	3420	3370	3220	-
Total Suspended Solids	mg/L	< 5	< 5	< 5	< 5	-
Total Dissolved Solids	mg/L	2191	2223	2194	2093	500* (2000**)
Chlorides as Cl ⁻	mg/L	867	823	886	731	250* (1000**)
Sulphates as SO ₄ ⁻²	mg/L	54	75	73	62	200* (400**)
Total Alkalinity as CaCO ₃	mg/L	240	280	240	200	200* (600**)
Total Hardness as CaCO ₃	mg/L	1276	1068	1040	1200	200* (600**)
Calcium as Ca+2	mg/L	210	190	222	291	75* (200**)
Magnesium as Mg+2	mg/L	183	217	166	115	30* (100**)
Nitrates	mg/L	17	17	20	26	45**
Fluoride	mg/L	0.01	0.02	BDL	0.017	1.0* (1.5**)
Turbidity	mg/L	6.5	2.3	0.48	0.87	5**
Phosphates	mg/L	0.4	0.2	0.5	BDL	-
Sodium as Na	mg/L	141	180	165	469	-
Potassium as K	mg/L	4	3	4	4	-
SAR	-	2.0	2.0	2.0	7.0	-
Boron	mg/L	BDL	BDL	BDL	BDL	-
Heavy Metals						
Copper	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	0.05*(1.5**)
Nickel	mg/L	ND	ND	ND	ND	0.02
Zinc	mg/L	0.272	0.245	0.450	< 0.1	5*(15**)
Cadmium	mg/L	ND	ND	ND	ND	0.003

Lead	mg/L	ND	ND	ND	ND	0.01
Total Chromium	mg/L	ND	ND	ND	ND	0.05

BDL: Below Detectable limit

ND: Not Detectable

Sample code : Sample details / collection point

- 11396 - Water sample collected from Borewell in Agriculture land of Sri Jala Maisaiah, S/o. Muthyalu, Sy.No. 266 of Choutuppal (V&M), Yadadri Bhuvangiri District
- 11397 - Water sample collected from Borewell in Suramamba Kantamaheshwara Swamy Temple Aregudem (V), Choutuppal (M), Yadadri Bhuvangiri District
- 11398 - Water sample collected from Borewell in Agriculture land of Sri Ananthula Mutyalu, S/o. Yellaiah, Sy.No.472 of Aregudem (V), Choutuppal (M), Yadadri Bhuvangiri District
- 11399 - Water sample collected from Borewell in Agriculture land of Sri Sama Janardhan Reddy, S/o. Mallareddy, Sy.No. 501 & 502 of Panthangi (V), Choutuppal (M), Yadadri Bhuvangiri District

Parameters	Unit	Results				Drinking water standards as per IS 10500: 2012
		11396	11397	11398	11399	
pH	-	7.67	8.36	8.39	8.31	6.5-8.5
Electrical conductivity	µS/cm	2991	1742	2106	2353	-
Total Suspended Solids	mg/L	32	< 5	< 5	< 5	-
Total Dissolved Solids	mg/L	1944	1080	1307	1459	500* (2000**)
Chlorides as Cl ⁻	mg/L	1036	249	597	634	250* (1000**)
Sulphates as SO ₄ ⁻²	mg/L	208	59	11	16	200* (400**)
Total Alkalinity as CaCO ₃	mg/L	320	552	256	384	200* (600**)
Total Hardness as CaCO ₃	mg/L	1824	440	760	616	200* (600**)
Calcium as Ca ⁺²	mg/L	211	80	96	86	75* (200**)
Magnesium as Mg ⁺²	mg/L	193	58	126	97	30* (100**)
Nitrates	mg/L	30	31	6	4	45**
Fluoride	mg/L	BDL	0.3	BDL	BDL	1.0* (1.5**)
Turbidity	mg/L	0.43	0.87	0.92	0.31	5**
Phosphates	mg/L	BDL	0.2	BDL	BDL	-
Sodium as Na	mg/L	461	235	311	224	-
Potassium as K	mg/L	8	3	3	3	-
SAR	-	6.0	4.0	5.0	4.0	-
Boron	mg/L	BDL	BDL	BDL	BDL	-
Heavy Metals						
Copper	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	0.05*(1.5**)
Nickel	mg/L	ND	ND	ND	ND	0.02
Zinc	mg/L	< 0.1	0.363	0.137	< 0.1	5*(15**)
Cadmium	mg/L	ND	ND	ND	ND	0.003
Lead	mg/L	ND	ND	ND	ND	0.01
Total Chromium	mg/L	ND	ND	ND	ND	0.05

BDL: Below Detectable limit

ND: Not Detectable

Sample code : Sample details / collection point

- 11392 - Water sample collected from Bore well in Agriculture land of Sri Arige Veeraiah, S/o. Kistaiah, Sy. No. 80 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
- 11393 - Water sample collected from Bore well in Agriculture land of Sri Arige Veera Swamy, S/o. Naraiah, Sy. No. 78 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
- 11394 - Water sample collected from Bore well in Agriculture land of Sri Arige Bheeraiah, S/o. Sattaiah, Sy. No. 78 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
- 11395 - Water sample collected from Bore well in Agriculture land of Sri Gundeboina Satyanarayana, S/o. Istaari, Sy. No. 250 of Choutuppal (V & M), Yadadri Bhuvanagiri District.

Sample Code: 11392

S. No	Compounds Identified
	No compound detected

Sample Code: 11393

S. No	Compounds Identified
	No compound detected

Sample Code: 11394

S. No	Compounds Identified
	No compound detected

Sample Code: 11395

S. No	Compounds Identified
	No compound detected

Sample code : Sample details / collection point

- 11396 - Water sample collected from Bore well in Agriculture land of Sri Jala Maisaiah, S/o. Muthyalu, Sy. No. 266 of Choutuppal (V&M), Yadadri Bhuvanagiri District.
- 11397 - Water sample collected from Bore well in Suramamba Kantamaheshwara Swamy Temple Aregudem (V), Choutuppal (M), Yadadri Bhuvanagiri District.
- 11398 - Water sample collected from Bore well in Agriculture land of Sri Ananthula Mutyalu, S/o. Yellaiah, Sy. No. 472 of Aregudem (V), Choutuppal (M), Yadadri Bhuvanagiri District.
- 11399 - Water sample collected from Bore well in Agriculture land of Sri Sama Janardhan Reddy, S/o. Mallareddy, Sy. No. 501 & 502 of Panthangi (V), Choutuppal (M), Yadadri Bhuvanagiri District.

Sample Code: 11396

S. No	Compounds Identified
	No compound detected

Sample Code: 11397

S. No	Compounds Identified
	No compound detected

Sample Code: 11398

S. No	Compounds Identified
	No compound detected

Sample Code: 11399

S. No	Compounds Identified
	No compound detected

The samples collected from the bore wells in the above agricultural fields were analyzed at Board laboratory for finger printing analysis to identify any chemical compounds present in the ground water. As per the analysis results, no compounds were detected in the above bore well samples. The analysis results are submitted below: (**Samples collected on 17.01.2020**)

Sample code : Sample details / collection point

- 1285 - Water sample collected from Bore well in Agriculture land of Sri Balike Sattaiah S/o. Mallaiah, Sy. No. 66 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
- 1286 - Water sample collected from Bore well in Agriculture land of Sri Balike Mallaiah S/o. Sattaiah Sy. No. 52 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
- 1287 - Water sample collected from Bore well in Agriculture land of Sri Arige Veera Swamy S/o. Kistaiah, Sy. No. 80 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.

Parameters	Unit	Results			IS 10500 : 2012	
		1285	1286	1287	Acceptable Limit	Permissible Limit
pH at 25 ^o C	-	7.56	7.59	7.37	6.5-8.5	No Relaxation
Total Suspended Solids	mg/L	< 5	< 5	< 5	-	-
Total Dissolved Solids (TDS)	mg/L	2,370	2,480	2,850	500	2000
Chlorides as Cl ⁻	mg/L	1,137	1,191	1,283	250	1000
Sulphates as SO ₄ ⁻²	mg/L	68	70	120	200	400
Total Alkalinity as CaCO ₃	mg/L	370	420	540	200	600
Total Hardness as CaCO ₃	mg/L	1,408	1,520	1,640	200	600
Calcium as Ca+2	mg/L	250	194	266	75	200
Magnesium as Mg+2	mg/L	191	252	236	30	100
Fluoride	mg/L	1.5	1.8	BDL	1.0	1.5
Nitrates	mg/L	19	20	29	45	No Relaxation
Phosphates	mg/L	BDL	BDL	BDL	-	-
Boron	mg/L	ND	ND	ND	0.5	1.0
% Sodium	mg/L	24	25	22	-	-
SAR	mg/L	2.4	2.6	2.3	-	-
Sodium	mg/L	205	237	218	-	-
Potassium	mg/L	4.9	5.3	5.4	-	-

BDL: Below detectable limit

ND: Not detected

Sample code : Sample details / collection point

- 1288 - Water sample collected from Bore well in Agriculture land of Sri Jala Mallaiah S/o. Rajaiah, Sy. No. 251 of Choutuppal (V&M), Yadadri Bhuvanagiri District.
- 1289 - Water sample collected from Bore well in Agriculture land of Sri Katta Narsimha S/o. Lakshmaiah, Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.

Parameters	Unit	Results		IS 10500 : 2012	
		1288	1289	Acceptable Limit	Permissible Limit
pH at 25 ^o C	-	7.39	7.33	6.5-8.5	No Relaxation
Total Suspended Solids	mg/L	< 5	< 5	-	-
Total Dissolved Solids (TDS)	mg/L	2,950	2,720	500	2000
Chlorides as Cl ⁻	mg/L	1,269	1,304	250	1000
Sulphates as SO ₄ ⁻²	mg/L	247	65	200	400
Total Alkalinity as CaCO ₃	mg/L	320	280	200	600
Total Hardness as CaCO ₃	mg/L	1,820	1,770	200	600
Calcium as Ca+2	mg/L	292	328	75	200
Magnesium as Mg+2	mg/L	265	231	30	100
Fluoride	mg/L	0.9	1.7	1.0	1.5
Nitrates	mg/L	38	36	45	No Relaxation
Phosphates	mg/L	BDL	BDL	-	-
Boron	mg/L	ND	ND	0.5	1.0
% Sodium	mg/L	20	22	-	-
SAR	mg/L	2.2	2.4	-	-
Sodium	mg/L	214	231	-	-

Potassium	mg/L	5.7	4.7	-	-
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BDL: Below detectable limit

ND: Not detected

Sample code : Sample details / collection point

- 1285 - Water sample collected from Bore well in Agriculture land of Sri Balike Sattaiah S/o. Mallaiah, Sy. No. 66 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
- 1286 - Water sample collected from Bore well in Agriculture land of Sri Balike Mallaiah S/o. Sattaiah Sy. No. 52 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
- 1287 - Water sample collected from Bore well in Agriculture land of Sri Arige Veera Swamy S/o. Kistaiah, Sy. No. 80 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
- 1288 - Water sample collected from Bore well in Agriculture land of Sri Jala Mallaiah S/o. Rajaiah, Sy. No. 251 of Choutuppal (V&M), Yadadri Bhuvanagiri District.
- 1289 - Water sample collected from Bore well in Agriculture land of Sri Katta Narsimha S/o. Lakshmaiah, Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.

Sample Code: 1285

S. No	Compounds Identified
	No Compound detected

Sample Code: 1286

S. No	Compounds Identified
	No Compound detected

Sample Code: 1287

S. No	Compounds Identified
	No Compound detected

Sample Code: 1288

S. No	Compounds Identified
	No Compound detected

Sample Code: 1289

S. No	Compounds Identified
	No Compound detected

Again in connection with the HRC Case No.207/2020, the Board officials contacted the complainant Sri Jala venkatesham over telephone to accompany. But he has informed that he is out of station and sent his representative Sri Arige Veeraswamy. Other villagers of Choutuppal, Katrevu and Aregudem were also present.

The Board officials along with the villagers have visited the agricultural fields of Choutuppal, Katrevu and Aregudem villages which are located back side of these industries. The Board officials on 03.02.2020 have collected ground water samples from the following bore wells located in the agricultural fields and submitted to Board Laboratory for analysis. The analysis results are awaited.

1. Water sample collected from Bore well in Agriculture land of Sri Jala Maisaiah, S/o. Muthyalu, Sy.No. 266 of Choutuppal (V&M), Yadadri Bhuvanagiri District
2. Water sample collected from Bore well in the Annapurna Devi Temple of Katrevu (V), Choutuppal (M), Yadadri Bhuvanagiri District.

3. Water sample collected from Bore well in Agriculture land of Sri Malige Sattaiah, S/o. Bheerappa, Sy.No. -- of Katrevu (V), Choutuppall (M), Yadadri Bhuvanagiri District.
4. Water sample collected from Grampanchayath Hand Bore well, near Grampanchayath office, Katrevu (V), Choutuppall (M), Yadadri Bhuvanagiri District.
5. Water sample collected from Bore well in Agriculture land of Sri Manne Mohan Reddy, S/o. Janga Reddy, Sy.No. 540,541,542 of Aregudem (V), Choutuppall (M), Yadadri Bhuvanagiri District.
6. Water sample collected from Grampanchayath Hand Bore well which is located Beside Aregudem to NH- 65 road and Oppsite of 17 No. Timber shed, Sy.No. 417 of Aregudem (V), Choutuppall (M), Yadadri Bhuvanagiri District.

The Board officials have inspected M/s. Divis Laboratories Ltd., M/s. Srini Pharmaceuticals Pvt Ltd., & M/s. Marthi Cottex Ltd, Choutuppall (V&M), Yadadri Bhuvanagiri District. The inspection reports of the industries is submitted as below:

I) M/s Divi's Laboratories Ltd, Unit-1, Lingo jigudem (V), Choutuppall (M), Yadadri Bhuvanagiri District.

1. M/s Divi's Laboratories Ltd, Unit-I is located at Lingo jigudem (V), Choutuppall (M), Yadadri Bhuvanagiri District and engaged in manufacturing of Bulk Drugs & Intermediates.
2. The Board has issued Consent for Operation (CFO) and Hazardous waste Authorization (HWA) to the industry vide order dt.14.03.2019 for manufacture of 32 Bulk Drugs and R&D products with total production capacity of 7322.04 Kgs/day (6 Regular products and 10 products on campaign basis at any time) and R&D Developmental Products- 5.5 Kgs/day with validity of 31.03.2024.
3. The industry generates effluents from the process and is segregating effluents into the high TDS, low TDS effluents streams. The industry has provided Zero liquid discharge (ZLD) system consisting of Stripper, MEE, ATFD, Biological ETP and RO plant. The MEE condensate along with other LTDS effluents are treated in Biological ETP followed by RO plant. The RO permeate is reused for cooling tower make up and the RO rejects are sent to MEE for evaporation along with HTDs effluents.
4. During inspection on 17.01.2020, the Board officials have collected samples of effluents and ground water samples from piezo wells of the industry. The analysis results are as follows:

Parameters	Method (*) No.	Unit	Results		
			LTDS Raw Effluent	Biological ETP Inlet (ECOT Outlet)	Biological ETP Outlet (Ultra Filtration Feed)
pH at 25 ^o C	4500-B	-	4.3	7.1	7.12
Total Suspended Solids	2540-B	mg/L	435	255	168
Total Dissolved Solids (TDS)	2540-C	mg/L	8150	7640	7240
Chemical Oxygen Demand	5220-B	mg/L	22,240	15,600	1,440
Oil and Grease	5520 - B	mg/L	2.6	1.8	0.2

BDL: Below detectable limit

Sample Code: LTDS Raw Effluent

S. No	Compounds Identified
1	Toluene
2	Diethyl carbonate

3	Butanoic acid, 2-bromo-, ethyl
4	Naphthalene, 2-ethenyl-6-methoxy
5	Naproxen methyl ester
6	Naproxen
7	Triphenylphosphine oxide
8	Triphenylphosphine sulfide

Sample Code: HTDS Effluent (MEE Feed)

S. No	Compounds Identified
1	Formamide, N, N-dimethyl
2	2-Pyrrlidinone, 1-methyl
3	Benzenemethanamine, .alpha.-methyl
4	Ethane, 1, 1, 2, 2-tetramethoxy
5	Acetamide, N-(1-phenylethyl)
6	Alpha.phenethylurethane
7	Levetiracetam
8	2-Acetyl-6-methoxynaphthalene
9	Naproxen
10	Diltiazem
11	Triphenylphosphine oxide

Parameters	Method (*) No.	Unit	Results		
			Ultra Filtration Outlet (Process RO Feed)	Process RO Permiate	HTDS Effluent (MEE Feed)
pH at 25 ^o C	4500-B	-	7.0	6.9	6.4
Total Suspended Solids	2540-B	mg/L	11	8	528
Total Dissolved Solids (TDS)	2540-C	mg/L	7150	210	34,600
Chemical Oxygen Demand	5220-B	mg/L	1,424	84	14,240
Oil and Grease	5520 - B	mg/L	BDL	BDL	1.3

BDL: Below detectable limit

Parameters	Method (*) No.	Unit	Results		
			MEE Condensate	Non Process RO Feed (Cooling Towers & Boiler Bleedoffs)	Non Process RO Permiate
pH at 25 ^o C	4500-B	-	8.4	7.1	7.0
Total Suspended Solids	2540-B	mg/L	18	115	17
Total Dissolved Solids (TDS)	2540-C	mg/L	455	3,218	190
Chemical Oxygen Demand	5220-B	mg/L	388	872	36
Oil and Grease	5520 - B	mg/L	BDL	BDL	BDL

BDL: Below detectable limit

Source: M/s. Divis Laboratories Ltd., Lingo jigudem (V), Chou ttupal (M), Yadadri Bhuvanagiri District.

Sample code : Sample details / collection point

- 11400 - Water sample collected from Peizo Well No. 1.
 11401 - Water sample collected from Peizo Well No. 2.
 11402 - Water sample collected from Peizo Well No.3.
 11403 - Water sample collected from Peizo Well No.4.
 11404 - Water sample collected from Peizo Well No.5.

Parameters	Unit	Results				
		11400	11401	11402	11403	11404
pH at 25°C	-	7.31	7.67	7.05	7.1	6.96
Total Suspended Solids	mg/L	< 5	< 5	< 5	< 5	< 5
Total Dissolved Solids (TDS)	mg/L	1,410	1,015	1,315	1,182	1,348
Chemical Oxygen Demand	mg/L	15	10	12	10	12
Chlorides as Cl ⁻	mg/L	379	277	539	520	481
Sulphates as SO ₄ ⁻²	mg/L	169	93	69	54	39
Total Alkalinity as CaCO ₃	mg/L	388	216	310	210	170
Total Hardness as CaCO ₃	mg/L	740	320	920	620	1,310
Calcium as Ca+2	mg/L	136	36	144	110	220
Magnesium as Mg+2	mg/L	97	56	136	84	185
Fluoride	mg/L	0.2	0.21	0.81	0.4	0.18
Nitrates	mg/L	35	25	7	10	29
Phosphates	mg/L	BDL	BDL	BDL	BDL	BDL
Sodium	mg/L	285	101	184	183	235
Potassium	mg/L	1.8	1.5	2	1.8	1.5
% Sodium	%	45	40	30	39	28
SAR	-	4.5	2.4	2.6	3.2	2.8

Sample code : Sample details / collection point

- 11405 - Water sample collected from Peizo Well No. 6.
 11406 - Water sample collected from Peizo Well No. 7.
 11407 - Water sample collected from Peizo Well No.8.
 11408 - Water sample collected from Peizo Well No.9.

Parameters	Unit	Results			
		11405	11406	11407	11408
pH at 25°C	-	7.13	7.16	7.12	7.19
Total Suspended Solids	mg/L	< 5	< 5	< 5	< 5
Total Dissolved Solids (TDS)	mg/L	1,185	1,336	1,307	2,992
Chemical Oxygen Demand	mg/L	10	8	10	57
Chlorides as Cl ⁻	mg/L	491	476	573	1,239
Sulphates as SO ₄ ⁻²	mg/L	69	22	45	274
Total Alkalinity as CaCO ₃	mg/L	240	370	130	280
Total Hardness as CaCO ₃	mg/L	750	890	803	1,094
Calcium as Ca+2	mg/L	68	112	140	390
Magnesium as Mg+2	mg/L	141	148	110	119
Fluoride	mg/L	0.59	0.49	0.47	0.1
Nitrates	mg/L	27	16	29	39
Phosphates	mg/L	0.39	BDL	BDL	0.27
Sodium	mg/L	168	198	239	508

Potassium	mg/L	0.89	2	1.9	2.1
% Sodium	%	32	32	39	43
SAR	-	2.7	2.9	3.7	5.8

BDL: Below detectable limit

Sample code : Sample details / collection point

- 11409 - Water sample collected from borewell near 'B' Hostel within the Industry premises
 11410 - Water sample collected from borewell which is located between substation and 'B' Hostel within the Industry premises
 11411 - Water sample collected from borewell near main entrance gate within the Industry premises

	Unit	Result			Drinking water standards as per IS 10500: 2012
		11409	11410	11411	
pH	-	7.76	7.49	7.73	6.5-8.5
Electrical Conductivity	µS/cm	1995	1634	1385	-
Total Suspended Solids	mg/L	< 5	< 5	< 5	-
Total Dissolved Solids	mg/L	1100	930	780	500* (2000**)
Chlorides as Cl ⁻	mg/L	407	329	244	250* (1000**)
Sulphates as SO ₄ ⁻²	mg/L	44	45	55	200* (400**)
Total Alkalinity as CaCO ₃	mg/L	288	265	272	200* (600**)
Total Hardness as CaCO ₃	mg/L	232	268	316	200* (600**)
Calcium as Ca ⁺²	mg/L	38	59	80	75* (200**)
Magnesium as Mg ⁺²	mg/L	33	29	28	30* (100**)
Nitrates	mg/L	20	21	09	45
Fluoride	mg/L	BDL	BDL	BDL	1.0* (1.5**)
Phosphates	mg/L	0.03	0.05	0.04	-
Sodium as Na	mg/L	326	254	168	-
Potassium as K	mg/L	1	2	4	-
SAR	-	9.3	6.7	4.1	-
Heavy Metals					
Copper	mg/L	<0.1	<0.1	<0.1	0.05*(1.5**)
Nickel	mg/L	ND	ND	ND	0.02
Zinc	mg/L	<0.1	1.558	<0.1	5*(15**)
Cadmium	mg/L	ND	ND	ND	0.003
Lead	mg/L	ND	ND	ND	0.01
Total Chromium	mg/L	ND	ND	ND	0.05

BDL: Below Detectable limit.

ND: Not Detected

- The industry has installed 39 Nos. of two stage scrubbers with online pH meter to control the process emissions at various sections of the production.
- The industry has installed Continuous Online Ambient Air Quality monitoring stations (CAAQMS) – 3 Nos & VOC meters for monitoring of VOCs and the same are connected to TSPCB server. The Board is regularly monitoring the online system.
- The industry installed Online stack monitoring system to common stack attached to 24 TPH and 16 TPH boilers and same is connected to TSPCB server.
- The industry is having 24 TPH and 16 TPH coal fired boilers and provided ESP and bag filters respectively as APCE and common stack of height 40 mtrs. The industry is having another 24 TPH boiler as standby and provided ESP as APCE and stack of 40 mtrs height.
- The industry during the process and also during the treatment of effluents generates hazardous wastes. The ETP sludge is being disposed to TSDF, Dundigal for scientific land filling and Organic residue, Spent Carbon are disposed to cement industries for Co-processing in the cement kilns as an alternative fuel.
- During the inspection, discharge of effluents within or outside the industry premises was not observed.

11. During the inspection, it was observed that the industry is constructing new buildings in the industry premises. The representative informed that, the new blocks will be used for manufacturing of consented products to meet the GMP norms and also some are for ware houses.
12. The Board is regularly monitoring the industry by reviewing in the Task Force Committee of the Board. The Board has constituted Rolling Task Force Team to inspect the industry for verification of the compliance of the industry and reviewed the status in the Task Force Committee hearing held on 26.09.2019 and issued certain direction to the industry vide order dated 18.10.2019.

II) M/s. Srini Pharmaceuticals Pvt. Ltd, Choutuppal (V&M) Yadadri Bhuvanagiri District.

1. M/s Srini Pharmaceuticals Pvt. Ltd, is located at Choutuppal (V&M) Yadadri Bhuvanagiri District and engaged in manufacturing of Bulk Drugs & Intermediates.
2. The Board has issued Consent for Operation (CFO) and Hazardous waste Authorization (HWA) to the industry vide order dt. 29.09.2016 for manufacture of 14 Bulk Drugs with total production capacity of 290 kg/day (6 products at a time) with validity of 30.06.2021.
3. The industry has provided ZLD system consisting of Stripper, MEE, Centrifuge, Nutch filter, Biological ETP followed by RO plant. The Biological ETP is consisting of Collection tank, Primary Clarifier, aeration tank for treatment of LTDS effluent.
4. During inspection on 21.01.2020, the Board officials have collected samples of effluents of the industry. The analysis results are as follows:

Parameters	Method (*) No.	Unit	Results		
			Clarifier Outlet	Effluent sample collected from Aeration tank	Aeration tank outlet (RO Feed)
pH at 25 ^o C	4500-B	-	7.28	7.21	7.17
Total Suspended Solids	2540-B	mg/L	153	156	283
Total Dissolved Solids (TDS)	2540-C	mg/L	5,019	4,294	3,259
Chemical Oxygen Demand	5220-B	mg/L	403	216	183
Oil and Grease	5520 – B	mg/L	0.3	0.1	BDL

BDL: Below detectable limit.

Parameters	Method (*) No.	Unit	Results		
			RO Permeate	MEE Outlet	Sample collected from Production Block-II Cooling tower
pH at 25 ^o C	4500-B	-	5.84	3.04	7.57
Total Suspended Solids	2540-B	mg/L	22	2,308	394
Total Dissolved Solids (TDS)	2540-C	mg/L	658	67,125	2,018
Chemical Oxygen Demand	5220-B	mg/L	137	50,630	1,577
Oil and Grease	5520 – B	mg/L	BDL	3.8	1.9

BDL: Below detectable limit.

Sample Code: HTDS Raw Effluent

S. No	Compounds Identified
1	1, 4-Dioxane
2	Toluene
3	Formamide, N, N-dimethyl
4	3-Hexen-2-one
5	Benzaldehyde
6	Cyclohexane, isocyanato
7	Benzyl alcohol
8	2, 5-Pyrrolidinedione, 1-methyl
9	N-formylmorpholine
10	Thiophene, tetrahydro
11	1H-Isoindole-1, 3 (2H)-dione, 2-methyl
12	Benzeneacetic acid, 2-chloro
13	Benzonitrile, 2-amino
14	Salicylamide
15	Benzoic acid, 2, 5-dichloro
16	Guaifenesin
17	5-Acetylsalicylamide
18	Pyridin-3-yl, 2-(4-nitrophenyl)
19	Dextromethorphan
20	Clopidogrel

Sample Code: LTDS Effluent

S. No	Compounds Identified
	1, 4-Dioxane

1. The industry installed IP cameras and digital flow meters at RO permeate and connected to TSPCB Server. The Board is regularly monitoring the online system. The industry has provided online VOC analyser for monitoring VOCs and connected to TSPCB Server.
2. The industry is having coal fired boiler of capacity 3 TPH & 1 TPH provided Cyclone Dust Collector as Air Pollution Control equipment followed by chimney of height of 30 m.
3. The industry has two Solvent Recovery columns for recovery and reuse of the spent solvents generated during the process.
4. The industry has provided two stage scrubbers at production blocks with online pH meters for process emissions control.
5. The industry during the manufacturing process and also during the treatment of effluents generates hazardous wastes. The hazardous waste such as ETP sludge is being disposed to TSDF, Dundigal for scientific land filling and Organic residue, Spent Carbon are disposed to cement industries for Co-processing in the cement kilns as an alternative fuel.
6. During the inspection, discharge of effluents within or outside the industry premises was not observed.

7. The Board is regularly monitoring the industry by reviewing in the Task Force Committee of the Board. The Board has constituted Rolling Task Force Team to inspect the industry for verification of the compliance of the industry and reviewed the status in the Task Force Committee hearing held on 26.09.2019 and issued certain direction to the industry vide order dated 18.10.2019. The status of the compliance of the directions is being reviewed by the Board.

III) M/s. Maruthi Cottex Ltd., Choutuppal (V&M), Yadadri Bhuvanagiri District

1. M/s. Maruthi Cottex Ltd is located at Choutuppal (V&M), Yadadri Bhuvanagiri District and engaged in textile fabric processing.
2. The Board has issued Consent for Operation (CFO) and Hazardous waste Authorization (HWA) to the industry vide order dt. 26.02.2019 for Fabric Processing – 1,50,000 Mtrs/day & Printed / Dyed Synthetic Polyester Cotton Fabric - 1,50,000 Mtrs/day with validity up to 31.12.2022.
3. The industry generates effluents during the Fabric processing. The industry has provided treatment system consisting of Biological ETP followed by sand filter, carbon filter, UF and RO plant, MEE (4 stages), FE followed by ATFD (5 KLD). LTDS effluents are treated in Biological ETP. Biological ETP consisting the following: Screen/grid chambers- collection cum aeration tank- flocculation tank-flash mixture tank-tube settling tank 1- aeration tank 1- tube settling tank 2- aeration tank 2- tube settling tank 3. After treatment, treated effluents are recycled for washings of fabric, bleaching, scouring etc. HTDS Effluents are treated in ETP, sand filter, carbon filter, UF and passed through RO system. The RO permeate recycled back into the process, cooling tower makeup. The RO rejects are evaporated in MEE, FE followed by ATFD and the MEE condensate is sent to RO system. The ETP sludge and ATFD salts are disposed to TSDf, Dundigal, Medchal-Malkajgiri District for scientific land filling.
4. During inspection, discharges of effluents within or outside the industry premises was not observed.
5. The industry has provided MDC followed by Multi cyclone dust collector followed by wet scrubber to the husk fired boiler of 6 TPH & the thermic fluid heater of 1 Lakh K.Cal/hr capacity is provided with MDC followed by common stack of 30 mt height. The industry provided common water scrubbing system for further control of the emissions. For boiler of 3 TPH capacity & The thermic fluid heater of 1 Lakh K.Cal/hr the industry has provided MDC & multi cyclone dust collectors followed by water scrubbing system commonly with stack of 30 mt height.
6. The industry has sent ETP & MEE salts to M/s. TSDf in January'2020 – 9.51 Tons, October'2019 – 5.59 Tons and July'2019 -6.03 Tons. The present stock of HW is about 7 Tons.
7. The industry has provided digital flow meters at Inlet and Outlet of ETP and provided digital meters for MEE feed, RO permeate.
8. The Board reviewed the industry in the Task Force Committee and issued closure order vide order dated 22.06.2019. Subsequently, the industry represented to the Board for Revocation of Closure orders as they have complied with the non compliances of closure order. The Board reviewed the status of compliance and issued Temporary revocation of closure order on 25.07.2019 stipulating

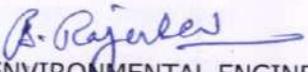
certain conditions. The status of compliance of the conditions is being reviewed by the Board by placing the issue before the Task Force Committee of the Board.

9. During the inspection of M/s. Maruthi Cottex Ltd., Choutuppall (V&M), Yadadri Bhuvanagiri District on 03.02.2020, the following effluents samples were collected and submitted to Board Laboratory for analysis. The analysis results are awaited.

- (i) LTDS Effluent (Inlet of Biological ETP)
- (ii) Outlet of Biological ETP (Ultrafiltration Inlet)
- (iii) MEE feed (RO rejects)
- (iv) Ultrafiltration Outlet (RO-I inlet)
- (v) RO-III Outlet (permeate)
- (vi) MEE Condensate

It is to submit that the above 3 industries viz., M/s. Divis Laboratories Ltd., M/s. Srinu Pharmaceuticals Pvt Ltd., and M/s. Maruthi Cottex Ltd, Choutuppall (V&M), Yadadri Bhuvanagiri District are being reviewed in the Board Task Force Committee for compliance.

Yours faithfully


 Sd/- ENVIRONMENTAL ENGINEER
 ENVIRONMENTAL ENGINEER
 T.S. Pollution Control Board,
 Regional Office, Nalgonda.



TELANGANA STATE POLLUTION CONTROL BOARD

Paryavarana Bhavan, A-III, Industrial Estate, Sanathnagar, Hyderabad-500 018
Phones : 040-23887500 Fax: 040 - 23887519

BY REGD. POST WITH ACK. DUE

Order No. NLG-20/TSPCB/UH-V/TF/2016 -

2635

Dt: 04.03.2020

Sub : M/s. Divi's Laboratories Ltd., Lingo jigudem (V), Choutuppal (M), Yadadri Bhuvanagiri District - Water (Prevention and Control of Pollution) Amendment Act, 1988 - Air (Prevention and Control of Pollution) Amendment Act, 1987 - **DIRECTIONS** - Issued - Reg.

- Ref :**
- Hearing held on 19.12.2015.
 - Memo No. NLG-20/TSPCB/U-II/TF/2015-2248, dt.02.01.2016.
 - TF Direction Order No. NLG-20/TSPCB/UH-V/2016 - 224, dt.13.04.2017.
 - CFO Order No.TSPCB/RCP/NLG/CFO&HWM/HO/2017-546, dt.09.05.2017.
 - Task Force Committee meeting held on 18.01.2018.
 - Notice No.12001/PCB/RO-NLG/CFO/2018-695, dt.25.01.2018.
 - Memo No. NLG-20/TSPCB/U-II/2017-3580, dt.31.01.2018.
 - Direction Order No. NLG-20/TSPCB/UH -II/2016 - 3875, dt.16.02.2018.
 - Directions Order No.NLG-20/TSPCB/U-II/2017-2635, dt.26.11.2018.
 - Directions Order No.NLG-20/TSPCB/UH-V/2016-1707, dt.18.10.2019.
 - Complaints made by Arige Kistaiah, Vice Sarpanch, Thangadapally (V), Smt. Munagala Rajeshwari, MPTC, Aregudem (V), and Gutta Prabhakar Reddy, Gujja (V), Sri P. Damodar Reddy, Tarnaka, Hyderabad and Sri Mallesh Yadav, Aregudem (V), regarding ground water pollution & air pollution in the surrounding area.
 - Inspection of the industry by the Board officials on 26.11.2019.
 - Complaints made by Sri G.Manohar Reddy, Thangadapally (V) through CPCB on 03.01.2020 and also to the Board on 17.01.2020, Pollution Parirakshna Samithi, Choutuppal on 04.01.2020, Kalushya vethireka Porata Samithi, Choutuppal on dt.17.01.2020, Complaints (66 Nos.) from Villagers of Katrevu, Choutuppal (M), Yadadri Bhuvanagiri District & Complaints (69 Nos.) from Villagers of Aregudem, Choutuppal (M) on 30.12.2019, regarding ground water pollution, Air & Water pollution in the surrounding area.
 - Inspection of the industry by the Board officials on 17.01.2020.
 - Sri Jala Venkatesham & others (Kalushya Parirakshana Samithi), Choutuppal (V&M), have filed a HR case No. 207 of 2020, dt.20.01.2020 in Hon'ble TSHRC alleging that several chemical companies such as M/s.Divis Laboratories Ltd., M/s. Srinu Pharmaceuticals Pvt. Ltd., & M/s.Maruthi Cottex Ltd., etc are creating Water, Air and Soil pollution in the village.
 - Hearing held on 07.02.2020.

* * * * *

- WHEREAS**, your industry is located at Lingo jigudem (V), Choutuppal (M), Yadadri Bhuvanagiri District and involved in manufacturing of Bulk Drug and intermediates.
- WHEREAS**, vide reference 1st cited, the Board reviewed the industry due to received complaints during the Environmental Public hearing of M/s. Brundavan Laboratories Pvt. Ltd and a Memo was issued to EE, RO, Nalgonda to Monitor the industry closely vide reference 2nd cited.
- WHEREAS**, earlier, complaints were received from Sri P.L.N.Rao, Lingo jigudem (V), Choutuppal (M), Yadadri District and the issue was reviewed in the Task Force Committee meeting held on 30.03.2017 and the Board issued certain directions vide reference 3rd cited.
- WHEREAS**, vide reference 4th cited, the Board issued CFO & HWA to the industry vide order dt.09.05.2017 with validity of 31.03.2022.
- WHEREAS**, vide reference 5th cited, the industry was reviewed in the Task Force Committee meeting held on 18.01.2018 to review the Compliance status of the

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DESPATCHED
ON: 04/03/2020

directions issued vide dt.13.04.2017. The Committee has recommended to issue show cause notice to the industry by the EE, RO, Nalgonda calling for an explanation for not complying the directions of the Board i.e., not provided piezowells and not submitted BG even after lapse of 9 months from the date of issue of the directions.

6. **WHEREAS**, vide reference 6th cited, meanwhile, as per the discussions during the Task Force meeting held on 18.01.2018, the RO, Nalgonda issued a notice to the industry vide dt.25.01.2018 directing the industry to submit the Bank Guarantee for Rs.32 Lakhs with validity period of one year immediately along with the compliance status of the Board directions.
7. **WHEREAS**, vide reference 7th cited, the Board addressed a memo vide dt. 31.01.2018 to EE, RO, Nalgonda directing to issue show cause notice to the industry.
8. **WHEREAS**, your industry was reviewed before the Task Force Committee of the Board on 03.02.2018 and as per the recommendation of the committee, vide reference 8th cited, the Board issued certain directions to the industry on 16.02.2018.
9. **WHEREAS**, vide reference 9th cited, the Board issued Directions to your industry on 26.11.2018 with one of the direction that:

"The industry shall conduct monitoring of piezowells once in three months with reputed monitoring agencies and submit the reports to the RO, Nalgonda with a copy to Head office".
10. **WHEREAS**, the industry was reviewed in the Task Force Committee meeting held on 26.09.2019 and issued directions to the industry on 18.10.2019 vide reference 10th cited, in connection with Rolling Task Force Team-I observations on 22.06.2019 as per the team Constitution order dt.31.05.2019.
11. **WHEREAS**, vide reference 11th cited, complaints made by Arige Kistaiah, Vice Sarpanch, Thangadapally (V), Smt. Munagala Rajeshwari, MPTC, Aregudem (V), and Gutta Prabhakar Reddy, Gujja (V), Sri P. Damodar Reddy, Tarnaka, Hyderabad and Sri Mallesh Yadav, Aregudem (V), regarding ground water pollution & air pollution in the surrounding area.
12. **WHEREAS**, vide reference 12th cited, the Board officials inspected the industry on 26.11.2019 and observed that the industry is complying with the CFO conditions and earlier Task Force directions. During the inspection, following Effluent, Peizo well and Bore well water samples were collected and the analysis results are as follows:

Sample code	Sample details / collection point
11412	Inlet of Biological ETP (LTDS Effluent).
11413	ECOT Inlet (Primary Aeration Effluent).
11414	ECOT Outlet (Biological Aeration Tank Inlet).

Parameters	Unit	Results		
		11412	11413	11414
pH at 25°C	-	3.9	7.41	6.92
Total Suspended Solids	mg/L	780	310	220
Total Dissolved Solids (TDS)	mg/L	15,520	15,100	14,510
Chemical Oxygen Demand	mg/L	27,360	25,120	14,240
Oil and Grease	mg/L	2.4	1.9	1.6

Sample code	Sample details / collection point
11415	Outlet of Biological ETP (Sand Filter Feed).
11416	Sand Filter Outlet (Ultra Filtration Feed).
11417	Ultra Filtration Outlet (Process RO Feed).

Parameters	Unit	Results		
		11415	11416	11417
pH at 25°C	-	6.31	7.16	7.05
Total Suspended Solids	mg/L	150	80	15
Total Dissolved Solids (TDS)	mg/L	12,100	8,800	8,200
Chemical Oxygen Demand	mg/L	1,216	1,192	752
Oil and Grease	mg/L	0.3	0.2	BDL

Sample code	Sample details / collection point
11418	Process RO Permeate.
11419	HTDS Effluent (MEE Feed).
11420	MEE Condensate.

Parameters	Unit	Results		
		11418	11419	11420
pH at 25°C	-	7.06	6.25	8.5
Total Suspended Solids	mg/L	5	480	20
Total Dissolved Solids (TDS)	mg/L	440	45,025	540
Chemical Oxygen Demand	mg/L	100	12,080	1,240
Oil and Grease	mg/L	BDL	1.4	0.6

Sample code	Sample details / collection point
11412	Inlet of Biological ETP (LTDS Effluent).
11419	HTDS effluent (MEE Feed).

Sample Code: 11412

S. No	Compounds Identified
1	Triethylamine
2	Diethyl carbonate
3	p-Xylene
4	Ethyl N, N-diethylcarbamate
5	2-Hydroxy-4-isopropyl naphthalene
6	Naphthalene, 2-ethenyl-6-methoxy
7	2-Acetyl-6-methoxynaphthalene
8	2-Naphthaleneacetic acid, 6-methyl
9	Triphenylphosphine oxide

Sample Code: 11419

S. No	Compounds Identified
1	Formamide, N, N-dimethyl
2	N, N-Dimethylacetamide
3	2-Pyrrolidinone, 1-methyl
4	Benzene, (1-nitroethyl)
5	Acetamide, N- (1-phenylethyl)
6	.alpha. Phenethylurethane
7	Naphthalene, 2-ethenyl-6-methoxy
8	Triphenylphosphine oxide

Sample code	Sample details / collection point
11400	Water sample collected from Peizo Well No. 1.
11401	Water sample collected from Peizo Well No. 2.
11402	Water sample collected from Peizo Well No.3.
11403	Water sample collected from Peizo Well No.4.
11404	Water sample collected from Peizo Well No.5.

Parameters	Unit	Results				
		11400	11401	11402	11403	11404
pH at 25°C	-	7.31	7.67	7.05	7.1	6.96
Total Suspended Solids	mg/L	< 5	< 5	< 5	< 5	< 5
Total Dissolved Solids (TDS)	mg/L	1,410	1,015	1,315	1,182	1,348
Chemical Oxygen Demand	mg/L	15	10	12	10	12
Chlorides as Cl ⁻	mg/L	379	277	539	520	481
Sulphates as SO ₄ ⁻²	mg/L	169	93	69	54	39
Total Alkalinity as CaCO ₃	mg/L	388	216	310	210	170
Total Hardness as CaCO ₃	mg/L	740	320	920	620	1,310
Calcium as Ca ⁺²	mg/L	136	36	144	110	220
Magnesium as Mg ⁺²	mg/L	97	56	136	84	185
Fluoride	mg/L	0.2	0.21	0.81	0.4	0.18
Nitrates	mg/L	35	25	7	10	29

Phosphates	mg/L	BDL	BDL	BDL	BDL	BDL
Sodium	mg/L	285	101	184	183	235
Potassium	mg/L	1.8	1.5	2	1.8	1.5
% Sodium	%	45	40	30	39	28
SAR	-	4.5	2.4	2.6	3.2	2.8

Sample code	Sample details / collection point
11405	Water sample collected from Peizo Well No.6.
11406	Water sample collected from Peizo Well No.7.
11407	Water sample collected from Peizo Well No.8.
11408	Water sample collected from Peizo Well No.9.

Parameters	Unit	Results			
		11405	11406	11407	11408
pH at 25°C	-	7.13	7.16	7.12	7.19
Total Suspended Solids	mg/L	< 5	< 5	< 5	< 5
Total Dissolved Solids (TDS)	mg/L	1,185	1,336	1,307	2,992
Chemical Oxygen Demand	mg/L	10	8	10	57
Chlorides as Cl ⁻	mg/L	491	476	573	1,239
Sulphates as SO ₄ ⁻²	mg/L	69	22	45	274
Total Alkalinity as CaCO ₃	mg/L	240	370	130	280
Total Hardness as CaCO ₃	mg/L	750	890	803	1,094
Calcium as Ca+2	mg/L	68	112	140	390
Magnesium as Mg+2	mg/L	141	148	110	119
Fluoride	mg/L	0.59	0.49	0.47	0.1
Nitrates	mg/L	27	16	29	39
Phosphates	mg/L	0.39	BDL	BDL	0.27
Sodium	mg/L	168	198	239	508
Potassium	mg/L	0.89	2	1.9	2.1
% Sodium	%	32	32	39	43
SAR	-	2.7	2.9	3.7	5.8

Sample code	Sample details / collection point
11392	Water sample collected from Bore well in Agriculture land of Sri Arige Veeraiah, S/o. Kistaiah, Sy. No. 80 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
11393	Water sample collected from Bore well in Agriculture land of Sri Arige Veera Swamy, S/o. Naraiah, Sy. No. 78 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
11394	Water sample collected from Bore well in Agriculture land of Sri Arige Bheeraiah, S/o. Sattaiah, Sy. No. 78 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
11395	Water sample collected from Bore well in Agriculture land of Sri Gundeboina Satyanarayana, S/o. Istaari, Sy. No. 250 of Choutuppal (V & M), Yadadri Bhuvanagiri District.

S. No	Compounds Identified
	Sample Code: 11392
1	No compound detected
	Sample Code: 11393
1	No compound detected
	Sample Code: 11394
1	No compound detected
	Sample Code: 11395
1	No compound detected

Sample code	Sample details / collection point
11396	Water sample collected from Bore well in Agriculture land of Sri Jala Maisaiah, S/o. Muthyalu, Sy. No. 266 of Choutuppal (V&M), Yadadri Bhuvanagiri District.
11397	Water sample collected from Bore well in Suramamba Kantamaheshwara Swamy Temple Aregudem (V), Choutuppal (M), Yadadri Bhuvanagiri District.
11398	Water sample collected from Bore well in Agriculture land of Sri Ananthula Mutyalu, S/o. Yellaiah, Sy. No. 472 of Aregudem (V), Choutuppal (M), Yadadri Bhuvanagiri District.
11399	Water sample collected from Bore well in Agriculture land of Sri Sama Janardhan Reddy, S/o. Mallareddy, Sy. No. 501 & 502 of Panthangi (V), Choutuppal (M), Yadadri Bhuvanagiri District.

S. No	Compounds Identified
	Sample Code: 11396
1	No compound detected
	Sample Code: 11397
1	No compound detected
	Sample Code: 11398
1	No compound detected
	Sample Code: 11399
1	No compound detected

13. **WHEREAS**, vide reference 13th cited, complaints made by Sri G.Manohar Reddy, Thangadapally (V) through CPCB on 03.01.2020 and also to the Board on 17.01.2020, Pollution Parirakshna Samithi, Choutuppal on 04.01.2020, Kalushya Vethireka Porata Samithi, Choutuppal on dt.17.01.2020, Complaints (66 Nos.) from Villagers of Katrevu, Choutuppal (M), Yadadri Bhuvanagiri District & Complaints (69 Nos.) from Villagers of Aregudem, Choutuppal (M) on 30.12.2019, regarding ground water pollution, Air & Water pollution in the surrounding area.

14. **WHEREAS**, vide reference 14th cited, the Board officials inspected the industry on 17.01.2020. During the inspection, Sri Raghavendra Rao, Senior Manager (Environment) representative of the industry was present. The following observations were made:

- The status of compliance on the conditions stipulated in the Task Force directions dt.18.10.2019 is as follows:

Sl. No	Direction	Status
1	The industry shall not operate without consent of the Board.	The industry has obtained CFO from the Board vide order dated: 14.03.2019, which is valid upto 31.03.2024.
2	The industry shall comply with all the CFO & HWA conditions of the Board scrupulously.	Submitted below
3	The industry shall restrict the quantities of production, products, water consumptions including the recycled water, waste water generation & disposal, hazardous waste generation & disposal etc., within the permitted quantities as mentioned in the CFO&HWA order and shall maintain the records separately.	Complied
4	The industry shall continuously segregate the effluent generated into HTDS & LTDS effluents and store only in above ground level storage tanks duly maintaining required free board to avoid overflows / spillages. The industry shall not store any effluents in drums or tankers etc.	Complied
5	The industry shall transfer the effluent through permanent pipelines only and shall not use any temporary flexible hose pipes for transfer of effluents under any circumstances.	Complied
6	The industry shall not discharge any effluents /	During the inspection, no

	seepages / spillages / leakages / overflows within the premises and outside the industry premises.	discharges of effluents within or outside industry premises observed.
7	The industry shall regularly operate the ZLD System.	The industry is regularly operating the ZLD system consisting of MEE system, Biological ETP followed by RO.
8	The industry shall operate the scrubbers continuously and shall take appropriate measures for control smell nuisance within & outside the industry premises.	The industry has installed 39 Nos of two stage scrubbers with online pH meter to control the process emissions.
9	The industry shall extend the validity of Bank Guarantee of Rs. 32 Lakh submitted to the Board from time to time before expiry, till further orders of the Board.	The industry submitted BG of Rs. 32 Lakh with BG No.1303919BG000029 on 16.07.2019 valid upto 16.07.2020.

- Compliance of Schedule – B conditions of CFO order date. 14.03.2019 are as follows:

Sl. No	Condition	Compliance																																
1	<p>The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities mentioned below.</p> <table border="1"> <thead> <tr> <th>S. No</th> <th>Purpose</th> <th>Qty (KLD)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Process & Floor washings & reactor washings.</td> <td>329</td> </tr> <tr> <td>2</td> <td>Boiler feed</td> <td>700</td> </tr> <tr> <td>3</td> <td>Cooling (make up)</td> <td>700</td> </tr> <tr> <td>4</td> <td>DM / Softener</td> <td>150</td> </tr> <tr> <td>5</td> <td>Incinerator Scrubber</td> <td>20</td> </tr> <tr> <td>6</td> <td>Domestic</td> <td>300</td> </tr> <tr> <td></td> <td>Total</td> <td>2199 KLD</td> </tr> </tbody> </table>	S. No	Purpose	Qty (KLD)	1	Process & Floor washings & reactor washings.	329	2	Boiler feed	700	3	Cooling (make up)	700	4	DM / Softener	150	5	Incinerator Scrubber	20	6	Domestic	300		Total	2199 KLD	During the period from July'2019 to Dec' 2019 as per the records, the water consumption is 722 KLD (Avg) against the consented capacity of 2199 KLD.								
S. No	Purpose	Qty (KLD)																																
1	Process & Floor washings & reactor washings.	329																																
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2	<p>The emissions shall not contain constituents in excess of the prescribed limits mentioned below.</p> <table border="1"> <thead> <tr> <th>Chimney No.</th> <th>Parameter</th> <th>Emission Standards</th> </tr> </thead> <tbody> <tr> <td>1 to 4</td> <td>Particulate Matter</td> <td>115 mg/Nm³</td> </tr> <tr> <td rowspan="10">5</td> <td>Particulate Matter</td> <td>115 mg/Nm³</td> </tr> <tr> <td>Particulates</td> <td>50 mg/Nm³</td> </tr> <tr> <td>HCl</td> <td>50 mg/Nm³</td> </tr> <tr> <td>SO₂</td> <td>200 mg/Nm³</td> </tr> <tr> <td>CO</td> <td>100 mg/Nm³</td> </tr> <tr> <td>Total Organic Carbon</td> <td>20 mg/Nm³</td> </tr> <tr> <td>HF</td> <td>4 mg/Nm³</td> </tr> <tr> <td>NOx</td> <td>400 mg/Nm³</td> </tr> <tr> <td>Total Dioxins & Furans</td> <td>0.1 ng TEQ mg/Nm³</td> </tr> <tr> <td>Hg and its compounds</td> <td>0.05 mg/Nm³</td> </tr> <tr> <td rowspan="2">6</td> <td>HCl Acid Vapour & Mist</td> <td>35 mg/Nm³</td> </tr> <tr> <td>Chlorine</td> <td>15 mg/Nm³</td> </tr> </tbody> </table>	Chimney No.	Parameter	Emission Standards	1 to 4	Particulate Matter	115 mg/Nm ³	5	Particulate Matter	115 mg/Nm ³	Particulates	50 mg/Nm ³	HCl	50 mg/Nm ³	SO ₂	200 mg/Nm ³	CO	100 mg/Nm ³	Total Organic Carbon	20 mg/Nm ³	HF	4 mg/Nm ³	NOx	400 mg/Nm ³	Total Dioxins & Furans	0.1 ng TEQ mg/Nm ³	Hg and its compounds	0.05 mg/Nm ³	6	HCl Acid Vapour & Mist	35 mg/Nm ³	Chlorine	15 mg/Nm ³	The industry has installed online stack monitoring system to the common stack attached to 24 TPH & 16 TPH coal fired boilers and connected to the TSPCB server.
Chimney No.	Parameter	Emission Standards																																
1 to 4	Particulate Matter	115 mg/Nm ³																																
5	Particulate Matter	115 mg/Nm ³																																
	Particulates	50 mg/Nm ³																																
	HCl	50 mg/Nm ³																																
	SO ₂	200 mg/Nm ³																																
	CO	100 mg/Nm ³																																
	Total Organic Carbon	20 mg/Nm ³																																
	HF	4 mg/Nm ³																																
	NOx	400 mg/Nm ³																																
	Total Dioxins & Furans	0.1 ng TEQ mg/Nm ³																																
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6	HCl Acid Vapour & Mist	35 mg/Nm ³																																
	Chlorine	15 mg/Nm ³																																
3	The industry should comply with emission limits for DG sets of capacity upto 800 KW as per the Notification G.S.R.520 (E), dated 01.07.2003 under the Environment (Protection) Amendment Rules, 2003 and G.S.R.448(E), dated 12.07.2004 under the Environment (Protection) Second Amendment Rules, 2004. In case of DG sets of capacity more than 800 KW should comply with emission limits as per the Notification G.S.R.489 (E), dated 09.07.2002 at serial no.96, under the Environment (Protection) Act, 1986.	Complied																																

4	<p>The industry shall comply with ambient air quality standards of PM₁₀(Particulate Matter size less than 10µm) - 100 µg/ m³; PM_{2.5}(Particulate Matter size less than 2.5 µm) -60 µg/ m³; SO₂ - 80 µg/ m³; NO_x - 80 µg/m³, outside the factory premises at the periphery of the industry.</p> <p>Standards for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009</p> <p>Noise Levels: Day time (6 AM to 10 PM) - 75 dB (A) Night time (10 PM to 6 AM) - 70 dB (A).</p>	<p>The industry has installed Continuous Online Ambient Air Quality monitoring stations (CAAQMS) – 3 Nos and same are connected to TSPCB server.</p>
5	The previous CFO&HWA Order dated 13.03.2018 stands cancelled.	<p>During the period from July'2019 to Dec' 2019 as per the records, the industry has manufactured 21 consented products and 5 R&D products of quantity 5704.3 Kg/day (avg.) as against the consented capacity of 7327.54 Kg/day.</p>
6	The industry shall manufacture only the consented product.	
7	The industry shall not increase the capacity beyond the permitted capacity, without obtaining CFE & CFO of the Board.	
8	The industry shall segregate the HTDS & LTDS effluents.	Complied
9	The industry shall regularly operate the pollution control systems i.e., Strippers, Multiple Effect Evaporators (MEEs), ATFDs, Biological ETPs, RO plants for treatment and reuse of treated effluents.	Complied
10	The industry shall not carryout evaporation of effluents in any reactor.	Complied.
11	The industry shall not use effluents in cooling towers under any circumstances.	Complied.
12	The industry shall maintain above ground effluent storage tanks for storage of HTDS & LTDS effluents. The industry shall not use any below ground effluent storage tanks.	Complied
13	The industry shall operate water meters for recording category-wise water consumption viz. Process, Washings, Boiler feed, Cooling tower makeup, Scrubber, R&D Plant, Domestic etc.	Provided
14	The industry shall operate digital flow meters for recording waste water generation at inlet of various effluent streams of HTDS & LTDS, viz., Stripper/ MEE feed; condensate of MEE & ATFD; steam flow to Stripper, MEE & ATFD; inlet & outlet of Biological ETP; RO feed; RO Permeate & RO reject.	Provided
15	The industry shall operate VOC analyzers for monitoring of VOCs and maintain the records.	<p>The industry has installed VOC meters at three locations (at AAQ online monitoring stations) within the premises and connected to TSPCB Server.</p>
16	The industry shall operate Multi-stage Scrubbers in the plant for control of process emissions, so as to avoid odour nuisance and maintain records.	<p>The industry has installed 39 Nos. of two stage scrubbers with online pH meter to control the process emissions.</p>
17	The industry shall operate the online pH meters for the Multi-stage scrubbers.	
18	The industry shall collect & store the Hazardous Solid waste in an elevated closed storage shed with impervious lining and Leachate collection system. The industry shall lift the Hazardous Waste regularly to the AFRF Facilities / Cement industries for Co-processing / TSDF, Dundigal for landfilling	Complied

19	The industry shall operate IP camera with PAN, TILT Zoom, 5x or above focal length, with night vision capability, along with flow meters & totalisers with RS- 485 communication to HTDS & LTDS, with connection of the data to the Servers of CPCB & TSPCB. The industry shall take immediate necessary steps for regular streaming of video & regular data transmission in the online monitor system.	Provided
20	The industry shall maintain good housekeeping within the plant premises.	Good housekeeping is maintained.
21	The industry shall maintain separate energy meter for the pollution control systems and maintain the records of the same.	Complied
22	The industry shall maintain vent condensers for the bulk storage tanks, storing highly volatile solvents, wherever required. The industry shall operate Nitrogen blanketing system, wherever required, with required pressure for the Solvents / Chemical/Product etc. for the Solvent storage tanks to avoid vapours escaping into the atmosphere, so as to avoid odour nuisance in the surroundings.	Complied
23	Solvents shall be recovered to the maximum extent possible and shall be reused. The Spent Solvents, which cannot be reused in the plant, shall be disposed to the End Users/ Authorized Cement manufacturing units for Co-processing / AFRF facilities of M/s. GEPIL Infrastructure Pvt. Ltd., Rakamcherla, Pudur (M), Rangareddy Dist (or) M/s. TSDF, Dundigal for pre-processing to be sent to Cement units for Co-processing / TSDF Dundigal for incineration. The industry shall not dispose Spent Solvents / Mixed Spent Solvents to the traders/ recyclers.	The industry is having two solvent recovery plants and recovering and reusing the solvents within the premises and the mixed spent solvents are being disposed to end users.
24	The industry shall carryout Leak Detection and Repair Study (LDAR) periodically to assess the solvent losses and take necessary remedial measures for control of solvent losses.	Complied
25	There shall not be any spillages / discharges of chemicals / effluents on ground. The drums containing chemicals & wastes shall be stored in elevated platform provided with leachate / spillages collection pit. Under any circumstances, the drums shall be stored on naked ground.	During the inspection, no discharges were observed.
26	The industry shall comply with the directions issued by the Task Force from time to time scrupulously.	--
27	The industry shall comply with the stipulations and conditions prescribed in the CFE Order.	--
28	The industry should develop and maintain green belt all along the boundary of the industry and other vacant places. The industry shall take up extensive plantation under the Haritha Haram program of the State Government.	The industry has developed green belt in about 230 acres.
29	The industry shall install & operate IP cameras with PAN, Zoom, 5x or above focal length, with night vision capability, at main gate entrance & at other gates where there is movement of effluent tankers, Solvent tankers, Chemical tankers, Hazardous Waste carrying vehicles & other material carrying vehicles. These cameras shall be connected to the website of TSPCB, with minimum backup of three months.	Provided
30	The industry shall maintain separate area for detoxification of drums and pump the effluent to effluent collection tanks.	Complied

31	The industry shall take measures to prevent the seepages such as cement concrete flooring with proper collection system to collect contaminants / spillages in the relevant areas in the industry premises.	Provided
32	The industry shall provide Stack Monitoring facility (Port hole, Platform, ladder etc.) as per Emission Regulation part-3 (ERP-3) norms for all the major stacks of the industry within a period of one month.	Complied
33	The industry shall pay the balance CFO fees, at RO, Nalgonda, as per the provisions of G.O.Ms.No.22, Dt: 09.07.2018 issued by EFS&T (For. III) Dept, Govt. of Telangana and TSPCB Circular dt: 30-07-2018, with a copy marked to Head Office. In case of failure to pay the Consent fees, the validity of the Consent Order automatically stands cancelled and operation of the industry without valid consent attract penal action under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and Hazardous and Other Waste (Management and Transboundary Movement) Rules, 2016.	--
34	The industry shall follow all the Rules and Regulations under the Manufacture, Storage & Import of Hazardous Chemicals Rules, 1989, framed under the Environment (Protection) Act, 1986.	--
35	The industry shall follow all the Rules and Regulations under the Chemical Accidents (Emergency Planning, Preparedness & Response) Rules, 1996, framed under the Environment (Protection) Act, 1986.	--
36	The industry shall take all safety measures and provide fire fighting equipment in the plant.	Complied
37	The industry shall submit mock drill report carried out at least once in six months, as required under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.	Complied
38	The industry shall not discharge any wastewater within or outside the factory premises and maintain zero discharge of effluents.	During the inspection, no discharge of effluents were observed.
39	The industry shall not cause any air pollution / odour nuisance in the surrounding environment.	During the inspection, odour was observed near the effluent collection tanks.
40	The industry has to provide adequate closed storage facilities above the ground with proper lining for storage of Hazardous Waste before its final disposal.	Complied
41	All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991, should be followed. The industry shall regularly renew the PLI Policy from time to time.	PLI valid upto 09.11.2020.
42	The industry shall maintain 3 CAAQM stations and connect the data to website of PCB.	The industry has installed Continuous Online Ambient Air Quality monitoring stations (CAAQMS) - 3 Nos and same are connected to TSPCB server.
43	Regular monitoring of vents of the storage tanks and work room concentration shall be carried out using sensors. The industry shall control fugitive emissions by providing chilled brine circulation, closed room operations and condensers with receivers.	Complied

44	The industry shall not use odour causing substances or Mercaptans and shall not cause odour nuisance in the surroundings.	Complied.
45	The evaporation losses in solvents shall be controlled by taking all preventive measures such as circulation of Chilled brine, transfer of solvents by using pumps instead of manual handling, closed centrifuges, providing primary & secondary condensers to all the reactor vents and all the solvent storage tanks and keeping solvent storage in ground storage tanks with closed pipeline to Reactors.	Complied.
46	The industry shall maintain the following records and the same shall be made available to the Board Officials during the inspection. a. Daily production details, RG-I records and Central Excise Returns. b. Quantity of Effluents generated, forced evaporated, condensate generated, effluents treated and RO permeate reused. c. Daily Hazardous Solid Waste generated and disposed to TSDF, Cement plants / Onsite Incineration. d. Log Books for pollution control systems.	Complied.
47	The industry shall maintain proper records for effluent disposal and its concurrence with CFO order.	Maintained
48	The industry shall not send any waste for recovery to other plants without prior approval of the Board	--
49	The industry shall not adopt treatment of effluents either directly / indirectly from other sister concern units without prior permission from the Board.	Complied
50	The industry shall furnish the Ground water quality monitoring reports quarterly to the EE, TSPCB, RO, Nalgonda.	Submitting
51	The applicant shall submit Environment Statement in Form-V to the Regional office before 30th September of every year as per Rule No.14 of E(P) Rules, 1986 & amendments thereof.	Submitting
52	The conditions stipulated in this order are without prejudice to rights and contentions of this Board in any Hon'ble court of Law.	--
53	The Board reserves its right to modify above conditions or stipulate new / additional conditions and to take action including revoking of this order in the interest of environment protection.	--

Remarks:

1. M/s Divi's Laboratories Ltd, Unit-I is located at Lingojigudem (V), Choutuppal (M), Yadadri Bhuvanagiri District and engaged in manufacturing of Bulk Drugs & Intermediates.
2. The Board has issued CFO to the industry vide order dt.14.03.2019 with validity of 31.03.2024.
3. The industry is segregating effluents into the high TDS, low TDS effluents.
4. The industry has provided ZLD system consisting of Stripper, MEE, ATFD, Biological ETP and RO plant. The MEE condensate along with other LTDS effluents are treated in Biological ETP followed by RO plant. The RO permeate is reused for cooling tower make up and the RO rejects are sent to MEE for evaporation.
5. The industry has installed 39 Nos. two stage scrubbers with online pH meter to control the process emissions.
6. The industry has installed Continuous Online Ambient Air Quality monitoring stations (CAAQMS) – 3 Nos & VOC meters for monitoring of VOCs and the same are connected to TSPCB server.

7. The industry installed Online stack monitoring system to common stack attached to 24 TPH and 16 TPH boilers and same is connected to TSPCB server.
8. The industry is having 24 TPH and 16 TPH coal fired boilers and provided ESP and bag filters respectively as APCE and common stack of height 40 mtrs. The industry is having another 24 TPH boiler as standby and provided ESP as APCE and stack of 40 mtrs height.
9. During the period from July'2019 to Dec' 2019 as per the records, the industry has manufactured 21 consented products and 5 R&D products of quantity 5704.3 kgs/day (avg.) as against the consented capacity of 7327.54 Kg/day.
10. During the period from July'2019 to Dec' 2019 as per the records, the water consumption is 722 KLD (Avg) against the consented capacity of 2199 KLD. The waste water generation is 997 KLD (Avg.) against the consented capacity of 1340 KLD.
11. The industry has disposed 3956.480 tons of MEE salts & 295.89 Tons of ETP sludge to TSDF, Dundigal for land filling and 171.290 tons of Organic residue & 35.320 Tons of Spent Carbon to cement industries for Co-processing during the period from July'2019 to December'2019. Presently the industry has stored about 40 tons of MEE salts, ETP sludge – 35 Tons and about 15 Tons of Organic Residue & Spent carbon – 3 Tons which are stored in the Shed.
12. During the inspection, odour was observed near effluents collection tanks.
13. During the inspection, no discharge of waste water within or outside the industry premises were observed.
14. During the inspection, it was observed that the industry is constructing new buildings in the industry premises. The representative informed that, the new blocks will be used for manufacturing of consented products to meet the GMP norms and also some are for ware houses.
15. A notice was issued on 18.12.2019 regarding odour problem and to take necessary measures for control of odour.
16. The Board officials on 17.01.2020 have collected ground water samples, bore well samples in the agricultural fields and effluent samples and analysis results are as follows:

Sample code	Sample details / collection point
1276	LTDS Raw Effluent.
1277	Biological ETP Inlet (ECOT Outlet).
1278	Biological ETP Outlet (Ultra Filtration Feed).

Parameters	Unit	Results		
		1276	1277	1278
pH at 25°C	-	4.3	7.1	7.12
Total Suspended Solids	mg/L	435	255	168
Total Dissolved Solids (TDS)	mg/L	8150	7640	7240
Chemical Oxygen Demand	mg/L	22,240	15,600	1,440
Oil and Grease	mg/L	2.6	1.8	0.2

Sample code	Sample details / collection point
1279	Ultra Filtration Outlet (Process RO Feed).
1280	Process RO Permiate.
1281	HTDS Effluent (MEE Feed).

Parameters	Unit	Results		
		1279	1280	1281
pH at 25°C	-	7.0	6.9	6.4
Total Suspended Solids	mg/L	11	8	528
Total Dissolved Solids (TDS)	mg/L	7150	210	34,600
Chemical Oxygen Demand	mg/L	1,424	84	14,240
Oil and Grease	mg/L	BDL	BDL	1.3

Sample code	Sample details / collection point
1282	MEE Condensate.
1283	Non Process RO Feed (Cooling Towers & Boiler Bleedoffs).

1284	Non Process RO Permiate.
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Parameters	Unit	Results		
		1282	1283	1284
pH at 25°C	-	8.4	7.1	7.0
Total Suspended Solids	mg/L	18	115	17
Total Dissolved Solids (TDS)	mg/L	455	3,218	190
Chemical Oxygen Demand	mg/L	388	872	36
Oil and Grease	mg/L	BDL	BDL	BDL

Sample code	Sample details / collection point
1276	LTDS Raw Effluent.
1281	HTDS Effluent (MEE Feed).

Sample Code: 1276

S. No	Compounds Identified
1	Toluene
2	Diethyl carbonate
3	Butanoic acid, 2-bromo-, ethyl
4	Naphthalene, 2-ethenyl-6-methoxy
5	Naproxen methyl ester
6	Naproxen
7	Triphenylphosphine oxide
8	Triphenylphosphine sulfide

Sample Code: 1281

S. No	Compounds Identified
1	Formamide, N, N-dimethyl
2	2-Pyrrlidinone, 1-methyl
3	Benzenemethanamine, .alpha.-methyl
4	Ethane, 1, 1, 2, 2-tetramethoxy
5	Acetamide, N-(1-phenylethyl)
6	Alpha.phenethylurethane
7	Levetiracetam
8	2-Acetyl-6-methoxynaphthalene
9	Naproxen
10	Diltiazem
11	Triphenylphosphine oxide

Sample code	Sample details / collection point
1285	Water sample collected from Bore well in Agriculture land of Sri Balike Sattaiah S/o. Mallaiah, Sy. No. 66 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
1286	Water sample collected from Bore well in Agriculture land of Sri Balike Mallaiah S/o. Sattaiah Sy. No. 52 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
1287	Water sample collected from Bore well in Agriculture land of Sri Arige Veera Swamy S/o. Kistaiah, Sy. No. 80 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.

Parameters	Unit	Results			IS 10500 : 2012	
		1285	1286	1287	Acceptable Limit	Permissible Limit
pH at 25°C	-	7.56	7.59	7.37	6.5-8.5	No Relaxation
Total Suspended Solids	mg/L	< 5	< 5	< 5	-	-
Total Dissolved Solids (TDS)	mg/L	2,370	2,480	2,850	500	2000
Chlorides as Cl ⁻	mg/L	1,137	1,191	1,283	250	1000
Sulphates as SO ₄ ⁻²	mg/L	68	70	120	200	400
Total Alkalinity as CaCO ₃	mg/L	370	420	540	200	600
Total Hardness as CaCO ₃	mg/L	1,408	1,520	1,640	200	600

Calcium as Ca+2	mg/L	250	194	266	75	200
Magnesium as Mg+2	mg/L	191	252	236	30	100
Fluoride	mg/L	1.5	1.8	BDL	1.0	1.5
Nitrates	mg/L	19	20	29	45	No Relaxation
Phosphates	mg/L	BDL	BDL	BDL	-	-
Boron	mg/L	ND	ND	ND	0.5	1.0
% Sodium	mg/L	24	25	22	-	-
SAR	mg/L	2.4	2.6	2.3	-	-
Sodium	mg/L	205	237	218	-	-
Potassium	mg/L	4.9	5.3	5.4	-	-

Sample code	Sample details / collection point
1288	Water sample collected from Bore well in Agriculture land of Sri Jala Mallaiah S/o. Rajaiah, Sy. No. 251 of Choutuppal (V&M), Yadadri Bhuvanagiri District.
1289	Water sample collected from Bore well in Agriculture land of Sri Katta Narsimha S/o. Lakshmaiah, Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.

Parameters	Unit	Results		IS 10500 : 2012	
		1288	1289	Acceptable Limit	Permissible Limit
pH at 25°C	-	7.39	7.33	6.5-8.5	No Relaxation
Total Suspended Solids	mg/L	< 5	< 5	-	-
Total Dissolved Solids (TDS)	mg/L	2,950	2,720	500	2000
Chlorides as Cl ⁻	mg/L	1,269	1,304	250	1000
Sulphates as SO ₄ ⁻²	mg/L	247	65	200	400
Total Alkalinity as CaCO ₃	mg/L	320	280	200	600
Total Hardness as CaCO ₃	mg/L	1,820	1,770	200	600
Calcium as Ca+2	mg/L	292	328	75	200
Magnesium as Mg+2	mg/L	265	231	30	100
Fluoride	mg/L	0.9	1.7	1.0	1.5
Nitrates	mg/L	38	36	45	No Relaxation
Phosphates	mg/L	BDL	BDL	-	-
Boron	mg/L	ND	ND	0.5	1.0
% Sodium	mg/L	20	22	-	-
SAR	mg/L	2.2	2.4	-	-
Sodium	mg/L	214	231	-	-
Potassium	mg/L	5.7	4.7	-	-

Sample code	Sample details / collection point
1285	Water sample collected from Bore well in Agriculture land of Sri Balike Sattaiah S/o. Mallaiah, Sy.No. 66 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
1286	Water sample collected from Bore well in Agriculture land of Sri Balike Mallaiah S/o. Sattaiah Sy.No. 52 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
1287	Water sample collected from Bore well in Agriculture land of Sri Arige Veera Swamy S/o. Kistaiah, Sy.No. 80 of Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.
1288	Water sample collected from Bore well in Agriculture land of Sri Jala Mallaiah S/o. Rajaiah, Sy.No. 251 of Choutuppal (V&M), Yadadri Bhuvanagiri District.
1289	Water sample collected from Bore well in Agriculture land of Sri Katta Narsimha S/o. Lakshmaiah, Thangadpally (V), Choutuppal (M), Yadadri Bhuvanagiri District.

S. No	Compounds Identified
	Sample Code: 1285
1	No Compound detected
	Sample Code: 1286
1	No Compound detected
	Sample Code: 1287
1	No Compound detected
	Sample Code: 1288
1	No Compound detected
	Sample Code: 1289
1	No Compound detected

15. **WHEREAS**, vide reference 15th cited, Sri Jala Venkatesham & others (Kalushya Parirakshana Samithi), Choutuppal (V&M), Yadadri Bhuvanagiri District have filed a HR case No. 207 of 2020 in Hon'ble TSHRC alleging that several chemical companies such as M/s. Divis Laboratories Ltd., M/s. Srinu Pharmaceuticals Pvt. Ltd., & M/s. Maruthi Cottex Ltd etc are creating water, air and soil pollution in the village.
16. **WHEREAS**, during the inspection on 03.02.2020, the Board officials contacted the complainant Sri Jala Venkatesham over telephone to accompany. But he has informed that he is out of station and sent his representative Sri Arige Veeraswamy & Other villagers of Choutuppal, Katrevu and Aregudem were also present.

The Board officials along with the villagers have visited the agricultural fields of Choutuppal, Katrevu and Aregudem villages which are located back side of M/s. Divis Laboratories Ltd., M/s. Srinu Pharmaceuticals Pvt. Ltd., & M/s. Maruthi Cottex Ltd., industries. The Board officials on 03.02.2020 have collected ground water samples from the following bore wells located in the agricultural fields and the analysis results are as follows:

Sample code	Sample details / collection point
2032	Water sample collected from Bore well in agriculture land of Sri Jala Maisaiah S/o. Muthyalu, Sy.No.266 of Choutuppal (V&M), Yadadri Bhuvanagiri District.
2033	Water sample collected from Bore well in the Annapurna Devi Temple of Katreva (V), Choutuppal (M), Yadadri Bhuvanagiri District.
2034	Water sample collected from Bore well in agriculture land of Sri Malige Sattaiah S/o. Bheerappa, Sy. No. of Katreva (V), Choutuppal (M), Yadadri Bhuvanagiri District.

Parameters	Unit	Results			IS 10500 : 2012	
		2032	2033	2034	Acceptable Limit	Permissible Limit
pH at 25°C	-	7.52	7.41	6.95	6.5-8.5	No Relaxation
Total Suspended Solids	mg/L	28	< 5	< 5	-	-
Total Dissolved Solids (TDS)	mg/L	2,584	1,490	1,346	500	2000
Chlorides as Cl ⁻	mg/L	1,298	450	395	250	1000
Sulphates as SO ₄ ⁻²	mg/L	205	34	30	200	400
Total Alkalinity as CaCO ₃	mg/L	340	560	560	200	600
Total Hardness as CaCO ₃	mg/L	720	390	420	200	600
Calcium as Ca+2	mg/L	224	120	124	75	200
Magnesium as Mg+2	mg/L	121	22	27	30	100
Fluoride	mg/L	BDL	BDL	BDL	1.0	1.5
Nitrates	mg/L	33	23	26	45	No Relaxation
Phosphates	mg/L	BDL	BDL	BDL	-	-
Boron	mg/L	BDL	BDL	BDL	0.5	1.0
% Sodium	mg/L	48	57	57	-	-
SAR	mg/L	6	5.3	5.6	-	-
Sodium	mg/L	450	242	264	-	-
Potassium	mg/L	5	1	2	-	-

Chemical Oxygen Demand	mg/L	71	6	15	-	-
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Sample code	Sample details / collection point
2035	Water sample collected from Grampanchayath Hand Bore well, near Grampanchayath office, Katreva (V), Choutuppal (M), Yadadri Bhuvanagiri District.
2036	Water sample collected from Bore well in Agriculture land of Sri Manne Mohan Reddy, S/o. Janga Reddy, Sy.No. 540, 541, 542 of Aregudem (V), Choutuppal (M), Yadadri Bhuvanagiri District.
2037	Water sample collected from Grampanchayath Hand Bore well which is located beside Aregudem to NH-65 road and opposite of 17 No. Timber shed, Sy.No.417 of Aregudem (V), Choutuppal (M), Yadadri Bhuvanagiri District.

Parameters	Unit	Results			IS 10500 : 2012	
		2035	2036	2037	Acceptable Limit	Permissible Limit
pH at 25°C	-	7.15	7.82	6.81	6.5-8.5	No Relaxation
Total Suspended Solids	mg/L	< 5	< 5	< 5	-	-
Total Dissolved Solids (TDS)	mg/L	1,481	1,540	1,685	500	2000
Chlorides as Cl ⁻	mg/L	413	492	671	250	1000
Sulphates as SO ₄ ⁻²	mg/L	66	65	38	200	400
Total Alkalinity as CaCO ₃	mg/L	536	496	572	200	600
Total Hardness as CaCO ₃	mg/L	640	600	720	200	600
Calcium as Ca+2	mg/L	208	176	96	75	200
Magnesium as Mg+2	mg/L	29	39	117	30	100
Fluoride	mg/L	BDL	BDL	BDL	1.0	1.5
Nitrates	mg/L	38	8	33	45	No Relaxation
Phosphates	mg/L	BDL	BDL	BDL	-	-
Boron	mg/L	BDL	BDL	BDL	0.5	1.0
% Sodium	mg/L	44	59	48	-	-
SAR	mg/L	4.2	7.5	5.2	-	-
Sodium	mg/L	245	423	321	-	-
Potassium	mg/L	3.1	5	11	-	-
Chemical Oxygen Demand	mg/L	33	45	31		

17. **WHEREAS**, vide reference 16th cited, you were given an opportunity for hearing before the Task Force Committee of the Board during the meeting held on 07.02.2020.

The industry representative and the complainants attended the meeting.

The complainants alleged that the industry is causing ground water pollution in the area and the water is not suitable for drinking and agriculture. They also informed that they are suffering from health problems due to the pollution caused by the industry and the industry is also going for expansion illegally without taking permissions from the statutory authorities.

The complainants informed that earlier the industry was having solar evaporation ponds till the year 2011 and they closed the ponds with soil without lifting hazardous material which has resulted in the contamination of ground water. The industry has dug the borewells in the premises and pumping the effluents into it without treatment in ZLD system. Due to this the surrounding ground water is polluted. The complainant requested the Board to carryout GPR studies to identify the illegal borewells as well as pipelines in the industry premises. They informed that due to operation of the industry in surrounding villages of Lingojudem,

Anthammagudem, Thangadpally, Panthagi, Gundlabavi, Chinnakonduru, Lakkaram Katrevu and Aregudem, ground water is polluted and the agricultural lands are unfit for cultivation and requested take action against the industry.

The Committee noted that the industry has provided piezo wells for monitoring the ground water quality as per the directions of the Board. The Board officials carried out monitoring of piezo wells in the industry premises as well as the bore well located in the surrounding agricultural lands. The results of the piezo wells shows that the TDS is ranging from 1000 mg/l to 3000 mg/l against the permissible limit of 2000 mg/l. COD from 10 mg/l to 60 mg/l. The results of the Borewells shows TDS ranging from 2000 mg/l to 3000 mg/l against the permissible limit of 2000 mg/l. The finger print analysis were also carried out with the effluent samples collected from the industry. The results shows that there is no presence of any chemical compounds in the piezo wells and the borewell samples collected. During inspection of Board officials, slight odour was observed near Biological ETP, effluent collection tanks and also noted that the industry is complying with directions issued by the Board.

The industry representative informed that they are complying with the Board's directions and also informed that they have supplied RO plants to 30 villages around the industry as part of CSR. They are continuously operating all the systems as per the directions of the Board and the allegations made by the complainants are false. He informed that they have applied for TOR for obtaining EC for expansion and not carrying out any expansion activity. He assured that they will abide by the directions of the Board.

The Committee recommended that the District Collector may be requested to constitute a Multi Disciplinary team consisting of Revenue, Agriculture, ground water and Pollution Control Board officials along with experts from IICT/NEERI to verify the allegations made by the complainants, assess the ground water contamination caused by the industry and damages if any along with recommendations for crop damage compensation on polluter pays principle.

After detailed discussion, the Committee recommended to issue certain directions to the industry to comply with.

18. **WHEREAS**, after careful consideration of the material facts of the case, the Board hereby **issues following directions to your industry to comply with:-**
1. The industry shall not operate without valid Consent of the Board.
 2. The industry shall comply with CFO&HWA conditions and Board directions issued by the Board scrupulously.
 3. The industry shall not manufacture any new products / un-consented products without CFE & CFO of the Board.
 4. The industry shall restrict the quantities of production, products, water consumptions including the recycled water, waste water generation & disposal, hazardous waste generation & disposal etc., within the permitted quantities as mentioned in the CFO&HWA order and shall maintain the records separately.
 5. The industry shall not cause any air pollution/ odour nuisance in the surrounding environment.
 6. The industry shall not cause any spillages / discharges of chemicals/ effluents on ground.
 7. The industry shall extend the validity of the Bank Guarantee from time to time prior to its expiry till further orders of the Board.
19. **WHEREAS**, these directions are issued under Sec.33 (A) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Sec. 31 (A) of Air (Prevention and Control of Pollution) Amendment Act, 1987.

20. **WHEREAS**, the above mentioned directives shall be implemented by the industry, failing which legal action will be initiated against your industry under Sec.33 (A) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Sec. 31 (A) of Air (Prevention and Control of Pollution) Amendment Act, 1987 directing closure of the industry in the interest of Public Health and Environment, without further notice.

Sd/-
MEMBER SECRETARY

To
M/s. Divi's Laboratories Ltd.,
Lingojigudem (V), Choutuppal (M),
Yadadri Bhuvanagiri District.

Copy to:

1. The JCEE., Z.O., R.C.Puram for information and necessary action.
2. The Environmental Engineer, Regional Office, Nalgonda for information and necessary action. He is directed to monitor the industry for compliance of the directions issued and shall submit status report.
3. Concerned file.

// T.C.F.B.O //


Senior Environmental Engineer (FAC)
(UH- V)

 सत्यमेव जयते	State Level Environment Impact Assessment Authority (SEIAA)
	Telangana State
	Government of India
	Ministry of Environment, Forests & Climate Change A-3, Industrial Estate, Sanathnagar, Hyderabad - 500 018.

REGD.POST WITH ACK.DUE

Order No. SEIAA/TS/OL/NLG-02/2015- 3077**Dt:03.02.2017.**

Sub: SEIAA, TS – M/s. Divi's Laboratories Limited (Unit-1), Sy. No. 302, Lingojugudem (V), Choutuppal (M), Nalgonda District – Environmental Clearance (Expansion) - Issued - Reg.

- I. This has reference to your application submitted online on 29.08.2016 & EIA report submitted online on 09.12.2016 (proposal no. SIA/TG/IND2/17950/2016) received on 23.12.2016 and subsequent Ir.dt.24.10.2016 seeking Environmental Clearance for the proposed expansion of **Synthetic organic chemicals manufacturing unit** in the name of **M/s. Divi's Laboratories Limited (Unit-1), Sy. No. 302, Lingojugudem (V), Choutuppal (M), Nalgonda District**. The nearest human habitation viz., Lingojugudem (V) exists at a distance of 2.0 km from the project site. The total area of the site for expansion is Ac.15.35 in Sy.No.302. Whereas, the total site area as per EC order dt.10.06.2008 is Ac. 500 (202.3 Ha.). Out of that, area earmarked for development of Green belt is 92.8 Ha. The total cost of the project for expansion is Rs. 75.5 Crores and the production capacity of the project after expansion is as following:

S. No	Product	Quantity (Kgs/day)	Quantity (TPA)
A	Fixed Products		
1	Naproxen	2761.64	1008
2	Dextromethorphan HBr	685	250
3	Iopamidol	493	180
4	Nabumetone	274	100
5	Valacyclovir.HCl	274	100
6	Levetiracetam	1315.1	480
Sub Total		5802.74	2118
B	Campaign products		
7	A – Wing	123	45
8	B – Wing	246.6	90
9	Proguanil HCl	21.9	08
10	Sulphazine	13.7	05
11	Zolpidem Tartrate	2.74	01
12	Quetiapine	13.5	05
13	Atovaquone	65.8	24
14	Carvedilol	11	04
15	Lamotrigine (Stage-2)	274	100
16	Marcoumar	5.5	02
17	N-Hydroxy Succinimide	41.1	15
18	Niacin	274	100
19	Free Amine Pivalate Ester	207.1	75.6
20	Risedronate Sodium	0.55	0.2
21	Desloratadine	5.5	02
22	Methoxy Morphinan HCl	5.5	02

S. No	Product	Quantity (Kgs/day)	Quantity (TPA)
23	Fosphenytoin Sodium	1.37	0.5
24	Nateglinide	8.1	03
25	Diltiazem HCl	82.2	30
26	Thiol Acid	8.2	03
27	R-amine	2.74	01
28	Apocarotenal	1.9	0.7
29	EF-9	0.5	0.2
30	2-CL-3, 4-Pmboxy-Benzamide	1.37	0.5
31	N-Boc-Ethylenediamine	22	08
32	Fumaraldehyde Bis (Dimethyl acetal)	68.5	25
33	CME	137	50
Sub Total		1645.37	600.7
Grand Total		7448.11	2718.7
Maximum production capacity on Campaign Basis (i.e. Worst case: 6 fixed products and any 10 products at a point of time)		7322.04	2672.6
R&D Products		5.5 kgs/day	

- II. In the process, synthetic organic chemicals are produced by using various chemicals, solvents, etc.,
- III. The proposal has been examined and processed in accordance with EIA Notification, 2006 and its amendments thereof. The State Level Expert Appraisal Committee (SEAC) examined the application in its meetings held on 29.09.2016, 25.10.2016 & 30.12.2016. The SEAC observed that though the total site area of the project is Ac.500, the proponent proposed the expansion only in Sy.No.302 of area Ac.15.35 which is notified and hence the SEAC considered the project. The Sub-Committee constituted by the SEAC inspected the site and submitted the report. The project is exempted from the process of Public Hearing as the industry is located in a Notified Industrial Area existing since 1990's, as per OM dt. 10.12.2014 of the MoEF&CC, GoI. Based on the information furnished, presentation made by the proponent and the consultant M/s. Ramky Enviro Engineers Ltd., Hyderabad; Certified Compliance Report dt. 28.09.2016 issued by the Regional Office, MoEF&CC, GoI. as per Circular dt.30.05.2012 of MoE&F, GoI; report of the Sub-Committee; G.O.Ms. No. 95, dt. 21.09.2007 of the EFS&T Dept., GoAP; G.O.Ms. No. 64, dt. 25.07.2013 of the EFS&T Dept., GoAP; G.O.Ms. No. 120, dt. 22.10.2013 of the I&C Dept., GoAP; G.O.Ms. No. 44, dt. 08.09.2016 of the I&C (IP&INF) Dept., GoTS; G.O.Ms.No. 47 dt. 02.07.2016 of I&CAD (Reforms) Dept., GoTS for withdrawal of 0.01 TMC / Annum of water from Musi River from the utilized Minor Irrigation allocations in K-10 Sub-basin of Krishna River; undertaking submitted by the proponent that they will go for expansion only in Sy.No. 302; the Committee considered the project proposal and recommended for issue of Environmental Clearance. The State Level Environment Impact Assessment Authority (SEIAA) in its meeting held on 27.01.2017 examined the proposal and recommendations of SEAC for issue of Environmental Clearance for Expansion considering the expansion in an area of 15.35 acres only in Sy.No.302 of Lingojigudem (V), Choutuppal (M), Nalgonda District. Accordingly, after discussions in the matter and considering the recommendations of the SEAC, **the SEIAA, Telangana hereby accords Environmental Clearance to the project for Expansion** as mentioned at Para no. I under the provisions of the EIA Notification 2006 and its subsequent amendments issued under Environment (Protection) Act, 1986 subject to implementation of the following specific and general conditions:

A. Specific Conditions:**i. Air pollution:**

- i After expansion, the emissions from the coal fired Boilers of capacity 24 TPH (Proposed - Standby), 24 TPH (Existing) & 16 TPH (Existing) shall be routed through ESP & Bag filters followed by stacks of height 40m each. The concentration of particulates in the emission shall not exceed 115 mg/Nm³. Thermic fluid heater (2x8 lakh kcal/hr) shall be provided with a stack of height 30m. Incinerator of capacity 1x9 TPD shall be routed through Multi Cyclone followed by Ventury Scrubber followed by stack of height 40m. Sampling Port with removable dummy of not less than 15cm diameter in the stack at a distance of 8 times the diameter of the stack from the nearest constraint such as bends etc, shall be provided to monitor stack emissions. Stacks of adequate height shall be provided for D.G. Sets of capacity 2x320 kVA (existing), 2x625 kVA (existing), 1x1250 kVA (existing), 1x750 kVA (proposed), 4x1250 kVA (proposed) & 1x1500 kVA (proposed) as per CPCB norms.
- ii National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended time to time shall be followed by the unit.
- iii The process emissions containing NH₃, CO, Br, H₂S, SO₂, HCl & HBr shall be routed through multi stage scrubber system. Scrubbed liquid shall be treated and reused or subjected to MEE. The process emissions containing derivatives of H₂, CO₂ & Oxygen shall be dispersed into the atmosphere. The industry shall also provide online pH monitoring system for scrubber. The industry shall meet the emission standards notified by the MoEF.
- iv Necessary measures shall be taken to control odour as far as possible. Chillers (brine solution) shall be installed to reduce solvent evaporation losses into the atmosphere. All the solvent storage tanks shall be connected to vent condensers. Regular monitoring of the VOCs shall be carried out using sensors.
- v The solvents shall be recovered by installing fractional distillation columns. The recovered solvents shall be reused in the process or sold to recyclers authorized by TSPCB. The volatile vapours generated during process shall be routed through condensers and the condensate shall be reused in the plant.
- vi As proposed, green belt of 92.8 Ha shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction and along road sides etc., Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- vii Raw materials shall be transported in covered trucks. Raw materials shall be stored under sheds. All the belt conveyors shall be covered with G.I. sheets. Appropriate dust suppression system shall be provided all around the stockpiles and conveyor system. All the roads in the plant area shall be asphalted / concreted and water shall be sprinkled to suppress the dust.
- viii Ambient air quality including ambient noise levels must not exceed the standards stipulated under Notification dt. 16.11.2009 issued by the MoEF&CC, GoI. Monitoring of ambient air quality and stack emissions shall be carried out regularly in consultation with TSPCB.

b) Water Pollution:

- i The source of water is Bore-wells within plant site, RWS Borewells and from Musi River as per G.O.Ms.No. 47 dt. 02.07.2016 of I&CAD (Reforms) Dept., GoTS. The total water requirement after expansion shall not exceed 2227 KLD (i.e., Fresh Water of 1030 KLD & Recycled treated waste water of 1197 KLD). Quantity of water used for: Process is 215 KLD; washings is 142 KLD; boiler make-up is 700 KLD; Cooling tower makeup is 700 KLD; DM / Softener 150 KLD; Scrubber is 20 KLD and Domestic purposes is 300 KLD.

- ii The total waste water generated after expansion shall not exceed 1340 KLD. Out of that, 215 KLD is from Process; 185 KLD is from washings; 70 KLD is from Boiler blow down; 420 KLD is from cooling tower bleed of; 150 KLD is from DM / Softener; 20 KLD is from Scrubber; 280 KLD is from Domestic section.
- iii The high TDS and low TDS effluents generated from the process are to be separated and treated separately. The high TDS effluents shall be disposed into stripper followed by MEE and ATFD. The condensate shall be reused in cooling towers after necessary treatment. The LTDS effluents shall be treated in an ETP followed by RO system. The permeate is to be re-used in the plant and rejects are to be sent to MEE system. The treated effluents shall be recycled completely. The project proponent shall achieve **Zero Liquid Discharge** and in no case the effluent shall be discharged outside the factory premises. The volatile organics shall be sent to recyclers authorized by TSPCB.
- iv The proponent shall provide separate storm water drains and harvest the rainwater from the rooftops to recharge the ground water.
- v Automatic / online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the Industry's website.
- vi The industry shall install IP Camera with PAN, TILT Zoom, 5x or above focal length, with night vision capability and flow meters in the channel / drain provided for carrying the effluent from within the premises of the unit.

c) Solid Waste :

- i. Hazardous waste generated from the industry such as waste oils, used oils etc., shall be disposed as per the Hazardous Wastes (Management, Handling, and Transboundary movement) Rules, 2008 and its amendments thereof to the recyclers authorized by TSPCB.
- ii. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- iii. The proponent shall comply with the following w.r.t. Solid Waste generated after expansion:

S. No	Description	Quantity	Disposal
1	Process residues	5389 Kg/day	TSDf for incineration / Authorized Cement plants for Co-processing / Onsite Incineration
2	Solvent Residue		
3	Spent carbon	739 Kg/day	
4	Forced Evaporation salts	24,868 Kg/day	TSDf for landfill/ Authorized Vendors
5	ETP sludge	1800 Kg/day	
6	Incineration ash	9.0 Kg/day	
7	Sodium chloride	157 Kg/day	Disposed to authorized recovery units / TSDf for land filling.
8	By products from Process	1965 Kg/day	Disposed to authorized recovery units / Authorized Cement plants for Co-processing.
9	Spent catalyst	80 Kg/day	Shall be disposed to TSDf / returned to supplier for recovery.
10	Spent solvents	139 KLD	Recovered within the own premises / sent to authorized recovery units.
11	Mixed spent solvents	123 KLD	Shall be recovered within the own premises / sent to authorized recovery units.

S. No	Description	Quantity	Disposal
12	Spent acids	24 KLD	Shall be recovered and recycled within industry / authorized units.
13	Used oil / Waste lubricating oil	18 L/day	Shall be disposed to authorized Re-processors / recyclers.
14	Detoxified containers & liners of HW & Haz.Chemicals, MS drums HDPE drums Carboys, Container liners	374 Nos/day	After complete detoxification sent back to suppliers.
15	E-Waste	0.85 Kg/day	Authorized recyclers / Re-processors.
16	Spillages / Rejected Materials	3.5 Kg/day	Incineration at onsite / TSDF for landfill / Transfer to authorized cements plants for co-processing.
17	Waste Insulation / Glass wool	20 Kg/day	Authorized recyclers / Re-processors
18	Used Lead acid batteries	6.0 Nos /month	Disposed to manufacturers / dealers on buy back basis.

B. General Conditions:

- i. **This order is valid for a period of 7 years.**
- ii. "Consent for Establishment" shall be obtained from Telangana State Pollution Control Board under Air and Water Act before the start of any activity / construction work at site.
- iii. This order is issued subject to outcome of the cases (if any), pending in the National Green Tribunal, Southern Zone, Chennai or in any other court.
- iv. The industry shall not manufacture any other products and exceeding capacities except those mentioned in this order, without permission.
- v. Provision shall be made for the housing of the construction labour within the site with all necessary infrastructure and facilities such as safe drinking water, fuel for cooking, mobile toilets, mobile STP, medical health care, crèche etc., The housing may be in the form of temporary structures to be removed after the completion of the project. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
- vi. No change in the process technology and scope of working should be made without prior approval of the SEIAA, TS. No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA, TS/ MoEF&CC, GoI, New Delhi, as applicable.
- vii. The environment safeguards contained in the EIA Report should be implemented in letter and spirit. The responsibility of implementation of environmental safeguards rests fully with the proponent i.e., M/s. Divi's Laboratories Ltd.
- viii. All the conditions, liabilities and legal provisions contained in the EC shall be equally applicable to the successor management of the project in the event of the project proponent transferring the ownership, maintenance of management of the project to any other entity.
- ix. The proponent shall submit half-yearly compliance reports in respect of the terms and conditions stipulated in this order in hard and soft copies to the SEIAA; and CCF, Regional office of MoEF&CC, GoI, Chennai on 1st June and 1st December of each calendar year.

- x. Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM, SPM, PM₁₀, PM_{2.5}, SO₂, NO_x monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.
- xi. Data on ambient air quality (RSPM, SPM, PM₁₀, PM_{2.5}, SO₂, NO_x) should be regularly submitted to the Ministry including its Regional Office located at Chennai and the State Pollution Control Board/ Central Pollution Control Board once in six months.
- xii. Usage of Personnel Protection Equipments by all employees / workers shall be ensured.
- xiii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- xiv. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.
- xv. The Industry shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- xvi. A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- xvii The funds earmarked for environmental protection measures (capital cost of Rs. 740 Lakhs and recurring cost of Rs. 74 Lakhs per annum) & also the funds earmarked for Corporate Social Responsibility (CSR) activities, should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the SEIAA, Ministry and its Regional Office located at Chennai.
- xviii Officials from the Regional Office of MoEF&CC, GoI, Chennai who would be monitoring the compliance of the stipulated conditions and implementation of environmental safeguards should be given full co-operation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents shall be submitted to the CCF, Regional Office to MoEF&CC, GoI, Chennai.
- xix. The project proponent shall submit the copies of the environmental clearance to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- xx. The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and SEIAA, Telangana. This order shall be displayed in the website of the project proponent.
- xxi. Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- xxii The company shall undertake eco-development measures including community welfare measures in the project area.
- xxiii The proponent shall obtain all other mandatory clearances from respective departments.
- xxiv Concealing the factual data or failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xxv. The SEIAA may revoke or suspend the order, if implementation of any of the above conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

xxvi The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

Sd/-
MEMBER SECRETARY
SEIAA, T.S.

Sd/-
MEMBER
SEIAA, T.S.

Sd/-
CHAIRMAN,
SEIAA, T.S.

To

Sri. S. Ramakrishna, General Manager,
M/s. Divi's Laboratories Limited (Unit-1),
Lingojigudem (V), Choutuppal (M),
Nalgonda District. AP - 508 252,
Ph.No. 8694-257001,
Email.id mail@divislaboratories.com

//T.C.F.B.O//

R/S
SENIOR ENVIRONMENTAL ENGINEER
(Unit Head – III)



REGD.POST WITH ACK.DUE

Order No. SEIAA/TS/OL/YDR-03/2017- 1421

Dt:03.08.2017

Sub: SEIAA, TS - M/s. Divi's Laboratories Limited (Unit-1), Sy. No. 302, Lingojigudem (V), Choutuppall (M), Yadadru (formerly Nalgonda) District – Amendment to Environmental Clearance – Issued - Reg.

Ref: 1. Order No. SEIAA/TS/OL/NLG-02/2015-3077, dt. 03.02.2017.
2. Representation submitted online (proposal no.SIA/TG/IND2/19612/2017) on 15.06.2017 received on 21.06.2017.

- I. Earlier, the SEIAA, Telangana vide reference 1st cited had issued Environmental Clearance for Expansion of **Synthetic Organic Chemicals manufacturing unit** in the name of **M/s. Divi's Laboratories Limited (Unit-1), Sy. No. 302, Lingojigudem (V), Choutuppall (M), Nalgonda District** mentioning "The total area of the site for expansion is Ac.15.35 in Sy.No.302. Whereas, the total site area as per EC order dt.10.06.2008 is Ac. 500 (202.3 Ha.). Out of that, area earmarked for development of Green belt is 92.8 Ha." keeping in view of the G.O.Ms. No. 44, dt. 08.09.2016 of the I&C (IP&INF) Dept., GoTS.
- II. The proponent vide reference 2nd cited informed the I&C (IP&INF) Dept., GoTS vide Memo dt.05.06.2017 issued orders that M/s. Divi's Laboratories Ltd., in Sy.Nos. 238, 247 to 250, 260 to 279 & 289 to 293 of Lingojigudem (V) and Sy.Nos. 505 & 506 of Aregudem (V) of Choutuppall (M), Yadadri District are also declared as Notified Industrial Areas in implementation of the Orders issued in G.O.Ms.No.120, dt.22.10.2013 & G.O.Ms.44, dt.08.09.2016. The extent of area of all the Sy.Nos. mentioned above is Ac.507.32 Guntas. Hence, it was requested to issue amendment to EC.
- III. The request of the proponent was examined by the State Level Expert Appraisal Committee (SEAC) in its meeting held on 28.06.2017. Based on the information furnished and Memo dt.05.06.2017 issued by the I&C (IP&INF) Dept. of GoTS, the Committee considered the request of the proponent and recommended to issue amendment to the EC order. The State Level Environment Impact Assessment Authority (SEIAA), in its meetings held on 10.07.2017 & 11.07.2017 examined the request of the proponent and the recommendations of SEAC, and decided to issue amendment to the Environmental Clearance. Hence, the following amendments are made to the EC order issued vide reference 1st cited:

- (a) The location of the project mentioned in the EC Order shall be read as "Sy.No. 238, 247 to 250, 260 to 279 & from 289 to 293 & 302 of Lingojudem (V) and Sy.No. 505 & 506 of Aregudem (Hamlet of Pantangi Village) of Choutuppal (M), Yadadri District".
- (b) The total site area after expansion mentioned in Para 1 shall be read as "Ac.507.32 Guntas".
- (c) The following additional condition no. vii shall be inserted after condition no. vi under b)
Water Pollution in A Specific Conditions:

The proponent shall regularly monitor the water quality of: in & around water bodies on downstream side of the project site and submit monitoring reports to the TSPCB.

- IV. All other information mentioned and conditions stipulated in the EC order issued vide reference 1st cited remain the same.

Sd/-
MEMBER SECRETARY
SEIAA, T.S.

Sd/-
MEMBER
SEIAA, T.S.

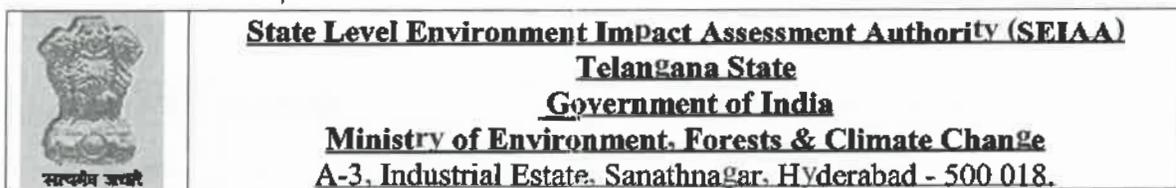
Sd/-
CHAIRMAN,
SEIAA, T.S.

To

Sri. S. Ramakrishna, General Manager,
M/s. Divi's Laboratories Limited (Unit-1),
Lingojudem (V), Choutuppal (M),
Nalgonda District. AP - 508 252,
Ph.No. 8694-257001,
Email.id mail@divislaboratories.com

//T.C.F.B.O//

RA3
Joint Chief Environmental Engineer
(Unit - B)



REGD.POST WITH ACK.DUE

Order No. SEIAA/TS/OL/YDR-38/2020- 165**Dt:04.07.2020.**

Sub: SEIAA, TS – M/s. Divi's Laboratories Limited (Unit – 1) Sy.No. 238, 247 to 250, 260 to 279, 289 to 293 & 302 of Lingo jigudam (V), and 505 & 506 of Aregudem (Hamlet of Pantangi (V)), Choutuppall (M), Yadadri Bhuvanagiri Dist – Environmental Clearance (Expansion) - Issued - Reg.

Ref:

1. Order No. J-11011/1159/2007-IA-II(I), dt. 10.06.2008.
2. Order No. SEIAA/TS/OL/NLG-02/2015-3077, dt. 03.02.2017.
3. Order No. SEIAA/TS/OL/YDR-03/2017-1421, dt. 03.08.2017 (Amend. to EC)
4. Representation submitted online (proposal no.SIA/TG/IND2/152244/2020) on 28.04.2018 received on 09.05.2020.

- I. Earlier, the Environmental Clearance was issued by the MoE&F, GoI for change of product mix vide reference 1st cited. The SEIAA, Telangana vide references 2nd & 3rd cited issued EC Expansion & Amendment to EC for expansion of the unit for manufacturing 33 products of Bulk Drugs & Intermediates (Fixed 6 + Campaign 27) + R&D products.
- II. Now, vide reference 4th cited for seeking Environmental Clearance for the proposed expansion of **Synthetic Organic Chemicals manufacturing unit** in the name of **M/s. Divi's Laboratories Limited (Unit – 1) Sy.No. 238, 247 to 250, 260 to 279, 289 to 293 & 302 of Lingo jigudam (V), and 505 & 506 of Aregudem (Hamlet of Pantangi (V)), Choutuppall (M), Yadadri Bhuvanagiri Dist.** The nearest human habitation viz., Lingo jigudem (V) exists at a distance of 2.0 km from the project site. It was reported that nearest water body i.e., Ityala Cheruvu exists at a distance of 2.8 km and nearest RF i.e., Choutuppall RF exists at a distance of 3.2 km from the plant site. The total area of the site is 205.31 Ha. (Ac. 507.32); Out of that, area earmarked for development of Green belt is 99.82 Ha (48.6%). The total cost of the project after expansion is Rs 1279.36 Crores and the production capacity of the project is as following:

S. No	Name of products	Quantity (TPA)
1	Naproxen	1008
2	Dextromethorphan HBr	372
3	Iopamidol	180
4	Nabumetone	200
5	Valacyclovir.HCl	100
6	Levetiracetam	960
7	A – Wing	25
8	B – Wing	25
9	Proguanil HCl	8.0
10	Sulphazine	5.0
11	Quetiapine	5.0
12	Atovaquone	24
13	Carvedilol	4.0
14	Marcoumar	2.0
15	N-Hydroxy Succinimide	15
16	Niacin	100
17	Free Amine Pivalate Ester	75.6
18	Fosphenytoin Sodium	0.5
19	Diltiazem HCl	60

S. No	Name of products	Quantity (TPA)
20	R-amine	1.0
21	Apocarotenal	5.0
22	EF-9	0.5
23	N-Boc-Ethylenediamine	8.0
24	Fumaraldehyde Bis (Dimethyl acetal)	120
25	CME	50
26	Bromo OTBN	900
27	ISIO-II	4.2
28	Iopromide	300
29	Nicotine	20
30	Dolutegravir	10
31	Rivaroxaban	30
32	DL-Naproxen	1200
33	Hydroxy Chloroquine Sulphate	300
34	Remdesvir	100
35	Favipiravir	100
--	R&D Products (10)	36.5
Total Production		6354.3

III. In the process, synthetic organic chemicals are produced by using various chemicals, solvents, etc.,

IV. The proposal has been examined and processed in accordance with EIA Notification, 2006 and its amendments thereof. The State Level Expert Appraisal Committee (SEAC) examined the proposal in its meetings held on 28.10.2019 & 23.05.2020. The Sub-Committee constituted by the SEAC in its meeting held on 28.10.2019 inspected the site on 16.12.2019 and submitted the report. The project is exempted from the process of Public Hearing as the industry is located in a Notified Industrial Area existing since 1990's, as per OM dt. 10.12.2014 of the MoEF&CC, GoI. Based on the information furnished, presentation made by the proponent and the consultant M/s. Ramky Enviro Engineers Ltd., Hyderabad; Certified Compliance Report dt. 27.04.2020 issued by the TSPCB, as per O.M. dt.30.05.2012 & 07.09.2017 of MoE&F, GoI; Report of the Sub-Committee; G.O.Ms. No. 95, dt. 21.09.2007 of the EFS&T Dept., GoAP; G.O.Ms. No. 64, dt. 25.07.2013 of the EFS&T Dept., GoAP; G.O.Ms. No. 120, dt. 22.10.2013 of the I&C Dept., GoAP. The SEAC also noted the provisions of G.O.Ms.No.44, dt.08.09.2016 issued by the Industries & Commerce (IP&INF) Dept., GoTS, and Memo dt.05.06.2017 of the I&C (IP&INF) Dept., declaring the project site of the proponent as notified industrial areas in G.O.Ms.No. 120, I&C (IP) Dept., dt.22.10.2013; S.O.1223 (E), dt.27.03.2020 of MoEF&CC, GoI; Undertaking Ir. dt.27.06.2020 submitted by the proponent w.r.t. the recommendations of the Sub-Committee's inspection report; the Committee considered the project proposal and recommended for issue of Environmental Clearance. The State Level Environment Impact Assessment Authority (SEIAA) in its meeting held on 18.06.2020 examined the proposal and recommendations of SEAC for issue of Environmental Clearance. Accordingly, after discussions in the matter and considering the recommendations of the SEAC, **the SEIAA, Telangana hereby accords Environmental Clearance to the project for Expansion** as mentioned at Para no. I under the provisions of the EIA Notification 2006 and its subsequent amendments issued under Environment (Protection) Act, 1986 subject to implementation of the following specific and general conditions:

A. Specific Conditions:

i. Air pollution:

- i The emissions from the proposed Coal fired Boilers of capacity 1x24 TPH, 1x16 TPH & 1x24 TPH (Standby) and Oil fired Boilers of capacity 2 x 4 TPH shall be routed through Electro Static Precipitator (ESP) / Cyclone separator / Bag filter followed by Combined

Stack of height 40m. The concentration of particulates in the emission shall not exceed 115 mg/Nm³. Thermic fluid heater (6x4 lakh kcal/hr) shall be provided with a stack of height 30m. Incinerator of capacity 1x9 TPD shall be routed through Multi Cyclone followed by Ventury Scrubber with a stack of height 40m. Sampling Port with removable dummy of not less than 15cm diameter in the stack at a distance of 8 times the diameter of the stack from the nearest constraint such as bends etc, shall be provided to monitor stack emissions. Stack of adequate height shall be provided for D.G. Sets of capacity 11 x 1500 kVA (Existing: 1x1500 kVA & Proposed: 10x1500 kVA), 5x1250 kVA(existing), 1x750 kVA (existing), 1x625 kVA (existing) & 2x320 kVA (existing) as per CPCB norms.

- ii The process emissions containing Carbon monoxide, Hydrogen Sulphide, Hydrogen Chloride, & Ammonia are to be routed through Multi Stage Scrubber system. The process emissions containing derivatives of Carbon dioxide & Oxygen shall be safely dispersed into the atmosphere. Further, the process emissions containing derivatives of Hydrogen are to be safely dispersed into the atmosphere through water column. The industry shall also provide online pH monitoring system for scrubber. The industry shall meet the emission standards notified by the MoEF&CC.
- iii National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended time to time shall be followed by the unit.
- iv Necessary measures shall be taken to control odour as far as possible. Chillers (brine solution) shall be installed to reduce solvent evaporation losses into the atmosphere. All the solvent storage tanks shall be connected to vent condensers. Regular monitoring of the VOCs shall be carried out using sensors.
- v The solvents shall be recovered by installing fractional distillation columns. The recovered solvents shall be reused in the process or sold to recyclers authorized by TSPCB. The volatile vapours generated during process shall be routed through condensers and the condensate shall be reused in the plant.
- vi As proposed, greenbelt of 99.82 Ha. (48.6%) shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction and along the road sides etc., Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- vii Raw materials shall be transported in covered trucks. Raw materials shall be stored under sheds. All the belt conveyors shall be covered with G.I. sheets. Appropriate dust suppression system shall be provided all around the stockpiles and conveyor system. All the roads in the plant area shall be asphalted / concreted and water shall be sprinkled to suppress the dust.
- viii The industry shall monitor VOCs in ambient air with online VOC analyzer and connect the data to the server of TSPCB.
- ix The project proponent shall install 24x7 continuous emission monitoring system at stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB & CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- x The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.
- xi To control source and the fugitive emission suitable pollution control devices shall be installed to meet the prescribed norms and / or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

- xii Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- xiii Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- xiv The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc., on all sources of noise generation.
- xv The ambient noise levels should conform to the standards prescribed under E(P)Act, 1986 viz., 75 dB(A) during day time and 70 dB(A) during night time.
- xvi The Industry shall provide energy sources for lighting purpose shall preferably be LED based.
- xvii Ambient air quality including ambient noise levels must not exceed the standards stipulated under Notification dt. 16.11.2009 issued by the MoEF&CC, GoI. Monitoring of ambient air quality and stack emissions shall be carried out regularly in consultation with TSPCB.

b) Water Pollution:

- i The source of water is Bore-wells within the plant site, Ground water Dept. and from Musi River as per G.O.Ms.No.47, dt.02.07.2016 of I&CAD (Reforms) Dept., GoTS. The total water requirement after expansion shall not exceed 5014.0 KLD (i.e., Fresh Water of 3144 KLD & Recycled treated water of 1870 KLD). Quantity of water used for: Process Floor & reactor washings is 944.0 KLD; Boiler make-up is 1200.0 KLD; Cooling tower makeup is 1500.0 KLD; DM / Softener 150 KLD; Scrubber is 20 KLD and Domestic purposes is 550 KLD & Gardening is 600.0 KLD.
- ii The total waste water generated after expansion shall not exceed 2846.0 KLD. Out of that, 619.0 KLD (HTDS) & 705.0 KLD (LTDS) are from Process & washings; 40 KLD is from Boiler blow down; 800.0 KLD is from cooling tower bleed of; 20.0 KLD is from Incinerator Scrubber; 150.0 KLD is from DM Plant / Softener regeneration; 512.0 KLD is from Domestic section.
- iii The high TDS and low TDS effluents generated from the process are to be separated and treated separately. The high TDS effluents shall be disposed into stripper followed by MEE and ATFD. The condensate shall be reused in cooling towers after necessary treatment. The LTDS effluents shall be treated in Biological ETP followed by RO system. The permeate is to be re-used in the plant and rejects are to be sent to MEE system. The treated effluents shall be recycled completely. The project proponent shall achieve **Zero Liquid Discharge** and in no case the effluent shall be discharged outside the factory premises. The volatile organics shall be sent to recyclers authorized by TSPCB.
- iv The effluent discharged shall conform to the standards prescribed under Environment (Protection) Rules, 1986 or as specified by the SPCB while granting Consent under the Air/Water Act, whichever is more stringent.
- v The effluent generated from the unit processes and operations shall be treated in proposed MEE followed by ETP. The treated effluent shall be recycled / reused within the plant. The effluent generated from the domestic section shall be disposed to septic tank followed by Soak Pit.
- vi The proponent shall provide separate storm water drains and harvest the rainwater from the rooftops to recharge the ground water.
- vii The industry shall install & maintain separate water meters for recording water consumption for various purposes and also maintain daily records.
- viii Automatic / online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the TSPCB and in the Industry's website.

- ix The industry shall install IP Camera with PAN, TILT Zoom, 5x or above focal length, with night vision capability and flow meters in the channel / drain provided for carrying the effluent within the premises of the unit.
- x Permission from the competent authority should be obtained for drawl of ground water, if any, required for this project.
- xi Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells by the project proponent in and around project area in consultation with Regional Director, CGWB, Southern Region, Hyderabad. Data thus collected should be sent at regular interval to MoEF, CGWA and CGWB, Southern, Region, Hyderabad.
- xii Suitable conservation measures to augment groundwater resources in the area shall be planned and implemented in consultation with Regional Director, CGWB, Southern Region, Hyderabad. Suitable measures should be taken for rainwater harvesting.

c) Solid Waste :

- i. Hazardous waste generated from the industry such as waste oils, used oils etc., shall be disposed as per the Hazardous Waste (Management, Handling, and Transboundary Movement) Rules, 2016, to the recyclers authorized by TSPCB.
- ii. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- iii. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc., Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- iv. The company shall undertake waste minimization measures as: Metering and control of quantities of active ingredients to minimize waste; Reuse of by-products from the process as raw materials or as raw material substitutes in other processes; Use of automated filling to minimize spillage; Venting equipment through vapour recovery system; and Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- v. The proponent shall comply with the following w.r.t. solid waste generated:

S. No	Description	Quantity	Mode of Disposal
1	Process residues (Organic Residue)	38485.5 Kg/day	Shall be disposed to Cement units for Co-processing / AFRF facilities of M/s: GEPIL Infrastructure Pvt.Ltd., Rakamcherla, Pudur (M), Rangareddy Dist (or) M/s: TSDF, Dundigal for pre-processing to be sent to Cement units for Co-processing / TSDF Dundigal for incineration.
2	Solvent Residue (Distillation bottom residue)		
3	Spent carbon	1033.8 Kg/day	
4	Spent solvents	285 KLD	Solvents shall be recovered to the maximum extent possible and shall be reused. The Spent Solvents which cannot be reused shall be disposed to the End Users / Authorized Cement manufacturing units for Co-processing / AFRF facilities of M/s: GEPIL Infrastructure Pvt.Ltd., Rakamcherla, Pudur (M), Rangareddy Dist (or) M/s: TSDF, Dundigal for pre-processing to be sent to Cement units for Co-processing / TSDF Dundigal for incineration.
5	Mixed spent solvents	241 KLD	

S. No	Description	Quantity	Mode of Disposal
6	Forced Evaporation salts	75753.7 Kg/day	TSDF for landfill / Authorized Vendors.
7	ETP sludge	4500 Kg/day	
8	Incineration ash	9.0 Kg/day	
9	Sodium chloride	108.4 Kg/day	Disposed to authorized recovery units / TSDF, Dundigal for land filling.
10	Spent catalyst	142.08 Kg/day	Shall be disposed to TSDF / returned to supplier for recovery.
11	Spent acids	24 KLD	Shall be recovered and recycled within industry / disposed to the End users / Authorized units.
12	Used oil / Waste lubricating oil	35 Ltrs/day	Shall be disposed to the authorized Re-processors / recyclers.
13	Detoxified containers & liners of HW & Haz. Chemicals <ul style="list-style-type: none"> • MS drums • HDPE drums • Carboys • Container liners 	125 Nos/day 76 Nos/day 212 Nos/day 119 Nos/day	After complete detoxification sent back to suppliers / Disposed to outside parties.
14	E-Waste	4.0 Kg/day	Shall be disposed to authorized Re-processors / Recyclers.
15	Spillage / Rejected material	20.0 Kg/day	Onsite incineration / Authorized cement manufacturing units for Co-processing / TSDF, Dundigal for incineration.
16	Waste Insulation / Glass Wool	320 Kg/day	Shall be disposed to authorized Re-processors / TSDF.
17	Used lead acid batteries	20.0 Kg/day	Disposed to manufacturers / dealers on buy back basis.

B. General Conditions:

- i **This order is valid for a period of 7 years.**
- ii "Consent for Establishment" shall be obtained from Telangana State Pollution Control Board under Air and Water Act before the start of any activity / construction work at site and also obtain CFO before commencing operations.
- iii The industry shall not manufacture any other products and exceeding capacities except those mentioned in this order, without permission.
- iv Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as safe drinking water, fuel for cooking, mobile toilets, mobile STP, medical health care, crèche etc., The housing may be in the form of temporary structures to be removed after the completion of the project. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
- v No change in the process technology and scope of working should be made without prior approval of the SEIAA, TS. No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA, TS/ MoEF&CC, GoI, New Delhi, as applicable.
- vi The environment safeguards contained in the EIA Report should be implemented in letter and spirit. The responsibility of implementation of environmental safeguards rests fully with the proponent ie., M/s. Divi's Laboratories Ltd.
- vii The project proponent shall abide by all commitments and recommendations made in the EIA/EMP report, commitment made during their presentation to the Expert Appraisal Committee.
- viii All the conditions, liabilities and legal provisions contained in the EC shall be equally applicable to the successor management of the project in the event of project proponent transferring the ownership, maintenance of management of the project to any other entity.

- ix The proponent shall submit half-yearly compliance reports in respect of the terms and conditions stipulated in this order in hard and soft copies to the SEIAA; and CCF, Regional office of MoEF&CC, GoI, Chennai on 1st June and 1st December of each calendar year.
- x Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM, SPM, PM₁₀, PM_{2.5}, SO₂, NO_x monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.
- xi Data on ambient air quality (PM₁₀, PM_{2.5}, SO₂, NO₂) should be regularly submitted to the Ministry including its Regional Office located at Chennai and the State Pollution Control Board/ Central Pollution Control Board once in six months.
- xii Usage of Personnel Protection Equipments by all employees / workers shall be ensured.
- xiii Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- xiv Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.
- xv Emergency preparedness plan based on the Hazardous identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- xvi The Industry shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- xvii A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- xviii The funds earmarked for environmental protection measures (Capital cost of Rs. 15950.0 Lakhs and Recurring cost of Rs. 1595.0 Lakhs/annum); Budget for CER is Rs. 448.0 Lakhs for 5 years. & also the funds earmarked for Corporate Social Responsibility (CSR) activities, should be kept in separate account and should not be diverted for other purpose. The budget allocated for the EMP shall be subsequently increased if the project cost increases at the time of CFO. Year wise expenditure should be reported to the SEIAA, Ministry and its Regional Office located at Chennai.
- xix The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No.22-65/2017-IA.III, dt.01.05.2018, as applicable regarding Corporate Environment Responsibility (CER).
- xx The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned SPCB as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- xxi Officials from the Regional Office of MoEF&CC, GoI, Chennai who would be monitoring the compliance of the stipulated conditions and implementation of environmental safeguards should be given full co-operation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents shall be submitted to the CCF, Regional Office to MoEF&CC, GoI, Chennai.
- xxii The project proponent shall submit the copies of environmental clearance to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- xxiii The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and SEIAA, Telangana. This order shall be displayed in the website of the project proponent.

- xxiv Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- xxv The company shall undertake eco-development measures including community welfare measures in the project area.
- xxvi The proponent shall obtain all other mandatory clearances from respective departments.
- xxvii Concealing the factual data or failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xxviii The SEIAA may revoke or suspend the order, if implementation of any of the above conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- xxix The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
- xxx Grant of EC is also subject to circulars issued under the EIA Notifications 2006, which are available on the MoEF&CC website: www.parivesh.nic.in

Sd/-
MEMBER SECRETARY
SEIAA, T.S.

Sd/-
MEMBER
SEIAA, T.S.

Sd/-
CHAIRMAN,
SEIAA, T.S.

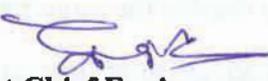
To

**Sri S. Ramakrishna, General Manager,
M/s. Divi's Laboratories Limited (Unit-1),
Lingojigudem (V), Choutuppal (M),
Yadadri Bhuvanagiri District - 508 252,
Ph.No. 08694-257001,
Email.id mail@divislaboratories.com**

Copy to:

1. Prof. Ch. Krishna Reddy, Chairman, SEAC, T.S. for kind information.
2. The Member Secretary, TSPCB for kind information.
3. The EE, RO: Nalgonda, TSPCB for information.
4. The Regional Officer, MoEF&CC, GOI, Chennai for kind information.
5. The Secretary, MoEF&CC, GOI, New Delhi for kind information.

//T.C.F.B.O//


Joint Chief Environmental Engineer

J-11011/321/2016- IA. II (I)
Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division

3rd Floor, Vayu Block,
Indira Paryavaran Bhawan, Jor Bagh Road,
Aliganj, New Delhi-110003

Dated: 27th April, 2018

OFFICE MEMORANDUM

Subject: Exemption from Public Consultation for the projects / activities located within the Industrial Estates / Parks - regarding

In order to facilitate understanding of the qualifying criterion providing exemption from public consultation for the projects or activities located within the industrial estates / parks, and to streamline the procedural requirements for environmental clearances to such projects/activities in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006, following clarifications are being issued for compliance with immediate effect: -

- (i) The exemption from public consultation, as provided under para 7(i) III Stage (3)(i)(b) of EIA Notification, 2006, to the projects or activities located within the industrial estates or parks, if applicable as under:
 - (a) Which were notified by the Central Government or the State/UT Governments, prior to the said Notification coming into force on 14th September, 2006
 - (b) Which obtain prior environmental clearances as mandated under the EIA Notification, 2006 [item 7(c) of the schedule to the said Notification].
- (ii) The exemption from public consultation, as provided under para 7(i) III Stage (3)(i)(b) of the EIA Notification, 2006, is also applicable to the projects or activities (located within the industrial estates and parks), which were granted Terms of Reference (ToR/Standard ToR) prior to environmental clearances to such industrial estates/parks, subject to validity of the ToRs.



- (iii) The exemption from public consultation, as provided under para 7(i) III State (3)(i)(b) of the EIA Notification, 2006, shall not be applicable to the following projects or activities (located within the industrial estates / parks) listed as under:

Sl. No. in Schedule of EIA Notification, 2006	Project or Activity
1 (d)	Thermal power plants
1 (e)	Nuclear power projects and processing of nuclear fuel
2 (a)	Coal washeries
2 (b)	Mineral beneficiation
3 (a)	Metallurgical industries (ferrous and non-ferrous)
3 (b)	Cement plants
4 (a)	Petroleum refining industry
4(b)	Coke oven plants
4 (c)	Asbestos milling and asbestos based products
4 (f)	Skin/hide processing including tanning industry
5 (g)	Distilleries
5 (i)	Pulp & paper industry
5 (j)	Sugar industry

2. This OM is issued in supersession to the earlier OMs dated 16th May, 2014; 10th December, 2014; and 4th April, 2016.

This issues with the approval of the Competent Authority.


(Sharath Kumar Pallerla)
Scientist 'F'/Director

To

1. All the officers of IA Division
2. Chairperson / Member Secretaries of all the SEIAAs/SEACs
3. Chairman of all the Expert Appraisal Committees
4. Chairman, Central Pollution Control Board
5. Chairpersons / Member Secretaries of all SPCBs/UTPCCs

Copy for information to:

1. PS to Minister for Environment, Forest and Climate Change
2. PS to Minister of State for Environment, Forest and Climate Change
3. PPS to Secretary (EF&CC)
4. PPS to AS (AKJ) / AS (AKM)
5. PPS to JS(GB) / JS(JT)
6. Website, MoEF&CC
7. Guard File

20-12-2019

Aregudem villagers visit to ETP Facility

AREGUEDEM VILLAGERS VISIT TO ETP FACILITY ON 20-12-2019

Equalization & Neutralization tanks



Online Effluent Monitoring system



Biological Treatment Area



Biological Treatment Area



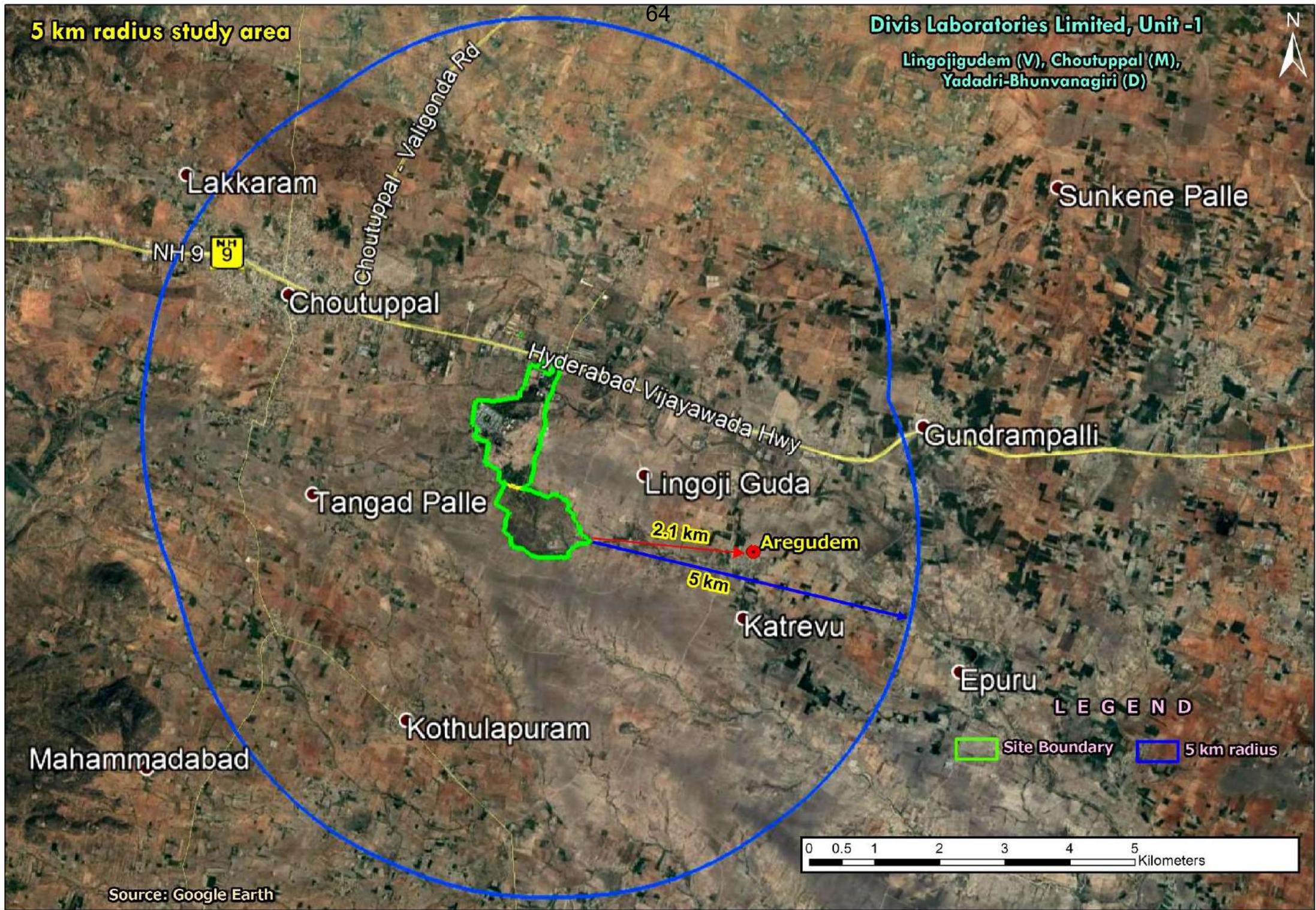
RO, MEE & ATFD



5 km radius study area

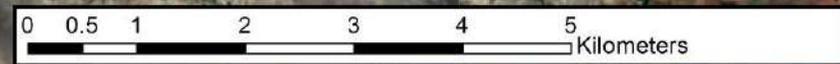
Divis Laboratories Limited, Unit -1

Lingojigudem (V), Choutuppal (M),
Yadadri-Bhunvanagiri (D)



LEGEND

Site Boundary 5 km radius



Source: Google Earth

OFFICE OF THE DISTRICT MEDICAL AND HEALTH OFFICER YADADRI -
BHUVANAGIRI DISTRICT

From,

Dr. B. Samba Siva Rao
District Medical & Health officer,
Yadadri Bhuvanagiri, District.

To,

The General Manager,
Divis Laboratories Ltd,
Lingojigudem.

Lr.Rc.No: *Spl* /DM&HO/Yadadri-Date *09.07.2020*

Sir,

Sub: Medical & Health department – Choutuppal Mandal – Divis Laboratories Ltd, Lingojigudem – abnormal health issues due to pollution – information called for – sent – Reg.

Ref: Deputy General Manager Divi's Laboratories Ltd, Lingojigudem letter No. nil
Dated: 03-07-2020

With reference to your letter cited, where in it has been requested to inform as to whether any abnormal health issues are noticed due to water/air pollution effected on the following villages of Choutuppal (M).

- | | |
|------------------|-------------------|
| 1. Aregudem | 2. Lingojigudem |
| 3. Katrevu | 4. Chintalagudem |
| 5. Thangadapally | 6. Ankireddygudem |
| 7. Panthangi | 8. Damera |

In this regard, it is to inform that, no reports are received with regard to skin diseases, Lung infections, abortions owing to water/air pollution effects on the above said villages of Choutuppal (M) last 3 years.

This is for information,

[Signature]
DISTRICT MEDICAL & HEALTH OFFICER
YADADRI BHUVANAGIRI

అదనంగా ప్రతినిధి

పశు సంవత్సరం - చౌటుప్పల మండలం

From
డా॥ శ్రీవేణీ
పశువైద్య సహాయ శస్త్ర-చికిత్సకులు
ప్రాథమిక పశువైద్య కేంద్రం
-చౌటుప్పల మండలం
యాదాద్రి - భీమనగరి జిల్లా

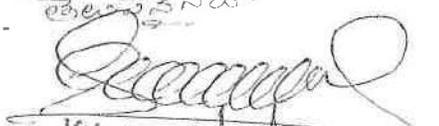
To
నల్ల శ్రీనివాస్
స/ చౌటుప్పల
D.No. 1-69/1
-చౌటుప్పల మండలం
యాదాద్రి - భీమనగరి జిల్లా

విషయము :- సమాచార హక్కు చట్టము 2005 -
గత 10 సంవత్సరాల నుండి చనిపోయిన
పశువుల వివరాలు గురించి

సూచన :- స.పా.చ. ఆర్డర్ నెంబర్ : 22/6/2020

పై సూచన ద్వారా మీరు చౌటుప్పల
మండల పరిధిలోని గ్రామాలలో ఉన్న పశువులు గత పది
సంవత్సరాల నుండి నీటి వరకు వివిధ వ్యాధి వలన చనిపోయిన
వివరాలు సంవత్సరం వారీగా తీయించారు.

ఈ విషయంలో మా కార్యాలయ ఇకార్బి
పరిశీలించగా మీరు తెలిపిన సమాచారం లక్షణంగా లేదు. ౩
నీను గత ౩ సంవత్సరాల నుండి ఈ మండలంలో అధికారిగా పని
చేయడం ద్వారా గా సర్వీసు కాల పరిధిలో పశువుల సమాచార
మరణాలలో వలయం నీజనల్ వ్యాధులలో తప్ప మరీ ఏ విధం
పశువుల మరణించిన దాఖలూ లేవని తెలుపడం.


02/07/2020
Veterinary Assistant Surgeon
Primary Veterinary Centre-Chouppal
Dist. Yadadri-Bhongir-508 252

GOVERNMENT OF TELANGANA
ANIMAL HUSBANDARY DEPARTMENT

From:

Dr.Sravan,
Veterinary Asst. Surgeon,
Primary Veterinary Centre,
Choutuppal Mandal,
Yadadri Bhuvanagiri Dist.

To:

Sri. Nalla Srinivas,
S/O Chandraiah,
D.No: 1-69/1,
Choutuppal,
Yadadribhuvanagiri.

Sub: Right to Information Act 2005 – Details of death of Animals last (10) years
– called for sent – Reg

Ref: 1) Your application Dt: 22/06/2020

In the above reference cited, you have requested to furnish details of Animals in what diseases death last (10) years in all villages of this Mandal with year wise.

In this regard, it is informed to you that on verification of the records available in this office, there is no information as called by you. When I was assumed the charge of this post in the year 2017, there is a information about animals are died due to seasonal death only except this, no other diseases are took placed.

This is for information.

Yours Faithfully,

SD/-
Veterinary Asst. Surgeon

అక్షయంగా ప్రస్తుతము

పశు సంవర్ధక శాఖ - చౌటుప్పల మండలం.

From
డా. శ్రీవల్లి
పశువైద్య సహాయ శస్త్ర-చికిత్సకులు
ప్రాథమిక పశువైద్య కేంద్రం
-చౌటుప్పల మండలం
యాదాద్రి - భువనగిరి జిల్లా

To
నల్లా శ్రీనువాస్
S/o చంద్రయ్య
D.NO. 1-69/1
-చౌటుప్పల మండలం
యాదాద్రి - భువనగిరి జిల్లా

విషయము :- సమాచార పాత్రుక - చట్టము 2002 -
గత 10 సంవత్సరాల నుండి చనిపోయిన
పశువుల వివరాల గురించి.

సూచన :- స.పా.చ. ఆర్డర్ నెంబర్ : 22/6/2020

పై సూచన ద్వారా మీరు చౌటుప్పల
మండల పరిధిలోని గ్రామాలలో ఉన్న పశువులు గత పది
సంవత్సరాల నుండి నీటి వరకు ఏవి ప్రాధికార వలన చనిపోయిన
వివరాలు సంవత్సరం వారీగా కలియజేయండి.

ఈ విషయంలో మా కార్యాలయలకి కార్యక్రమ
పరిషేషించగా మీరు అందించిన సమాచారం లోపలగా లేదు. కా
నీను గత 3 సంవత్సరాల నుండి ఈ మండలంలో అధికారిగా పని
చేయడం ద్వారా నా సర్టిఫికేట్ల పరిధిలో పశువులు సమాచార
మరణంతో మరలని నిజానలే ప్రాధికారంతో తప్ప మరి ఏ నిధం
పశువులు మరణించిన బాధులు లేవని తెలుపడమది.


02/07/2020
Veterinary Assistant Surgeon
Primary Veterinary Centre
Deotla

OFFICE OF THE DISTRICT MEDICAL AND HEALTH OFFICER YADADRI -
BHUVANAGIRI DISTRICT

From,

Dr. B. Samba Siva Rao
District Medical & Health officer,
Yadadri Bhuvanagiri, District.

To,

The General Manager,
Divis Laboratories Ltd.
Lingojigudem.

Lr. Rc. No: *Spd* /DM&HO/Yadadri-Date *09.07.2020*

Sir,

Sub: Medical & Health department – Choutuppal Mandal – Divis Laboratories Ltd, Lingojigudem – abnormal health issues due to pollution – information called for – sent – Reg.

Ref: Deputy General Manager Divis Laboratories Ltd, Lingojigudem letter No. nil
Dated: 03-07-2020

With reference to your letter cited, where in it has been requested to inform as to whether any abnormal health issues are noticed due to water/air pollution effected on the following villages of Choutuppal (M).

- | | |
|------------------|-------------------|
| 1. Aregudem | 2. Lingojigudem |
| 3. Katrevu | 4. Chintalagudem |
| 5. Thangadapally | 6. Ankireddygudem |
| 7. Panthangi | 8. Damera |

In this regard, it is to inform that, no reports are received with regard to skin diseases, Lung infections, abortions owing to water/air pollution effects on the above said villages of Choutuppal (M) last 3 years.

This is for information,


 DISTRICT MEDICAL & HEALTH OFFICER
 YADADRI BHUVANAGIRI

Dt: 14.7.2020.

From,
M. Nagaraju
Mandal Agricultural Officer,
Choutuppal (M), Yadadri (Dist),

To,
The General Manager,
Divis Laboratories Ltd,
Lingojigudam, Choutuppal (M),

Sub:- RTI Act 2005 - Choutuppal M - cultivation
particulars in respect of all Revenue Villages of Choutuppal (M)
Information called - Sen-Reg.

Ref:- Your application Dt: 16.6.2020,

with reference to your letter under reference
Cited, where it has been requested to furnish
Cultivation particulars of all crops,

In this regard I am enclosing herewith
a statement showing the crop cultivation particulars
in all Revenue Villages of Choutuppal (M),

This for future information.

Enclosures

* Reconsolidation cropping
particulars during, 2014-15,
2016-17, 2018-19,

Yours sincerely,


Mandal Agricultural Officer
Choutuppal Mdl.
Yadadri Bhuvanagiri Dist.

VILLAGE WISE CROP WISE RECONSILATION AREA SOWN FIGURES OF CHOUTUPPAL TAHSIL (KHARIF 2014-2015)

Sl. No.	Name of the Village	AREA IN ACRES														VEGETABLES									
		Paddy				JOWAR	BAJRA	GREEN GRAM	REDGRAM	GROUND NUT	MAIZE	CHILLIES	CASTER	COTTON	DONDA	Cucumber	Brinjal	Tomato	Beera	Bendi	Gokara	Bottle Gourd	Kakara	Leafy Veg.	Total Veg.
		TANKS	WELLS	BORE WELLS	TOTAL																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
1	Coopranpet			60	60				0					0										0	
2	Malkapur			399	399				90					581										0	
3	Allapur			115	115				9					135		2	1				1		1	5	
4	Paepalpahad			442	442				30					580		3	1					2		6	
5	D. Nagaram			375	375	4			32		3			600		2	1	3	2	3				14	
6	Khaithapur			58	58				12					150		3	5	10	5	10				15	48
7	Yellagiri			74	74				16					214		3	5	10	5	10				15	48
8	Lakkaram			201	201				30					525										10	10
9	Chinnakondur			401	401				30					6390		60	30	66	35	40		40		30	30
10	Nelapatla		50	370	420				0					1480											0
11	Jaikesaram		208	287	495				3					582											0
12	S. Lingotam			188	188				132					976											0
13	Thattasingaram			110	110				50					250						2					2
14	Thangadapally			324	324				12					2340											2
15	Lingoligudem			380	380				1					2150	1	1		1		1					50
16	Panthangi			455	455				0					4055		20	5	4	2	15	4				50
17	Choutuppai			165	165				14					353											5
	TOTAL Acres	0	258	4404	4662	4	0	0	461	0	3	0	0	21361	1	94	48	94	49	82	4	40		73	488
	HEC.	0	104	1782	1887	2	0	0	187	0	1	0	0	8644	0	38	19	38	20	33	2	16		30	197

Amey
Agriculture Officer
Choutuppai

Tahsildar
Choutuppai
2/9/14

VILLAGE WISE CROP WISE AREA FINAL RECONCILIATION FIGURES OF CHOUTUPPAL MANDAL (KHARIF 2016-17) AREA IN ACRES

Sl. No.	Name of the Village	పరిశ్రమలు				కొత్త	సజ్జ	మొక్కజొన్న	పసర	కంది	మినుములు	ఆమురం	ప్రత్తి	పెరుకానగ	నుప్పులు	రాము	మొక్కజొన్న	కూరగాయలు											
		బెరువులు	బావులు	బోధు	మొత్తం													రొస	పంకాయ	గోకర	సొర	రొండ	టమాట	బీర	బెండ	ఆకు కూర	మొత్తం		
		(3)	(4)	(5)	(6)													(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1	Toupranpet			11	11			2	5					3			15	2	1	1	1		1	2		8			
2	Malkapur			159	159			9	160	5		129					11	5	1	1						1	2	4	15
3	Allapur			12	12	15		2	32		29	118					1	1		1	1		1						4
4	Peepalpahad			76	76	92		8	14	125	21	608					3	1		1									2
5	D. Nagaram			160	160	40		12	150		30	400	3				6	3	2	4				5	6	2			28
6	Khaithapur			10	10				25			30					5	2	5	4				10	5	10	15	56	
7	Yellagiri			10	10				50			55					5	3	5	10				10	5	10	20	68	
8	Lakkaram			8	8	1		1	3	150	1	250								1				1	1		10	13	
9	Chinnakondur			1163	1163			58	476			4863												1	1		10	13	
10	Nelapatla		40	250	290	5		5	14		12	1980	5				50	50	10	10	10		50	10	10	14	214		
11	Jaikesaram		246	378	624				46			807					3	5						2				7	
12	S. Lingotam			65	65			25		185		850					1			5						1		7	
13	Thallasingaram			130	130			10	80	1		200																0	
14	Thangadapally			150	150			2	12	300		2100					3	3										3	
15	Lingo jigudem			230	230			2	15	160		1860					40	40	5	5	6	4	10	10	5	5	90		
16	Panthangi			105	105				11	405		3900					4	3		2	3							8	
17	Choutuppal			12	12				120			325		12			5	5	5	5	5		15	5	5	5	55		
	TOTAL Acres	0	286	2929	3215	153	0	43	148	2483	7	92	18475	8	3	12	65	132	68	36	50	23	104	45	47	73	578		
	HEC.	0	96	1185	1301	61.9	0	17	60	1005	3	37	7477	3	1	5	26	53	28	15	20	9	42	18	19	30	234		

K. Van
Mandal Planning & Statistical Officer
Choutuppal Mandal

Mandal Agriculture Officer
Choutuppal Mandal

Tahsildar
Choutuppal Mandal

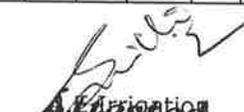
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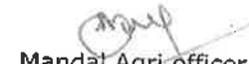
VILLAGE WISE CROP WISE AREA FINAL RECONCILIATION FIGURES OF CHOUTUPPAL MANDAL (RABI 2018-19) AREA IN ACRES

Sl. No.	Name of the Village	పరి				పెసర	మొత్త జొన్న	కూరగాయలు															నీటి పారుదల గలది	నీటి పారుదల లేనిది	మొత్తం
		చెరువులు	బావులు	బోరు	మొత్తం			దోస	కీరదోస	వంకాయ	గోకర	సొర	దొండ	టమాట	వీర	బెండ	కాప్పికమ్	కాకర	చామగడ్డ	గుమ్మడి	అపసు	కూరలు			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1	Toopranpet			25	25							3		2	2			3			1	11	36	0	36
2	Malkapur			160	160							3		2				1				6	166	0	166
3	Allapur			20	20			6						2				2				10	30	0	30
4	Peepalpahad			80	80			2		2		3		3								10	90	0	90
5	D. Nagaram			505	505		9	3		3		6		5	7	2						26	540	0	540
6	Khaithapur			45	45					1				2								3	48	0	48
7	Yellagiri			50	50			1		2		8		4	5						2	22	72	0	72
8	Lakkaram			160	160			2		2				6							22	32	192	0	192
9	Chinnakondur		65	1620	1685		5	12		5		25		15	10	5		8	2			82	1772	0	1772
10	Nelapatia		15	300	315			3		2		3										10	325	0	325
11	Jaikesaram		200	320	520		4	5		1				3	4	1		1				15	539	0	539
12	S. Lingotam		60	345	465		12	3		2		8	1	10	5	2		3				34	511	0	511
13	Thallasingaram			185	185			2		3				5	5	3		2				20	205	0	205
14	Thangadapally			140	140		12	3		2		5		5	3	3		2				23	175	0	175
15	Lingojugudem			265	265		5	3		3		5		8	3		1	2				25	295	0	295
16	Panthangi			410	410			3	3	3		10		6	2	2		2			1	32	442	0	442
17	Choutuppal			35	35			2		1		6			3	5		2		3	1	23	58	0	58
	TOTAL Acres	0	340	4665	5065	0	47	50		32	0	85	1	78	49	25	1	28	2	3	27	384	5496	0	5496
	HEC.	0	138	1888	2050	0	19	20		13	0	34	0	32	20	10	0	11	1	1	11	155	2224	0	2224


MPSo
Choutuppal Mandal


Horticulture Officer
Choutuppal Mandal


Irrigation
Choutuppal Mandal


Mandal Agri. officer
Choutuppal Mandal


Thasildar
Choutuppal Mandal

NMR Toilets



26/11/2019 12:14

NMR Toilets



26/11/2019 12:15

NMR Toilets

16-22

23-29

26/11/2019 12:16



Bath Rooms



26/11/2019 12:18

Bath Rooms



26/11/2019 12:18

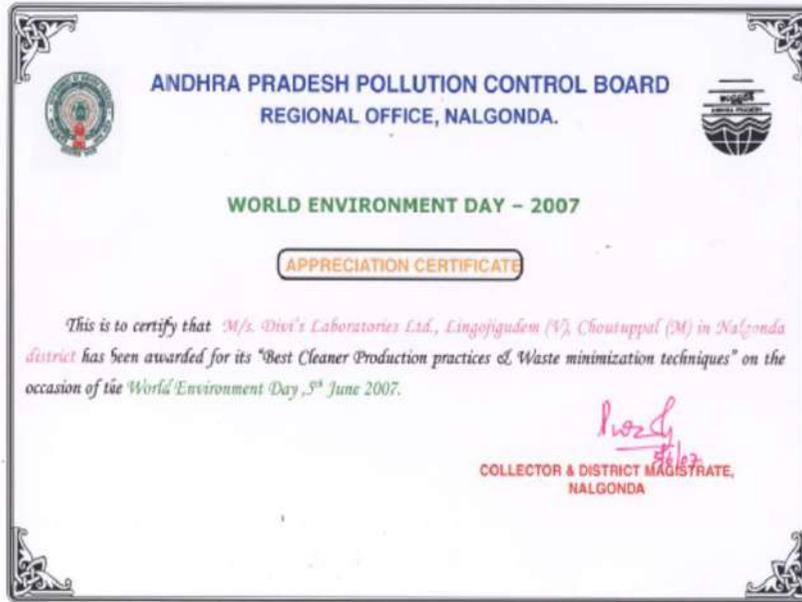
DIVI'S ZLD MONITORING AND SAMPLES COLLECTED BY PCB AUTHORITIES
AND APPRECIATIONS TO THE INDUSTRY - from past years

S. No	Date of inspection	Inspected by	Number of ZLD samples collected from industry
1	26.03.15	Analyst Gr-I (Central laboratory) TSPCB, RO- Nalgonda, MPDO- Choutuppall, Agricultural officer, IPO & AEE- RWS of pochampally (M)	17
2	28.11.16	RO-Nalgonda, TSPCB (EE & AES)	10
3	24.04.18	RO-Nalgonda, TSPCB (EE & AES)	11
4	20.08.18	RO-Nalgonda, TSPCB (EE & AES)	4
5	22.11.18	RO-Nalgonda, TSPCB (EE & AES)	10
6	22.06.19	Rolling task force team-1, TSPCB (EE, AEE, AES & Field Analyst)	14
7	26.11.19	RO-Nalgonda, TSPCB (EE, AEE, AES & FA)	9
8	03.01.20	RO-Nalgonda (AEE & AES)	2
9	17.01.20	RO-Nalgonda, TSPCB	9

Appreciation certificates from Pollution control board for Pollution Control & Environment Protection



“Best Cleaner Production” & “Effective Environmental Pollution Control Measures and Best Green Belt Development”



Divi's ZLD Facility:



* **Complete Effluent Treatment Plant for “Zero Discharge” was in operation with advanced treatment technologies and all standby capacities such as:**

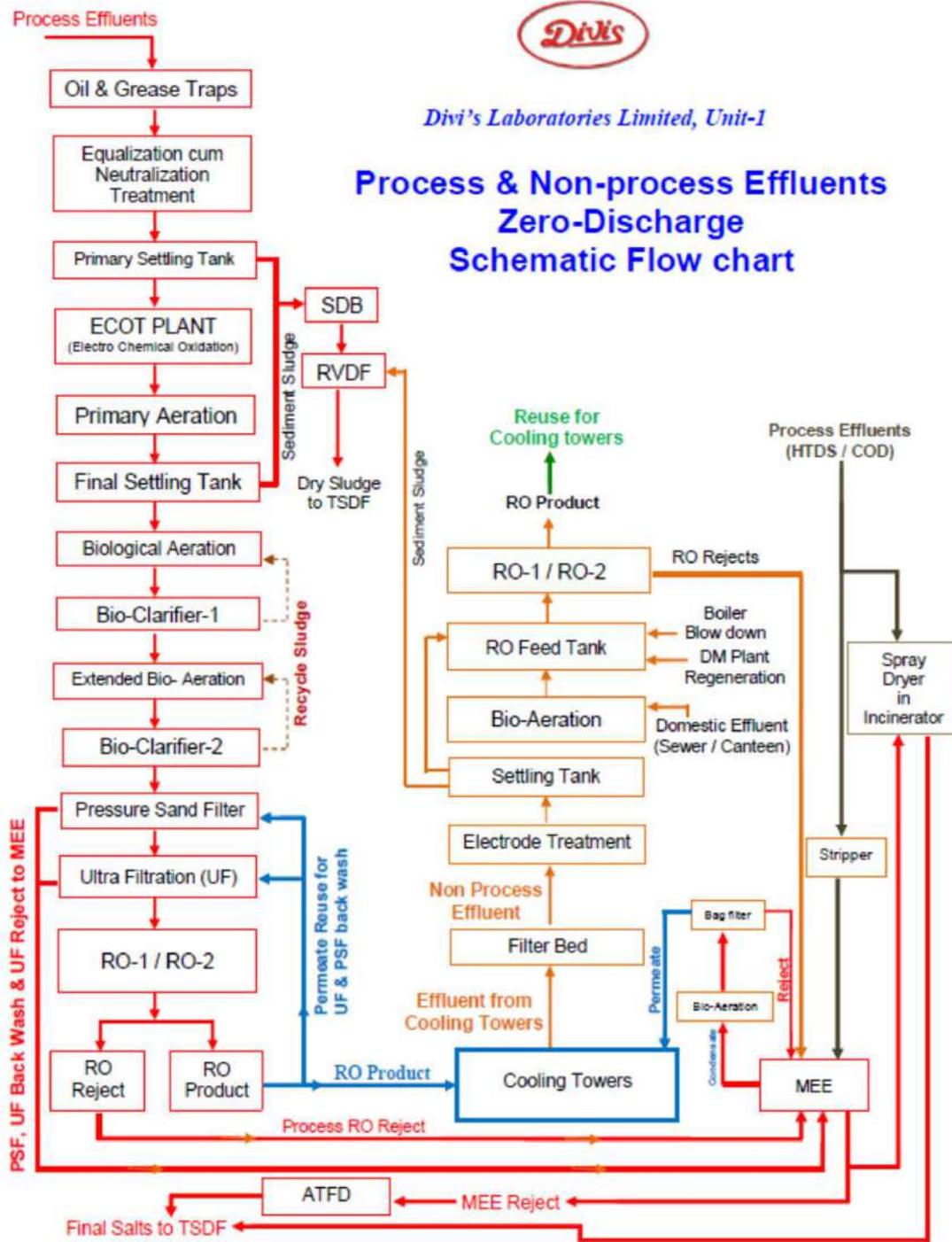
- *Electro Chemical Oxidation System,*
- *Biological Aeration tanks of primary & extended with Jet Aerators & Fine Bubble Diffuser System,*
- *Multiple Effect Evaporators of falling film & Raising film technology in four, five & six effects connected with Stripper Columns,*
- *Ultra filtration system,*
- *RO Plants with Disc tube & Sea water membrane type RO plants,*
- *Multi Grade Filters (Pressure Sand Filter),*
- *Rotary Vacuum Drum filter for Solids & Liquids separation,*
- *ATFD (Agitated Thin Film Dryer).*
- *Dedicated Hazardous Wastes Storage Facility with impermeable flooring and roof*
- *Incinerator with waste heat recovery system (Not operating as the total organic solid waste is sending to cement industries as alternative fuel)*
- *Online Air & Effluent monitoring systems*
- *IP camera at main gate entrance*

Effluent treatment schematic flow & description



Divi's Laboratories Limited, Unit-1

Process & Non-process Effluents Zero-Discharge Schematic Flow chart



Operating full-fledged Effluent Treatment Plant for “Zero liquid Discharge” with advanced treatment technologies and installed with all standby capacities.

Initially, the effluents are segregated into Low TDS and High TDS Effluents. The Low TDS effluents collected from process are treated in Physical, Chemical (Electro Chemical Oxidation) and Biological systems where followed by RO treatment. The high TDS effluents collected from process and the RO rejects will be sent to MEE (Multiple Effect Evaporators) and the concentrate of MEE was evaporated in ATFD. The final salt collected from the bottom of ATFD will be disposed to TSDF.

The LTDS effluent collected from non-process operations such as boiler blowdown, cooling tower bleed, DM/Softener regenerations will be pre-treated separately in chemical oxidation followed by aeration and RO. This RO reject is transferred to MEE and followed by ATFD.

The RO permeates collected from treatment of process & Non-process LTDS effluents are re-used / recycled in the plant for various applications.

The domestic waste water will be treated in STP and the recovered treated water is reused for toilet flushing's and gardening.

Installed online Air & effluent monitoring system and the real time data is connected to official website of PCB.

Organic solid wastes like distillation bottom residues collected from recovery units will be disposed to cement industry as an alternate fuel for co-processing in the cement kilns.

Inorganic solid wastes like Evaporation salts from ATFD & ETP sludge are disposed to TSDF (An authorized govt. secure land fill).

Other effluents which are recyclable / recoverable will be sent to offsite facility / end users (A Govt. authorized recovery / recycle units) for appropriate disposal.

A. Physical & Chemical Treatments

Oil & Grease Traps



Equalization & Neutralization Tanks



Electro Chemical Oxidation System



B. Biological Treatment System with Jet Aerators & Diffuser Aeration Technology



C. Pre & Final Filtration System

Pressure Sand Filters



Ultra Filtration System



RO Building



Process RO Plant (SWRO)



Non-Process RO Plant (Disc-Tube)



Stripper & Multiple Effect Evaporator (MEE)

Stripper Column



Four Effects Evaporator



Five Effects Evaporator



Six Effects Evaporator



Solid Waste Management

ATFD – 1, 2, 3, 4 & 5



Rotary Vacuum Drum Filter



Sludge Drying Beds



Hazardous Waste Management (Temporary Storage Shed before final disposal)

- Impermeable Flooring
- Secondary Containment
- Roofing
- Leachate Collection



Waste Collection Bins



Environment Monitoring:

Divi's Online Air Monitoring Station

AAQMS - 1



AAQMS - 2



AAQMS - 3



ON-LINE ENVIRONMENTAL MONITORING PARAMETERS AT ONSITE

Ambient Air Quality	Weather Monitoring Parameters	CSEMS (Continuous Stack Emission Monitoring System)	On-Line Effluent Monitoring System and IP Camera
PM 10	Wind Direction	Particulates	pH
PM 2.5	Wind Speed	NO _x	TSS
SO ₂	Relative Humidity	SO ₂	COD
NO _x	Temperature	CO	BOD
TVOC	Rainfall	--	--
--	Solar Radiation	--	--

CEMS (Continuous Stack Emission Monitoring Station)

Online Stack Monitoring Station



System for uploading data



CSEM Analyzer



Various Environmental Parameters monitoring by Third party:

Ambient Air, Stack Emissions, Waste Water, Ground Water Quality, Fugitive Emissions, HCl gas emissions, VOC, Noise Levels, Hazardous Waste and soil Quality monitoring.

Various Environmental Parameters monitoring at Onsite Laboratory:

Effluent pH, TDS, SS, Chlorides & COD

Air & Effluent monitoring data connected to official website of PCB

Online Environmental Monitoring Data – Provided Public Display at the Factory Entrance



Divi's Online Effluent Monitoring Station

For Inlet monitoring

Online Effluent Monitoring Station - 1



Online Camera - 1 for ETP



Connected to PCB website



For Outlet monitoring

Online Effluent Monitoring Station - 2



Online Camera - 2 for Discharge Flow meter



Connected to PCB website



Energy Consumption Meters ⁸⁹

For Production Block
including
Scrubbing system

Energy meter for
24 tons Boiler

Energy meter for
ESP

Energy meter for
ETP / ECOT Plant

Energy meter for
MEE & ATFDs

Energy meters
arranged in panel



Scrubbers

Multistage scrubbers



Multistage scrubbers



pH meter



Multistage scrubbers



Online pH meter



Scrubber failure alarm



**Effluent Treatment for ZLD ⁹⁰ & Environment Management
Cost in Divi's Laboratories is 43.6 Crores per one year**

1. Liquid Effluent Treatment Cost for last one year: 22.31 Crores.

A. LTDS Effluent treatment in Biological ETP followed by RO and the rejects to MEE & ATFD: 9.12 Crores.

B. HTDS Effluent treatment in MEE followed by ATFD: 13.19 Crores.

2. Solid waste disposal cost to Offsite for last one year: 5.62 Crores.

A. Solid waste (inorganic) disposal cost to TSDF: 5.43 Crores.

B. Solid waste (organic) disposal to Cement Industries: 0.19 Crores.

3. Environmental monitoring expenditure for last one year: 0.96 Crores.

4. Additional cost for mechanical spares, vendor services, manpower & misc: 5.0 Crores.

5. Corporate Environmental Responsibility expenditure: 9.69 Crores.

6. Maintenance, spares & manpower cost is extra.



91 Hazardous Wastes Disposal Cost expensed in last one year

Month	Disposal cost to TSDF (in Lakhs)					Disposal cost to Cement Industries (in Lakhs)		
	Qty (Tons)	Evaporation Salt, ETP sludge & Insulation waste	Reference Bill Number	Transportation Charges	Reference Bill Number	Qty (Tons)	Organic Residue & Spent Carbon	Reference Bill Number
Apr-19	671.010	32.90	9300000765	6.03	18093, 18147	60.280	2.23	157
May-19	622.600	33.26	9300000939	5.60	18358, 18359 & 18620	56.590	1.95	163 & 164
Jun-19	597.150	31.93	9300001122	5.37	18591, 18592	58.280	2.15	168
Jul-19	745.550	36.96	9300001339	6.73	18805, 18806 & 18821	33.070	1.12	172 & 173
Aug-19	732.860	35.30	9300001539	6.59	19099, 19100	67.410	2.49	179
Sep-19	663.920	31.38	9300001780	5.97	19340, 19341	23.290	0.86	184
Oct-19	661.770	33.79	9300001960	5.95	19574, 19575 & 19576	40.680	1.50	198
Nov-19	763.520	38.58	9300002203	6.87	19808, 19809	20.860	0.62	199
Dec-19	701.720	39.23	9300002382	6.31	20057, 20058	21.300	0.78	355
Jan-20	1113.770	58.98	9300002661	10.02	20283, 20284 & 20285	41.840	1.41	202 & 203
Feb-20	954.180	50.65	9300002857	8.53	--	81.576	3.01	216
Mar-20	810.48	39.48	9300003003	7.31	20575, 20576 & 20578	25.320	1.26	217
Avg.	753.21	38.54	--	6.77	--	44.21	1.62	--

Hazardous Waste Disposal Cost Per Month is 46.93 Lakhs

Regd. post with ack. due

TELANGANA STATE POLLUTION CONTROL BOARD
REGIONAL OFFICE: NALGONDA

H.No. 8-15, 1st Floor
Sri Lakshmi Complex
Near RTO Office, Sri Vinayaka Nagar
Hyderabad Road, Nalgonda-508 001

Notice No.72001/PCB/RO-NLG/2015 - 586

Dt:22.06.2015

NOTICE

Sub: TSPCB – RO – NLG – Complaints received from the villagers of Choutuppal & Pochampally Mandals, Nalgonda District against industries for causing Water & Air Pollution during the Environmental Public Hearing of M/s. Brundavan Laboratories Pvt. Ltd., Yellagiri (V), Choutuppal (M) – Inspections of industries by 2 Teams which are constituted by the Joint Collector, Nalgonda District – NOTICE – Issued – Reg.

Ref: Complaints received from the villagers of Choutuppal & Pochampally Mandals, Nalgonda District

* * *

WHEREAS you are operating industry located at Lingo jigudem (V), Choutuppal (M), Nalgonda District to produce Bulk Drug & Drug Intermediates:

WHEREAS complaints were received from the villagers of Choutuppal & Pochampally Mandals, Nalgonda District against industries for causing Water & Air Pollution during the Environmental Public Hearing of M/s. Brundavan Laboratories Pvt. Ltd., Yellagiri (V), Choutuppal (M), Nalgonda District on 13.03.2015.

WHEREAS the Joint Collector, Nalgonda has constituted two teams (Team – I & Team – II) with officials of Revenue, Agricultural, RWS, DIC & PCB for conducting inspection of industries located in Choutuppal & Pochampally Mandals, Nalgonda District.

WHEREAS the officials in the teams inspected your industry on 21.04.2015. Copy of the analysis report of the samples collected during inspection is enclosed. As per the analysis reports, presence of COD was observed in the samples of the bore wells.

Hence, you are hereby directed to submit the compliance report on the above to this office within two weeks from the date of receipt of this notice failing which action will be initiated against your industry under the provisions of the Water & Air Acts.

Encl: Analysis Reports

To,
M/s. Divi's Laboratories Ltd.,
Lingo jigudem (V), Choutuppal (M),
Nalgonda District.

A. Khanna
ENVIRONMENTAL ENGINEER
ENVIRONMENTAL ENGINEER
T.S. Pollution Control Board
Regional Office, Nalgonda.



TELANGANA STATE POLLUTION CONTROL BOARD

Paryavarana Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad - 500 018
Ph: 040-23887500

CENTRAL LABORATORY

FORM - X
REPORT BY THE BOARD ANALYST

(See Rule 26)

Report No: SR/10/TSPCB/HO/R00/LAB/2015/3237-3242
Issue date: 18/04/2015
Page No. 1 of 1

I here by certify that I, N. Raveendhar, State Board Analyst duly appointed under Sub - section (3) of Section 53 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) received on 27/03/2015 and collected on 26/03/2015 by S. Srinivas, Analyst Gr.I, Central Lab, a 1 Ltr. sample each of M/s.Divis Laboratories Ltd., Unit-I, Lingojigudem (V), Choutuppal (M), Nalgonda dist., from

Sample code : Sample details / collection point
3237 - Condensate aeration tank outlet
3238 - Process RO feed
3239 - Process RO permeate
3240 - Process RO rejects
3241 - Non-process RO feed
3242 - Non-process RO permeate

The sample was in a condition fit for analysis reported below:

The condition of the seals, fastening and container on receipt was intact

I further certify that I have analysed the above mentioned sample on 27/03/2015 to 18/04/2015 and declare the results of the analysis to be as follows.

Parameter(s)	Method (*) No.	Unit	Results					
			3237	3238	3239	3240	3241	3242
pH at 25°C	4500-B	-	8.7	6.9	7.0	6.7	7.5	7.0
Total Suspended Solids	2540-D	mg/L	1027	581	90	984	250	5
Total Dissolved Solids (TDS)	2540-C	mg/L	9089	23531	370	51536	15450	567
Chemical Oxygen Demand	5220-B	mg/L	4922	5534	146	27223	4114	181

Note: Results related to sample as received.
(*) Standard methods of APHA, 22nd Edition.

Signed this: 18/04/2015
Address :
Central Laboratory
A.P.P.C.B., Hyderabad


(N. RAVEENDHAR)
Board Analyst

.....End of report.....



TELANGANA STATE POLLUTION CONTROL BOARD

Paryavarana Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad – 500 018

Ph: 040-23887500

CENTRAL LABORATORY

FORM - X
REPORT BY THE BOARD ANALYST

(See Rule 26)

Report No: SR/10/TSPCB/HO/R00/LAB/2015/3243-3247

Issue date: 18/04/2015

Page No. 1 of 1

I here by certify that I, N. Raveendhar, State Board Analyst duly appointed under Sub – section (3), of Section 53 of the Water (Prevention and Control of Pollution) Act. 1974 (6 of 1974), received on 27/03/2015 and collected on 26/03/2015 by S. Srinivas, Analyst Gr.I, Central Lab, a 1 Ltr. sample each of M/s.Divis Laboratories Ltd., Unit-I, Lingojigudem (V), Choutuppal (M), Nalgonda dist., from

Sample code : Sample details / collection point
 3243 - Non-process RO rejects
 3244 - Stripper feed
 3245 - Stripper bottom
 3246 - MEE condensate
 3247 - MEE concentrate

The sample was in a condition fit for analysis reported below:

The condition of the seals, fastening and container on receipt was intact

I further certify that I have analysed the above mentioned sample on 27/03/2015 to 18/04/2015 and declare the results of the analysis to be as follows.

Parameter(s)	Method (*) No.	Unit	Results				
			3243	3244	3245	3246	3247
pH at 25°C	4500-B	-	7.01	7.20	6.67	6.84	6.09
Total Suspended Solids	2540-D	mg/L	471	437	426	31	900
Total Dissolved Solids (TDS)	2540-C	mg/L	35738	52072	51673	569	172135
Chemical Oxygen Demand (COD)	5220-B	mg/L	9843	40757	41142	622	28503

Note: Results related to sample as received.
 (*) Standard methods of APHA, 22nd Edition.

Signed this: 18/04/2015
 Address :
 Central Laboratory
 A.P.P.C.B., Hyderabad

N. Raveendhar
 18/04/15
 (N. RAVEENDHAR)
 Board Analyst

.....End of report.....



TELANGANA STATE POLLUTION CONTROL BOARD

25-35/11, Tulasi Reddy Complex, R.C.Puram, Sangareddy Dist. -502032

ANALYSIS REPORT FORM - XI REPORT BY THE BOARD ANALYST (See Rule 28)

Report No.2016-11-299-278

Dt:-7-12-2016

I hereby certify that Sri.Md.Sadiq Ali, State Board Analyst, Zonal Laboratory duly appointed under sub-section (3) of section 53 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) received on the day 30/11/2016 from the RO-Nalgonda, Samples of M/s.Divis Laboratories Ltd., Lingojigudem (V), Choutuppal (M), Yadadri District collected on 28/11/2016.

2016-11-269	: Inlet of ETP(Process LTDS)
2016-11-270	: Electro chemical Oxidation plant Outlet (Biological Aeration Inlet)
2016-11-271	: Biological Aeration Outlet (Ultra Filtration (UF) Inlet)
2016-11-272	: Ultra filtration Outlet (Process R.O Inlet)
2016-11-273	: Process R.O Permeate (Cooling Tower Inlet)
2016-11-274	: Cooling Towers Bleed off (Non process Effluent & Non process RO Inlet)
2016-11-275	: Non Process R.O Permeate
2016-11-276	: MEE Inlet (HTDS and R.O Plants Rejects)
2016-11-277	: MEE Condensate
2016-11-278	: MEE Condensate after Aeration(Process R.O Inlet)

The sample was in a condition fit for analysis reported below:

I further certify that I have analyzed the above mentioned sample from 30/11/2016 to 7/12/2016 and declare the result of the analysis to be as follows.

S.No	Parameter	Results									
		269	270	271	272	273	274	275	276	277	278
1	pH	5.1	6.9	7.5	6.9	7.1	6.5	8.7	7.2	8.01	8.2
2	Total Suspended Solids (TSS)	344	956	221	59	-	228	-	806	55	76
3	Total Dissolved Solids (TDS)	18116	19269	16932	1447	226	2523	211	19955	284	307
4	Chemical Oxygen Demand (COD)	22854	15695	4179	170	78	1346	-	3824	2428	387

Note: All result are expressed in mg/L except P^H.

The results are related to samples as received.

The condition of the seals, fastening and container on receipt was intact.

Signed this: 7/12/2016

Address:

Sri.Md.Sadiq Ali
Senior Environmental Scientist
Zonal Laboratory
R.C.Puram

Md. Sadiq Ali
SIGNATURE OF THE STATE BOARD ANALYST



TELANGANA STATE POLLUTION CONTROL BOARD

Paryavaran Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad – 500 018

Ph: 040-23887500

CENTRAL LABORATORY

Analysis Report

Reg. No. SR/05/TSPCB/HO/R00/LAB/2018/4447-4449
 Collected on: 24/04/2018
 Test method: Standard Methods of APHA, 22nd Edition
 Issue date: 05/05/2018

Collected by: Analyst Gr – I & AEE, RO-NLG
 Received on: 25/04/2018
 Quantity of the sample: 1Ltr. sample each
 Page No.: 1 of 1

Source : M/s. Divis Laboratories Ltd. Lingojigudem (V), Chouuttupal (M), Yadadri Bhuvanagiri District.

Sample code : Sample details / collection point

4447 - Inlet of ETP (Process LTDS).

4448 - Electro Chemical Oxidation Plant Outlet (Biological Aeration Inlet).

4449 - Biological Aeration – I Outlet (Clarifier Inlet).

Parameters	Method (*) No.	Unit	Results		
			4447	4448	4449
pH at 25°C	4500-B	-	4.7	6.8	7.2
Total Suspended Solids	2540-B	mg/L	2,000	1,500	1,200
Total Dissolved Solids	2540-C	mg/L	18,992	17,924	16,024
Chemical Oxygen Demand	5220-B	mg/L	26,400	14,080	3,600
Oil & Grease	5520 A	mg/L	20	13.2	2.8

Note: Results related to sample as received.

BDL: Below Detectable Limit.


 P. Veeranna
 Joint Chief Environmental Scientist (FAC)

.....End of report.....



TELANGANA STATE POLLUTION CONTROL BOARD

Paryavaran Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad – 500 018

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CENTRAL LABORATORY

Analysis Report

Reg. No. SR/05/TSPCB/HO/R00/LAB/2018/4450-4452

Collected on: 24/04/2018

Test method: Standard Methods of APHA, 22nd Edition

Issue date: 05/05/2018

Collected by: Analyst Gr – I & AEE, RO-NLG

Received on: 25/04/2018

Quantity of the sample: 1Ltr. sample each

Page No.: 1 of 1

Source : M/s. Divis Laboratories Ltd. Lingojigudem (V), Chouttupal (M), Yadadri Bhuvanagiri District.

Sample code : Sample details / collection point

4450 - Biological Aeration – II outlet (Ultra Filtration Inlet).

4451 - Ultra Filtration Outlet (Process RO Inlet).

4452 - Process RO Permeate (Cooling Tower Inlet).

Parameters	Method (*) No.	Unit	Results		
			4450	4451	4452
pH at 25°C	4500-B	-	7.3	6.9	6.6
Total Suspended Solids	2540-B	mg/L	507	162	< 5
Total Dissolved Solids	2540-C	mg/L	13,920	12,420	320
Chemical Oxygen Demand	5220-B	mg/L	1,801	736	100
Oil & Grease	5520 A	mg/L	1.2	BDL	BDL

Note: Results related to sample as received.

BDL: Below Detectable Limit.


P. Veeranna
Joint Chief Environmental Scientist (FAC)

..... End of report.....



TELANGANA STATE POLLUTION CONTROL BOARD

Paryavaran Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad – 500 018

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CENTRAL LABORATORY

Analysis Report

Reg. No. SR/05/TSPCB/HO/R00/LAB/2018/4453-4454

Collected on: 24/04/2018

Test method: Standard Methods of APHA, 22nd Edition

Issue date: 05/05/2018

Collected by: Analyst Gr – I & AEE, RO-NLG

Received on: 25/04/2018

Quantity of the sample: 1Ltr. sample each

Page No.: 1 of 1

Source : M/s. Divis Laboratories Ltd., Lingojigudem (V), Chouttupal (M), Yadadri Bhuvanagiri District.

Sample code : Sample details / collection point

4453 - Cooling Tower Bleed off (Non Process Effluents & Non Process RO Inlet).

4454 - Non Process RO Permeate.

Parameters	Method (*) No.	Unit	Results	
			4453	4454
pH at 25°C	4500-B	-	6.7	7.6
Total Suspended Solids	2540-B	mg/L	290	10
Total Dissolved Solids	2540-C	mg/L	3,394	180
Chemical Oxygen Demand	5220-B	mg/L	1,264	32
Oil & Grease	5520 A	mg/L	BDL	BDL

Note: Results related to sample as received.

BDL: Below Detectable Limit.


 P. Veeranna
 Joint Chief Environmental Scientist (FAC)

.....End of report.....



TELANGANA STATE POLLUTION CONTROL BOARD

Paryavaran Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad – 500 018

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CENTRAL LABORATORY

Analysis Report

Reg. No. SR/05/TSPCB/HO/R00/LAB/2018/4455-4457
 Collected on: 24/04/2018
 Test method: Standard Methods of APHA, 22nd Edition
 Issue date: 05/05/2018

Collected by: Analyst Gr – I & AEE, RO-NLG
 Received on: 25/04/2018
 Quantity of the sample: 1Ltr. sample each
 Page No.: 1 of 1

Source : M/s. Divis Laboratories Ltd., Lingojigudem (V), Chouttupal (M), Yadadri Bhuvanagiri District.

Sample code : Sample details / collection point

4455 - MEE Inlet (HTDS & RO Plant Rejects).

4456 - MEE Condensate.

4457 - MEE Condensate after aeration (Process RO Inlet).

Parameters	Method (*) No.	Unit	Results		
			4455	4456	4457
pH at 25°C	4500-B	-	7.3	9.5	7.2
Total Suspended Solids	2540-B	mg/L	587	29	10
Total Dissolved Solids	2540-C	mg/L	29,937	159	202
Chemical Oxygen Demand	5220-B	mg/L	7,880	2,120	199
Oil & Grease	5520 A	mg/L	5.2	BDL	BDL

*Note: Results related to sample as received.

BDL: Below Detectable Limit.


 P. Veeranna
 Joint Chief Environmental Scientist (FAC)

.....End of report.....

ANALYSIS REPORT

- 1) Sample Description : M/s. Divis Laboratories Ltd., Lingojigudem Village, Choutupal Mandal, Yadadri Bhuvanagiri District.
- 2) Sample Collected on : 22/11/2018
- 3) Sample Received on : 24/11/2018
- 5) Report issued on : 01/12/2018
- 4) Sample Collected By : RO-Nalgonda

Sample Code	Sample Source	pH	TSS	TDS	COD
2018-11-321	Inlet of FTP (Raw LTDS Effluent).	4.76	405	20,880	27,891
2018-11-322	Biological aeration Inlet (Electro Chemical Oxidation plant Outlet).	5.81	275	11,475	13,388
2018-11-323	Biological aeration Outlet (Ultra filtration Inlet).	6.71	214	8,978	2,192
2018-11-324	Process RO Inlet (Ultra filtration Outlet).	6.92	114	1,388	612
2018-11-325	Process RO Permeate (Cooling Tower Inlet).	7.75	BDL	305	50
2018-11-326	Non Process RO Inlet (Cooling Tower Bleed off).	6.57	585	3,145	1,058
2018-11-327	Non Process RO permeate.	8.3	32	278	40
2018-11-328	MEE-3 rd Inlet (HTDS & RO plants reject).	6.58	147	8,745	5,950
2018-11-329	MEE-3 rd Condensate.	7.53	BDL	134	128
2018-11-330	MEE-3 rd Condensate after aeration (process RO Inlet).	7.12	33	140	132


SENIOR ENVIRONMENTAL SCIENTIST (FAC)



TELANGANA STATE POLLUTION CONTROL BOARD
 Paryavaran Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad - 500 018
 Ph: 040-23887500

CENTRAL LABORATORY

Analysis Report

Reg. No. SR/05/TSPCB/HO/R00/LAB/2018/11412-11414
 Collected on: 26/11/2019
 Test method: Standard Methods of APHA, 23rd Edition
 Issue date: 07/12/2019

Collected by: EE, AES & ABE-I. RO-NLG
 Received on: 27/11/2019
 Quantity of the sample: 1 Ltr. sample each
 Page No.: 1 of 1

Source: M/s. Divis Laboratories Ltd., Lingojigudem (V), Chouttupal (M), Yadadri Bhuvanagiri District.

Sample code : Sample details / collection point
 11412 = Inlet of Biological ETP (LTDS Effluent).
 11413 = ECOT Inlet (Primary Aeration Effluent).
 11414 = ECOT Outlet (Biological Aeration Tank Inlet).

Parameters	Method (*) No.	Unit	Results		
			11412	11413	11414
pH at 25°C	4500-B	-	3.9	7.41	6.92
Total Suspended Solids	2540-B	mg/L	780	310	220
Total Dissolved Solids (TDS)	2540-C	mg/L	15,520	15,100	14,510
Chemical Oxygen Demand	5220-B	mg/L	27,360	25,120	14,240
Oil and Grease	5520-B	mg/L	2.4	1.9	1.6

Note: Results related to sample as received.

(N. Murali Mohan)
 Joint Chief Environmental Scientist (FAC)

.....End of report.....



TELANGANA STATE POLLUTION CONTROL BOARD
 Paryavarana Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad – 500 018
 Ph: 040-23887500

CENTRAL LABORATORY

Analysis Report

Reg. No. SR/05/TSPCB/HO/R00/LAB/2018/11415-11417
 Collected on: 26/11/2019
 Test method: Standard Methods of APHA, 23rd Edition
 Issue date: 07/12/2019

Collected by: EE, AES & AEE-I, RO-NLG
 Received on: 27/11/2019
 Quantity of the sample: 1 Ltr. sample each
 Page No.: 1 of 1

Source: M/s. Divis Laboratories Ltd., Lingojigudem (V), Chouttupal (M), Yadadri Bhuvanagiri District,

Sample code : Sample details / collection point
 11415 = Outlet of Biological ETP (Sand Filter Feed).
 11416 = Sand Filter Outlet (Ultra Filtration Feed).
 11417 = Ultra Filtration Outlet (Process RO Feed).

Parameters	Method (*) No.	Unit	Results		
			11415	11416	11417
pH at 25°C	4500-B	-	6.31	7.16	7.05
Total Suspended Solids	2540-B	mg/L	150	80	15
Total Dissolved Solids (TDS)	2540-C	mg/L	12,100	8,800	8,200
Chemical Oxygen Demand	5220-B	mg/L	1,216	1,192	752
Oil and Grease	5520 - B	mg/L	0.3	0.2	BDL

Note: Results related to sample as received.

BDL: Below detectable limit

(N. Murali Mohan)
 Joint Chief Environmental Scientist (FAC)

.....End of report.....



TELANGANA STATE POLLUTION CONTROL BOARD
 Paryavarana Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad -- 500 018
 Ph: 040-23887500

CENTRAL LABORATORY

Analysis Report

Reg. No. SR/05/TSPCB/HO/R00/LAB/2018/11418-11420
 Collected on: 26/11/2019
 Test method: Standard Methods of APHA, 23rd Edition
 Issue date: 07/12/2019

Collected by: EE, AES & AEE-I, RO-NLG
 Received on: 27/11/2019
 Quantity of the sample: 1 Ltr. sample each
 Page No.: 1 of 1

Source: M/s. Divis Laboratories Ltd., Lingojigudem (V), Chouttupal (M), Yadadri Bhuvanagiri District.

Sample code : Sample details / collection point

- 11418 - Process RO Permeate.
 11419 - HTDS Effluent (MEE Feed).
 11420 - MEE Condensate.

Parameters	Method (*) No.	Unit	Results		
			11418	11419	11420
pH at 25°C	4500-B	-	7.06	6.25	8.5
Total Suspended Solids	2540-B	mg/L	5	480	20
Total Dissolved Solids (TDS)	2540-C	mg/L	440	45,025	540
Chemical Oxygen Demand	5220-B	mg/L	100	12,080	1,240
Oil and Grease	5520-B	mg/L	BDL	1.4	0.6

Note: Results related to sample as received.

BDL: Below detectable limit

(N. Murali Mohan)
 Joint Chief Environmental Scientist (FAC)

.....End of report.....



TELANGANA STATE POLLUTION CONTROL BOARD

Paryavarana Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad – 500 018
Ph: 040-23887500

CENTRAL LABORATORY FORM - X REPORT BY THE BOARD ANALYST

(See Rule 26)

Report No: SR/10/TSPCB/HO/R00/LAB/2018/1048

Issue date: 13/01/2020

Page No. 1 of 1

I hereby certify that I, N. Murali Mohan, State Board Analyst duly appointed under Sub – section (3) of Section 53 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) received on 04/01/2020 and collected on 03/01/2020 by Sri T. Ravindar, AES, RO-NLG, a 2 Ltr. sample of M/s. Divi's Laboratories Ltd., Lingojigudem (V), Chouttupal (M), Yadadri Bhuvanagiri District.

Sample code : Sample details / collection point

1048 - HTDS Effluent sample collected from above ground level collection tank.

The sample was in a condition fit for analysis reported below:

The condition of the seals, fastening and container on receipt was intact

I further certify that I have analysed the above mentioned sample on 04/01/2020 to 13/01/2020 and declare the results of the analysis to be as follows.

Parameters	Method (*) No.	Unit	Result 1048
pH at 25°C	4500-B	-	6.8
Total Suspended Solids	2540-B	mg/L	960
Total Dissolved Solids (TDS)	2540-C	mg/L	42,000
Chemical Oxygen Demand	5220-B	mg/L	11,760

Note: Results related to sample as received.
(*) Standard methods of APHA, 23rd Edition.

Signed this: 13/01/2020
Address:
Central Laboratory
TSPCB Hyderabad

N. Murali Mohan
Board Analyst

.....End of report.....



TELANGANA STATE POLLUTION CONTROL BOARD

Paryavarana Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad – 500 018
Ph: 040-23887500

CENTRAL LABORATORY FORM - X REPORT BY THE BOARD ANALYST

(See Rule 26)

Report No: SR/10/TSPCB/HQ/R00/LAB/2018/1049

Issue date: 13/01/2020

Page No. 1 of 1

I hereby certify that I, N. Murali Mohan, State Board Analyst duly appointed under Sub – section (3) of Section 53 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) received on 04/01/2020 and collected on 03/01/2020 by Sri T. Ravindar, AES, RO-NLG, a 2 Ltr. sample of M/s. Divi's Laboratories Ltd., Lingojigudem (V), Chouttupal (M), Yadadri Bhuvanagiri District.

Sample code : Sample details / collection point

1049 - LTDS Effluent sample collected from above ground level collection tank.

The sample was in a condition fit for analysis reported below:

The condition of the seals, fastening and container on receipt was intact

I further certify that I have analysed the above mentioned sample on 04/01/2020 to 13/01/2020 and declare the results of the analysis to be as follows.

Parameters	Method (*) No.	Unit	Result 1049
pH at 25°C	4500-B.	-	7.0
Total Suspended Solids	2540-B	mg/L	510
Total Dissolved Solids (TDS)	2540-C	mg/L	13,900
Chemical Oxygen Demand	5220-B.	mg/L	15,040

Note: Results related to sample as received.
(*) Standard methods of APHA, 23rd Edition.

Signed this: 13/01/2020

Address:
Central Laboratory
TSPCB Hyderabad

N. Murali Mohan
Board Analyst

.....End of report.....



TELANGANA STATE POLLUTION CONTROL BOARD

Paryavaran Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad – 500 018

Ph: 040-23887500

CENTRAL LABORATORY

Analysis Report

Reg. No. SR/05/TSPCB/HO/R00/LAB/2018/1276-1278

Collected on: 17/01/2020

Test method: Standard Methods of APHA, 23rd Edition

Issue date: 28/01/2020

Collected by: EE, AES & AEE-I. RO-NLG

Received on: 18/01/2020

Quantity of the sample: 1 Ltr. sample each

Page No.: 1 of 1

Source: M/s. Divis Laboratories Ltd., Lingojigudem (V), Chouattupal (M), Yadadri Bhuvanagiri District.

Sample code : Sample details / collection point

- 1276 - LTDS Raw Effluent.
1277 - Biological ETP Inlet (ECOT Outlet).
1278 - Biological ETP Outlet (Ultra Filtration Feed).

Parameters	Method (*) No.	Unit	Results		
			1276	1277	1278
pH at 25°C	4500-B	-	4.3	7.1	7.12
Total Suspended Solids	2540-B	mg/L	435	255	168
Total Dissolved Solids (TDS)	2540-C	mg/L	8150	7640	7240
Chemical Oxygen Demand	5220-B	mg/L	22,240	15,600	1,440
Oil and Grease	5520 - B	mg/L	2.6	1.8	0.2

Note: Results related to sample as received.

BDL: Below detectable limit

(N. Murali Mohan)

Joint Chief Environmental Scientist (FAC)

.....End of report.....



TELANGANA STATE POLLUTION CONTROL BOARD

Paryavarana Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad – 500 018

Ph: 040-23887500

CENTRAL LABORATORY

Analysis Report

Reg. No.SR/05/TSPCB/HO/R00/LAB/2018/1279-1281

Collected on: 17/01/2020

Test method: Standard Methods of APHA, 23rd Edition

Issue date: 28 /01/2020

Collected by: EE, AES & ABE-I. RO-NLG

Received on: 18/01/2020

Quantity of the sample: 1 Ltr. sample each

Page No.: 1 of 1

Source: M/s. Divis Laboratories Ltd., Lingojigudem (V), Chouttupal (M), Yadadri Bhuvanagiri District.

Sample code : Sample details / collection point

1279 - Ultra Filtration Outlet (Process RO Feed).

1280 - Process RO Permiate.

1281 - HTDS Effluent (MEE Feed).

Parameters	Method (*) No.	Unit	Results		
			1279	1280	1281
pH at 25°C	4500-B	-	7.0	6.9	6.4
Total Suspended Solids	2540-B	mg/L	11	8	528
Total Dissolved Solids (TDS)	2540-C	mg/L	7150	210	34,600
Chemical Oxygen Demand	5220-B	mg/L	1,424	84	14,240
Oil and Grease	5520 - B	mg/L	BDL	BDL	1.3

Note: Results related to sample as received.

BDL: Below detectable limit

(N. Murali Mohan)

Joint Chief Environmental Scientist (FAC)

.....End of report.....



TELANGANA STATE POLLUTION CONTROL BOARD

Paryavara Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad – 500 018

Ph: 040-23887500

CENTRAL LABORATORY

Analysis Report

Reg. No. SR/05/TSPCB/HO/R00/LAB/2018/1282-1284
 Collected on: 17/01/2020
 Test method: Standard Methods of APHA, 23rd Edition
 Issue date: 28/01/2020

Collected by: EE, AES & AEE-I. RO-NLG
 Received on: 18/01/2020
 Quantity of the sample: 1 Ltr. sample each
 Page No.: 1 of 1

Source: M/s. Divis Laboratories Ltd., Lingojigudem (V), Chountupal (M), Yadadri Bhuvanagiri District.

Sample code : Sample details / collection point

- 1282 - MEE Condensate.
 1283 - Non Process RO Feed (Cooling Towers & Boiler Bleedoffs).
 1284 - Non Process RO Permiate.

Parameters	Method (*) No.	Unit	Results		
			1282	1283	1284
pH at 25°C	4500-B	-	8.4	7.1	7.0
Total Suspended Solids	2540-B	mg/L	18	115	17
Total Dissolved Solids (TDS)	2540-C	mg/L	455	3,218	190
Chemical Oxygen Demand	5220-B	mg/L	388	872	36
Oil and Grease	5520 - B	mg/L	BDL	BDL	BDL

Note: Results related to sample as received.

BDL: Below detectable limit

(N. Murali Mohan)
 Joint Chief Environmental Scientist (FAC)

.....End of report.....



TELANGANA STATE POLLUTION CONTROL BOARD
Paryavarana Bhavan, A-III, Industrial Estate, Sanathnagar,
Hyderabad-500 018
Phones : 040-23887500 Fax: 040 - 23887519

BY REGD. POST WITH ACK. DUE

Order No. NLG-20/TSPCB/UH-V/TF/2016 -

Dt:18.10.2019

Sub : M/s. Divi's Laboratories Ltd., Lingojigudem (V), Choutuppal (M), Yadadri Bhuvanagiri District - Water (Prevention and Control of Pollution) Amendment Act, 1988 - Air (Prevention and Control of Pollution) Amendment Act, 1987 - **DIRECTIONS** - Issued - Reg.

- Ref :**
1. Hearing held on 19.12.2015.
 2. Memo No. NLG-20/TSPCB/U-II/TF/2015-2248 Dt: 02.01.2016.
 3. TF Direction Order No. NLG-20/TSPCB/UH-V/2016 - 224, dt.13.04.2017.
 4. CFO Order No. TSPCB/RCP/NLG/CFO&HWM/HO/2017-546, dt.09.05.2017.
 5. Task Force Committee meeting held on 18.01.2018.
 6. Notice No.12001/PCB/RO-NLG/CFO/2018-695, Dt.25.01.2018.
 7. Memo No. NLG-20/TSPCB/U-II/2017-3580 Dt:31.01.2018.
 8. Direction Order No. NLG-20/TSPCB/UH -II/2016 - 3875, dt.16.02.2018.
 9. Directions Order No.NLG-20/TSPCB/U-II/2017-2635, dt:26.11.2018.
 10. Rolling Task Force team Constitution order dt.31.05.2019.
 11. Inspection of the industry by the Rolling Task Force team-I officials of TSPCB on 22.06.2019,
 12. Hearing held on 26.09.2019.

1. **WHEREAS**, your industry is located at Lingojigudem (V), Choutuppal (M), Yadadri Bhuvanagiri District and involved in manufacturing of Bulk Drug and intermediates.
2. **WHEREAS**, vide reference 1st cited, the Board reviewed the industry due to received complaints during the Environmental Public hearing of M/s. Brundavan Laboratories Pvt. Ltd and a Memo was issued to EE, RO, Nalgonda to Monitor the Industry closely vide reference 2nd cited.
3. **WHEREAS**, earlier, complaints were received from Sri P.L.N.Rao, Lingojigudem (V), Choutuppal (M), Yadadri District and the issue was reviewed in the Task Force Committee meeting held on 30.03.2017 and the Board issued certain directions vide reference 3rd cited.
4. **WHEREAS**, vide reference 4th cited, the Board issued CFO & HWA to the industry vide order dt.09.05.2017 with validity of 31.03.2022.
5. **WHEREAS**, vide reference 5th cited, the industry was reviewed in the Task Force Committee meeting held on 18.01.2018 and the decision of the Committee is as below:

The industry vide letter dt:17.01.2018 requested for postponement of their case for next meeting as the technical persons are out of station.

The committee noted that the industry has not complied with the directions of the Board vide orders dt:13.04.2017, i.e, not submitted the NEERI study report for Installation of Piezometric wells in and around the industry taking into consideration of 500 Acres of industry premises, not provided Piezometric wells and not furnished the Bank Guarantee of RS.32 lakhs.

After detailed discussions, the committee recommended to issue showcause notice to the industry by the EE,R.O, Nalgonda calling for an explanation for not complying the directions of the Board even after lapse of 9 months from the date of issue of the directions.
6. **WHEREAS**, vide reference 6th cited, meanwhile, as per the discussions during the Task Force meeting held on 18.01.2018, the RO, Nalgonda issued a notice to the industry vide dt.25.01.2018 directing the industry to submit the Bank Guarantee for Rs.32 Lakhs with validity period of one year immediately along with the compliance status of the Board directions.
7. **WHEREAS**, vide reference 7th cited, the Board addressed a memo vide dt. 31.01.2018 to EE, RO, Nalgonda directing to issue showcause notice to the industry.

8. **WHEREAS**, your industry was reviewed before the Task Force Committee of the Board on 03.02.2018 and as per the recommendation of the committee, vide reference 8th cited, the Board issued certain directions to the industry on 16.02.2018.
9. **WHEREAS**, vide reference 9th cited, the Board issued Directions to your industry on 26.11.2018 with one of the direction that:
"The industry shall conduct monitoring of peizowells once in three months with reputed monitoring agencies and submit the reports to the RO, Nalgonda with a copy to Head office".
10. **WHEREAS**, vide reference 10th cited, the Board constituted Rolling Task Force inspection team to inspect the industries in and around Nalgonda immediately on 31.05.2019 due to receiving repeated complaints on in and around industries located at Choutuppal & Pochampally areas etc.,
11. **WHEREAS**, vide reference 11th cited, the industry was inspected by the Rolling Task Force Team-I officials of TSPCB on 22.06.2019 and submitted the following observations:
- (i) The unit was inspected on 22.06.2019 the unit was in operation. The representative Sri Raghavender, EHS Incharge was present.
 - (ii) The Board issued CFE (Change of product mix) on no increase in production capacity and pollution load to the industry vide order dt.24.12.2018. Subsequently, the Board issued CFO to the industry vide order dt.14.03.2019 with validity of 31.03.2024.
 - (iii) As per information submitted by the industry during the 6 months period of Dec'2018 to May'2019, the industry has manufactured consented products and the quantity is 5465.73 kgs/day (avg.) as against consented capacity of 7322.04 Kg/day.
 - (iv) As per the records of the industry, during the last six months period of Dec'2018 to May'2019,, the water consumption is 1306 KLD (avg) as against consented 2199 KLD .
 - (v) The industry is segregating effluents high TDS, low TDS effluents. The waste water generation is 826 KLD (avg)(high TDS-392 KLD, low TDS-434 effluents as against consented 1340 KLD(high TDS-202 KLD, low TDS-1138 effluents)
 - (vi) The industry has provided full-fledged ETP(1500 KL capacity) for treating LTDS effluent consisting of Raw effluents collection sump, Oil & grease traps, Equalization cum Neutralization tanks, Primary Settling Tank, Electro Chemical Oxidation Plant, Primary aeration for process effluents, Secondary settling Tank, Biological Aeration tank for process effluents, Extended aeration tank for process effluents, Biological Clarifiers for process effluents, Multi grade filter (MGF) / Pressure sand filter, Ultra filtration system to treat the low TDS effluents, MEE condensate and part of domestic effluents. RVDF (Rotary vacuum drum filter) for ETP sludge. The installed capacities of various units are as given below:

S.No	Name of the treatment facilities	Installed capacity (M3/day)
1	Primary Aeration tank	1 X 1400 for process LTDS effluents.
2	Biological Aeration tank	1 x 4500 for process LTDS effluents.
3	Extended Aeration tank	1 X 700 for process LTDS effluents.
4	Biological Aeration tank	1 X 500 for non process effluents.
5	Biological Aeration tank	1 X 4500 for MEE condensate.
6	Biological clarifier	2 X 120 for process LTDS effluents
7	Electro chemical oxidation	2 X 300 for process LTDS effluents.
8	Sludge drying beds	8 X 150 for ETP sludge.
9	RVDF (Rotary vacuum drum filter)	2 X 40 for separation of solids and liquids in ETP sludge.
10	Ultra filtration system	1 X 800 before RO feed.
11	Pressure sand filters	2 x 40 before RO feed.

- (vii) The industry has provided ZLD system for treatment and disposal of the HTDS effluents. The details are as given below:

MEEs

MEE - I	Four stage, 350 KLD with vertical calendrias along with common stripper (360 KL capacity) for MEE - I & II.
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MEE - II	Five stage, 350 KLD with Horizontal calendrias along with common stripper (360 KL capacity) for MEE - I & II.
MEE - III	Six stage, 350 KLD with vertical calendrias along with stripper(360 KL capacity).

ATFDs

ATFD I, II, III, IV, V	- 65 KLD each.
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RO systems

RO - I	Located near ECOT building with capacity 600 M ³ /day.
RO - II	Located inside ECOT building with capacity 300 M ³ /day.
RO - III	Located near MEE - I with capacity 325 M ³ /day.
RO - IV	Located near MEE - I with capacity 325 M ³ /day.

- (viii) The industry has installed Continuous Online Ambient Air Quality monitoring stations (CAAQMS) - 3 Nos & VOC meters for monitoring of VOCs and the same are connected to TSPCB server. As per the online connectivity data Ambient Air Quality is within standards.
- (ix) The industry is having 2 No. of 24 TPH and 16 TPH(standby) coal fired boilers for which they have provided ESP and bag filters respectively and common stack of height 40 mtrs. The industry installed Online monitoring system to common stack of 24 TPH and 16 TPH boilers and same is connected to TSPCB server. The industry has installed 24 TPH coal fired boiler but not yet commissioned. The industry is having thermic fluid heaters of 8 Lac. K Cal/hr. (2 Nos.)
- (x) The industry has installed 28 Nos. two stage scrubbers with pH meters to control process emission.
- (xi) The industry has installed incinerator of capacity 9 TPD and provided multi cyclones followed by Venturi scrubber as air pollution control system. The same is not in operation and the organic waste is sent to cement industries for co processing in the cement kiln as alternative fuel.
- (xii) As per the records of the industry during the last six months period of Dec'2018 to May'2019, the industry has sent organic residue - 1506 kgs/day (Avg) against the 5390 Kg/day, spent carbon - 445 kg/day (Avg) against the 732 Kg/day to Cement industries for co-processing, FE salts - 22,136 kg/day against the 24,868 kg/day, ETP sludge -1648.8 kg/day as against the 1800 kg/day to M/s. TSDf. Presently, a stock of FE salts -30 Tons, Organic residue - 15 tons and Spent carbon - 4 Tons, ETP sludge- 15 Tons is available at the site.

- Compliance on CFO schedule - B conditions of CFO Order Dt.14.03.2019:

S.No	Condition	Compliance																								
1)	<p>The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities mentioned below:</p> <table border="1"> <thead> <tr> <th>S. No</th> <th>Purpose</th> <th>Quantity (KLD)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Process & Floor washings & reactor washings.</td> <td>329</td> </tr> <tr> <td>2</td> <td>Boiler feed</td> <td>700</td> </tr> <tr> <td>3</td> <td>Cooling (make up)</td> <td>700</td> </tr> <tr> <td>4</td> <td>DM / Softener</td> <td>150</td> </tr> <tr> <td>5</td> <td>Incinerator Scrubber</td> <td>20</td> </tr> <tr> <td>6</td> <td>Domestic</td> <td>300</td> </tr> <tr> <td></td> <td>Total</td> <td>2199 KLD</td> </tr> </tbody> </table>	S. No	Purpose	Quantity (KLD)	1	Process & Floor washings & reactor washings.	329	2	Boiler feed	700	3	Cooling (make up)	700	4	DM / Softener	150	5	Incinerator Scrubber	20	6	Domestic	300		Total	2199 KLD	As per the records of the industry, during the last six months period of Dec'2018 to May'2019 the water consumption is 1306 KLD (avg) as against consented 2199 KLD.
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2)	<p>The emissions shall not contain constituents in excess of the prescribed limits mentioned below.</p> <table border="1"> <thead> <tr> <th>Chimney No.</th> <th>Parameter</th> <th>Emission Standards</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Chimney No.	Parameter	Emission Standards				The industry has installed online monitoring system to common stack of 24 TPH & 16 TPH and connected to the TSPCB website. As per the online data the values are																		
Chimney No.	Parameter	Emission Standards																								

	1 to 4	Particulate Matter	115 mg/Nm ³	within the standards.	
	5	Particulate Matter	115 mg/Nm ³		
		Particulates	50 mg/Nm ³		
		HCl	50 mg/Nm ³		
		SO ₂	200 mg/Nm ³		
		CO	100 mg/Nm ³		
		Total Organic Carbon	20 mg/Nm ³		
		HF	4 mg/Nm ³		
		NOx	400 mg/Nm ³		
		Total Dioxins & Furans	0.1 ng TEQ mg/Nm ³		
		Hg and its compounds	0.05 mg/Nm ³		
		Cd + Th + their compounds	0.05 mg/Nm ³		
		Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V + their compounds	0.05 mg/Nm ³		
		6	HCl Acid Vapour & Mist		35 mg/Nm ³
			Chlorine		15 mg/Nm ³
3)	The industry should comply with emission limits for DG sets of capacity upto 800 KW as per the Notification G.S.R.520 (E), dated 01.07.2003 under the Environment (Protection) Amendment Rules, 2003 and G.S.R.448(E), dated 12.07.2004 under the Environment (Protection) Second Amendment Rules, 2004. In case of DG sets of capacity more than 800 KW should comply with emission limits as per the Notification G.S.R.489 (E), dated 09.07.2002 at serial no.96, under the Environment (Protection) Act, 1986.				--
4)	The industry shall comply with ambient air quality standards of PM ₁₀ (Particulate Matter size less than 10µm) - 100 µg/ m ³ ; PM _{2.5} (Particulate Matter size less than 2.5 µm) -60 µg/ m ³ ; SO ₂ - 80 µg/ m ³ ; NO _x - 80 µg/m ³ , outside the factory premises at the periphery of the industry. Standards for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009 Noise Levels: Day time (6 AM to 10 PM) - 75 dB (A) Night time (10 PM to 6 AM) - 70 dB (A)			The industry has installed Continuous Online Ambient Air Quality monitoring stations (CAAQMS) - 3 Nos and same are connected to TSPCB server. As per the online data the values are within the standards.	
5)	The industry shall manufacture only the consented product.			Complied	
6)	The industry shall not increase the capacity beyond the permitted capacity, without obtaining CFE & CFO of the Board.			Complied- Manufacturing consented products as per CFO order Dtd.14.03.2019.As per the records observed the production for Dec'2018-May 2019 is 5465.73 Kg/day against the consented capacity of 7322.04 Kg/Day	
7)	The industry shall segregate the HTDS & LTDS effluents.			Complied - Segregating the HTDS & LTDS effluents	

8)	The industry shall regularly operate the pollution control systems i.e., Strippers, Multiple Effect Evaporators (MEEs), ATFDs, Biological ETPs, RO plants for treatment and reuse of treated effluents.	Complied- Operating the Strippers, Multiple Effect Evaporators (MEEs), ATFDs, Biological ETPs, RO plants for treatment and reuse of treated effluents.
9)	The industry shall not carryout evaporation of effluents in any reactor.	Complied-No evaporation of effluents are carried out in reactors.
10)	The industry shall not use effluents in cooling towers under any circumstances.	Complied- No effluents observed in cooling towers
11)	The industry shall maintain above ground effluent storage tanks for storage of HTDS & LTDS effluents. The industry shall not use any below ground effluent storage tanks.	Complied- The industry has provided above ground level separate storage tanks for storage of HTDS & LTDS
12)	The industry shall operate water meters for recording category-wise water consumption viz. Process, Washings, Boiler feed, Cooling tower makeup, Scrubber, R&D Plant, Domestic etc.	Complied
13)	The industry shall operate digital flow meters for recording waste water generation at inlet of various effluent streams of HTDS & LTDS, viz., Stripper/ MEE feed; condensate of MEE & ATFD; steam flow to Stripper, MEE & ATFD; inlet & outlet of Biological ETP; RO feed; RO Permeate & RO reject.	The industry has provided digital flow meters at stripper feed, MEE feed, MEE condensate, Biological ETP inlet, Biological ETP outlet, RO feed, RO permeate & RO reject.
14)	The industry shall operate VOC analyzers for monitoring of VOCs and maintain the records.	VOC analyzers provided and maintaining records along with CAAQM and connected to TSPCB server
15)	The industry shall operate Multi-stage Scrubbers in the plant for control of process emissions, so as to avoid odour nuisance and maintain records. The industry shall operate the online pH meters for the Multi-stage scrubbers.	The unit has installed 28 No. two stage scrubbers with PH meter to control the process emissions.
16)	The industry shall collect & store the Hazardous Solid waste in an elevated closed storage shed with impervious lining and Leachate collection system. The industry shall lift the Hazardous Waste regularly to the AFRF Facilities / Cement industries for Co-processing / TSDF, Dundigal for landfilling.	Hazardous Solid waste stored in elevated closed shed with impervious lining and Leachate collection system and regularly disposed as per consent conditions.
17)	The industry shall operate IP camera with PAN, TILT Zoom, 5x or above focal length, with night vision capability, along with flow meters & totalisers with RS- 485 communication to HTDS & LTDS, with connection of the data to the Servers of CPCB & TSPCB. The industry shall take immediate necessary steps for regular streaming of video & regular data transmission in the online monitor system.	IP cameras provided for the flow meters at HTDS(inlet of ETP) and RO permeate(Outlet of ETP) and connected to TSPCB server.
18)	The industry shall maintain good housekeeping within the plant premises.	Maintaining good housekeeping.
19)	The industry shall maintain separate energy meter for the pollution control systems and maintain the records of the same.	Separate energy meters provided to ETP & APCE systems.
20)	The industry shall maintain vent condensers for the bulk storage tanks, storing highly volatile solvents, wherever required. The industry shall operate Nitrogen blanketing system, wherever required, with required pressure for the Solvents / Chemical/Product etc. for the Solvent storage tanks to avoid vapours escaping into the atmosphere, so as to avoid odour nuisance in the surroundings.	Provided.
21)	Solvents shall be recovered to the maximum extent possible and shall be reused. The Spent Solvents,	The unit is operating solvent recovery plant.

	which cannot be reused in the plant, shall be disposed to the End Users/ Authorized Cement manufacturing units for Co-processing / AFRF facilities of M/s. GEPIL Infrastructure Pvt. Ltd., Rakamcherla, Pudur (M), Rangareddy Dist (or) M/s. TSDf, Dundigal for pre-processing to be sent to Cement units for Co-processing / TSDf Dundigal for incineration. The industry shall not dispose Spent Solvents / Mixed Spent Solvents to the traders/recyclers.	
22)	The industry shall carryout Leak Detection and Repair Study (LDAR) periodically to assess the solvent losses and take necessary remedial measures for control of solvent losses.	--
23)	There shall not be any spillages / discharges of chemicals / effluents on ground. The drums containing chemicals & wastes shall be stored in elevated platform provided with leachate / spillages collection pit. Under any circumstances, the drums shall be stored on naked ground.	No spillages observed near the storage sheds.
24)	The industry shall comply with the directions issued by the Task Force from time to time scrupulously.	-
25)	The industry shall comply with the stipulations and conditions prescribed in the CFE Order.	-
26)	The industry should develop and maintain green belt all along the boundary of the industry and other vacant pieces. The industry shall take up extensive plantation under the Haritha Haram program of the State Government.	Developed Green belt in the premises
27)	The industry shall install & operate IP cameras with PAN, Zoom, 5x or above focal length, with night vision capability, at main gate entrance & at other gates where there is movement of effluent tankers, Solvent tankers, Chemical tankers, Hazardous Waste carrying vehicles & other material carrying vehicles. These cameras shall be connected to the website of TSPCB, with minimum backup of three months.	Provided
28)	The industry shall maintain separate area for detoxification of drums and pump the effluent to effluent collection tanks.	The industry has provided concrete platform with sufficient dyke wall and leachate collection pit for storage of chemical drums.
29)	The industry shall take measures to prevent the seepages such as cement concrete flooring with proper collection system to collect contaminants / spillages in the relevant areas in the industry premises.	
30)	The industry shall provide Stack Monitoring facility (Port hole, Platform, ladder etc.) as per Emission Regulation part-3 (ERP-3) norms for all the major stacks of the industry within a period of one month.	Complied
31)	The industry shall pay the balance CFO fees, at RO, Nalgonda, as per the provisions of G.O.Ms.No.22, Dt: 09.07.2018 issued by EFS&T (For. III) Dept, Govt. of Telangana and TSPCB Circular dt: 30-07-2018, with a copy marked to Head Office. In case of failure to pay the Consent fees, the validity of the Consent Order automatically stands cancelled and operation of the industry without valid consent attract penal action under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and Hazardous and Other Waste (Management and Transboundary Movement) Rules, 2016.	-
32)	The industry shall follow all the Rules and Regulations	-

	under the Manufacture, Storage & Import of Hazardous Chemicals Rules, 1989, framed under the Environment (Protection) Act, 1986.	
33)	The industry shall follow all the Rules and Regulations under the Chemical Accidents (Emergency Planning, Preparedness & Response) Rules, 1996, framed under the Environment (Protection) Act, 1986.	
34)	The industry shall take all safety measures and provide fire fighting equipment in the plant.	Provided
35)	The industry shall submit mock drill report carried out at least once in six months, as required under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.	--
36)	The industry shall not discharge any wastewater within or outside the factory premises and maintain zero discharge of effluents.	No discharge observed within and outside the premises.
37)	The industry shall not cause any air pollution / odour nuisance in the surrounding environment.	During the inspection odour was observed at MEE and ETP area.
38)	The industry has to provide adequate closed storage facilities above the ground with proper lining for storage of Hazardous Waste before its final disposal.	Provided closed storage facilities for storage of Hazardous waste.
39)	All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991, should be followed. The industry shall regularly renew the PLI Policy from time to time.	PLI policy valid upto 09.11.2019
40)	The industry shall maintain 3 CAAQM stations and connect the data to website of PCB.	Provided 3 No.AAQMS and connected to server.
41)	Regular monitoring of vents of the storage tanks and work room concentration shall be carried out using sensors. The industry shall control fugitive emissions by providing chilled brine circulation, closed room operations and condensers with receivers.	Complied.
42)	The industry shall not use odour causing substances or Mercaptans and shall not cause odour nuisance in the surroundings.	-
43)	The evaporation losses in solvents shall be controlled by taking all preventive measures such as circulation of Chilled brine, transfer of solvents by using pumps instead of manual handling, closed centrifuges, providing primary & secondary condensers to all the reactor vents and all the solvent storage tanks and keeping solvent storage in ground storage tanks with closed pipeline to Reactors.	Complied
44)	The industry shall maintain the following records and the same shall be made available to the Board Officials during the inspection. <ul style="list-style-type: none"> • Daily production details, RG-I records and Central Excise Returns. • Quantity of Effluents generated, forced evaporated, condensate generated, effluents treated and RO permeate reused. • Daily Hazardous Solid Waste generated and disposed to TSDF, Cement plants / Onsite Incineration. • Log Books for pollution control systems. 	Maintaining the records.
45)	The industry shall maintain proper records for effluent disposal and its concurrence with CFO order.	Maintaining records for effluent disposal.
46)	The industry shall not send any waste for recovery to other plants without prior approval of the Board.	-
47)	The industry shall not adopt treatment of effluents either directly / indirectly from other sister concern	-

	units without prior permission from the Board.	
48)	The industry shall furnish the Ground water quality monitoring reports quarterly to the EE, TSPCB, RO, Nalgonda.	Submitting
49)	The applicant shall submit Environment Statement in Form-V to the Regional office before 30th September of every year as per Rule No.14 of E(P) Rules, 1986 & amendments thereof.	Submitting
50)	The conditions stipulated in this order are without prejudice to rights and contentions of this Board in any Hon'ble court of Law.	-
51)	The Board reserves its right to modify above conditions or stipulate new / additional conditions and to take action including revoking of this order in the interest of environment protection.	-

• Compliance status of Task Force direction dt. 26.11.2018:

Sl. No.	Conditions	Compliance
1)	The industry shall comply with all the CFO&HWA conditions of the Board scrupulously.	Complied.
2)	The industry shall comply with the directions issued by the Board from time to time.	Complied.
3)	The industry shall conduct monitoring of piezowells once in three months with reputed monitoring agencies and submit the reports to the RO, Nalgonda with a copy to Head Office.	Complied- samples collected during inspection and submitted for analysis at Central lab.
4)	The industry shall renew of Bank Guarantee of Rs.32 lakhs available with the Board from time to time till further orders from the Board.	The industry has furnished the BG of Rs 32 lakhs which is valid upto 16.07.2020.

12. **WHEREAS**, the analysis results of the samples collected during the inspection:

Parameters	Unit	Inlet of ETP	Outlet of Electro-chemical oxidation plant.
pH at 25°C	-	4.0	7.2
Total Suspended Solids	mg/L	448	695
Total Dissolved Solids (TDS)	mg/L	19,988	15,144
Chemical Oxygen Demand	mg/L	24,707	13,310

Parameters	Unit	Aeration tank.	Sample collected from Clarifier.	Sample collected from sand filter outlet.	Ultra filtration Outlet (Inlet of RO).
pH at 25°C	-	7.3	7.2	7.1	7.0
Total Suspended Solids	mg/L	1,025	794	85	52
Total Dissolved Solids (TDS)	mg/L	14,864	13,988	13,814	12,767
Chemical Oxygen Demand	mg/L	4,384	1,913	1,714	849

Parameters	Unit	RO-Permeate.	RO-Reject.	MEE Feed (HTDS Effluents storage tank).	MEE - Condensate.
pH at 25°C	-	6.9	7.1	7.0	8.0
Total Suspended Solids	mg/L	15	125	978	25
Total Dissolved Solids (TDS)	mg/L	289	35,914	30,776	181
Chemical Oxygen Demand	mg/L	96	2,327	6,695	1,865

Parameters	Unit	MEE - Concentrate.	Sample of Non-Process effluent RO-Inlet.	Non-Process effluent RO-Permeate.	Non-Process effluent RO-Reject
pH at 25°C	-	6.5	7.1	7.0	7.2
Total Suspended Solids	mg/L	4,065	128	18	205
Total Dissolved Solids (TDS)	mg/L	1,53,126	3,536	271	11,133
Chemical Oxygen Demand	mg/L	27,098	1,164	36	3,786

Parameters	Unit	Piezo metric - well - 08 (within industry premises)	Piezo metric well - 05 (within industry premises).	Piezo metric well - 02 (within industry premises)	Piezo metric well - 09 (outside industry premises).	Piezo metric well - 01 (outside industry premises) at Ankireddy garden.	IS 10500 : 2012	
							Acceptable Limit	Permissible Limit
pH at 25°C	-	7.3	7.5	7.7	7.2	7.5	6.5-8.5	No Relaxation
TDS	mg/L	1,700	1,505	1,420	3,800	1,920	500	2000
COD	mg/L	12	16	12	96	24	-	-
Chlorides as Cl ⁻	mg/L	639	544	501	1,614	440	250	1000
Sulphates as SO ₄ ⁻²	mg/L	58	68	124	243	284	200	400
Total Alkalinity as CaCO ₃	mg/L	140	180	320	340	460	200	600
Total Hardness as CaCO ₃	mg/L	1,020	1,448	610	2,365	1,020	200	600
Calcium as Ca+2	mg/L	216	250	116	403	208	75	200
Magnesium as Mg+2	mg/L	116	200	78	330	122	30	100
Fluoride	mg/L	0.3	0.4	0.23	0.53	0.2	1.0	1.5
Nitrates	mg/L	35	32	31	41	38	45	No Relaxation
Phosphates	mg/L	0.3	BDL	BDL	0.35	BDL	-	-
Sodium as Na	mg/L	341	255	270	692	467	-	-
Potassium as K	mg/L	10	2.6	3.4	1.9	5.2	-	-
SAR	-	4.6	2.9	2.4	6.19	6.3	-	-

13. **WHEREAS**, vide reference 12th cited, you were given an opportunity for hearing before the Task Force Committee of the Board during the meeting held on 26.09.2019. The industry representative has attended the meeting.

The Committee noted that, the Board is receiving repeated complaints, in and around Choutuppal, Nalgonda, Dothigudem area etc., the Board constituted 3 Rolling Task Force Teams to inspect the industries in Pochampally & Choutuppal Mandals vide order dt. 31.05.2019 to inspect the industries.

The Committee noted that, during the inspection odour was observed at MEE and ETP area and they are complying with the directions issued by the Board.

After detailed discussions, the Committee recommended to issue certain directions to the industry to comply within Two Months.

14. **WHEREAS**, after careful consideration of the material facts of the case, the Board hereby issues following directions to your industry to comply within Two Months:-

1. The industry shall not operate without consent of the Board.
 2. The industry shall comply with the CFO & HWA conditions and directions dated 26.11.2018 scrupulously.
 3. The industry shall restrict the quantities of production, products, water consumptions including the recycled water, waste water generation & disposal, hazardous waste generation & disposal etc., within the permitted quantities as mentioned in the CFO&HWA order and shall maintain the records separately.
 4. The industry shall continuously segregate the effluent generated into HTDS & LTDS effluents and store only in above ground level storage tanks duly maintaining required free board to avoid overflows/spillages. The industry shall not store any effluents in drums or tankers etc.
 5. The industry shall transfer the effluent through permanent pipelines only and shall not use any temporary flexible hose pipes for transfer of effluents under any circumstances.
 6. The industry shall not discharge any effluents / seepages / spillages / leakages / overflows within the premises and outside the industry premises.
 7. The industry shall regularly operate the ZLD System.
 8. The industry shall operate the scrubbers continuously and shall take appropriate measures for control smell nuisance within & outside the industry premises.
 9. The industry shall extend the validity of Bank Guarantee of Rs.32.0 Lakhs submitted to the Board from time to time before expiry, till further orders of the Board.
15. **WHEREAS**, these directions are issued under Sec.33 (A) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Sec. 31 (A) of Air (Prevention and Control of Pollution) Amendment Act, 1987.
16. **WHEREAS**, the above mentioned directives shall be implemented by the industry, failing which legal action will be initiated against your industry under Sec.33 (A) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Sec. 31 (A) of Air (Prevention and Control of Pollution) Amendment Act, 1987 directing closure of the industry in the interest of Public Health and Environment, without further notice.

Sd/-
MEMBER SECRETARY

To
M/s.Divi's Laboratories Ltd.,
Lingojigudem (V), Choutuppal (M),
Yadadri Bhuvanagiri District.

// T.C.F.B.O //


Senior Environmental Engineer (B.A.)
(UH- V)

Musi
Water Bill

119



Divi's Laboratories Limited

Date: 11.06.2020

To,
The Dy.Executive Engineer,
I.B Sub-Division,
Bhuvanagiri.

Sub:- Payment of Industrial water charges from January-20 to March-20- Reg.

Ref:-1. Lr.No.DEE/Bngr-Sub-Div/446/2018-19,Dated 14-11-2018

2. G.O.Ms. No.47, Dated: 02.07.16

3. Agreement Proceeding No.SE/IC-NLG/DEE/T3/2016-17/1373S,Dt: 03.09.2016

4. Lr.No.DEE/Bngr-Sub-Div/171/A/20-21, Dated: 18.05.2020

* * *

Dear Sir,

We are drawing water from Musi River according to the 3rd cited agreement from 23rd March-18. With reference to your letter 1st cited dated 14.11.18, the water consumption of Divi's Laboratories Limited from January – 20 to March – 20 is 16,957.98 gallons for which that total amount is Rs. 59,352.93/-. With reference to your letter 4th cited we taken D.D (D.D No: 95416, Dated: 10.06.2020) with an amount of Rs. 64,193/- on the name of APAO, Bhuvanagiri, Yadadri Bhuvanagiri towards payment of water withdrawal charges from Musi River.

We request you the excess amount of Rs. 4,840/- to be adjusted in next month bill.

This is for your kind information.

Thanking you,
Yours faithfully,

(S.RAMAKRISHNA)
GENERAL MANAGER

Received
by Executive Engineer
I.B Sub-Division. Bhuvanagiri
11/6/2020

Enclose: Original D.D No: 954161, Dated: 10.06.2020 for Rs. 64,193/-.

“An ISO-9001, ISO-14001 and OHSAS-18001 Triple certified company”

FACTORY : UNIT-1 : Lingojjudem Village, Choutuppal Mandal, Yadadri Bhuvanagiri District, Telangana - 508 252, INDIA.
Tel. : 08694 - 257001, CIN : L24110TG1990PLC011854
REGD. OFFICE : Divi Towers, 1-72/23(P)/DIVIS/303, Cyber Hills, Gachibowli, Hyderabad - 500 032, Telangana, INDIA.
Tel. : 91-40-2378 6300 / 400 Fax : 91-40-2378 6460
E-mail : mail@divislaboratories.com, Website : www.divislaboratories.com.

भारतीय स्टेट बैंक
State Bank of India
 Branch: CHOUTUPPAL
 CODE No: 02705
 08694-261791

सांगडाप 120
DEMAND DRAFT

Key: NAKHET
 Sr. No: 690792

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D	D	M	M	Y	Y	Y	Y

प्राप्तकर्ता/आवेदक **ARAO, BHUVANAGIRI, YADADRI, BHUVANAGIRI DISTRICT**
ON DEMAND PAY
 रुपये **RUPEES** Sixty Four Thousand One Hundred and Ninety Three Only

शुद्ध प्राप्त आदेश भर
QR ORDER

अदा करें ₹ 64193.00

Key: 000526954161
 Name of Applicant

Key: NAKHET Sr. No: 690792
DIVIS LABORATORIES LIMITED LINGOJIGUDEM, CHOUTUPPAL

शुद्ध प्राप्त / VALUE RECEIVED

भारतीय स्टेट बैंक
STATE BANK OF INDIA
 अदाकर्ता शाखा / DRAWEE BRANCH: BHONGIR
 कोड नं. / CODE No: 12716

S. Anitha
 प्राधिकृत हस्ताक्षरकर्ता
AUTHORISED SIGNATORY

शाखा प्रबंधक
BRANCH MANAGER

कम्प्यूटर द्वारा मुद्रित होने पर ही वैध
VALID ONLY IF COMPUTER PRINTED

केवल 3 महीने के लिए वैध
VALID FOR 3 MONTHS ONLY

₹ 1,50,000/- एक अधिक के निम्नलिखित अधिकारियों द्वारा हस्ताक्षरित होने पर ही वैध है।
 INSTRUMENTS EXCEEDING ₹ 1,50,000/- ABOVE ARE VALID UNLESS SIGNED BY TWO OFFICERS
S. ANITHA
SBI Choutuppal
 Ph. 08694-272230

⑈954161⑈ 00002000⑈ 000526⑈ 16

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Divis Laboratories Limited

Lingojigudem

Musi Flow Meter Reading for the month of MAY'2020

Date	Starting Reading	Ending Reading	Total (in KL)
01-05-2020	361383	362077	694.00
02-05-2020	362077	362805	728.00
03-05-2020	362805	363523	718.00
04-05-2020	363523	364247	724.00
05-05-2020	364247	364981	734.00
06-05-2020	364981	365710	729.00
07-05-2020	365710	366428	718.00
08-05-2020	366428	367166	738.00
09-05-2020	367166	367890	724.00
10-05-2020	367890	368616	726.00
11-05-2020	368616	369356	740.00
12-05-2020	369356	370085	729.00
13-05-2020	370085	370820	735.00
14-05-2020	370820	371554	734.00
15-05-2020	371554	372282	728.00
16-05-2020	372282	373013	731.00
17-05-2020	373013	373737	724.00
18-05-2020	373737	374475	738.00
19-05-2020	374475	375204	729.00
20-05-2020	375204	375938	734.00
21-05-2020	375938	376676	738.00
22-05-2020	376676	377404	728.00
23-05-2020	377404	378137	733.00
24-05-2020	378137	378864	727.00
25-05-2020	378864	379595	731.00
26-05-2020	379595	379595	0.00
27-05-2020	379595	380333	738.00
28-05-2020	380333	381058	725.00
29-05-2020	381058	381790	732.00
30-05-2020	381790	382530	740.00
31-05-2020	382530	383264	734.00

Total withdrawal water quantity in the month of MAY'2020**21,881.00**

Total withdrawal water quantity in the month of MAY'2020

= 2,18,81,000.00

Litters

= 57,80,347.53

Gallons

Note: We have to pay Rs. 3.50 per 1000 gallons

So, for 57,80,347.53 gallons we have to pay 20,231.22 Rupees for the month of MAY'2020

*Divi's Laboratories Limited, Unit-1***WATER PERMISSIONS**

S. No.	Reference	Permission order details
1	Memo No. Hg-II/2067/2013, Dated: 23.05.2013	Government of AP, Ground water Department. Ground water from two existing wells (DW+DCB) located in survey Nos 398 & 403, Gokaram Village, Valigonda Mandal, Nalgonda Dist.
2	G.O.Ms No 47, Dated 02.07.2016	Government of Telangana, Irrigation & CAD (Reforms) Dept. From Musi River, the unutilized Minor irrigation allocations in K-10 Sub basin of Krishna River.
3	Proc. No: DEC- I/OT1/AEE4/TSiPASS/ M/s Divis Laboratories / water allocation Dt: 29.02.2020	Government of Telangana, Irrigation & CAD Department. From Musi River at Jalu Kalwa (V), Vologonda (M), Yadadri-Bhongiri Dist

GOVERNMENT OF ANDHRA PRADESH
GROUND WATER DEPARTMENTMemo No.Hg-IU/2067/2013,Dated: 23.05.2013,

- Sub:- Andhra Pradesh ground Water Department - State Level Single Window Clearance Committee - M/s.Divis Laboratories Limited, Gokaram Village, Valligonda Mandal, Nalgonda District - Report approved - Communicated - Regarding.
- Ref:- Letter No.GWD/DDN/182/I/2011-12, Dated: 04/05/2013 of Deputy Director, Ground Water Department, Nalgonda.

*** **

Attention of the Deputy Director, Ground Water Department, Nalgonda is invited to the subject and reference cited, it is informed that the above report is approved. The firm is permitted to draw 500 Kilo liters per day (Dug-cum-borewell=300 kld. + Dugwell=200 kld.) from two wells (DCB+DW) for 6 hours in a day, as recommended by Deputy Director, Ground Water Department, Nalgonda. Recommendations are valid for present status of Groundwater conditions.

The Deputy Director, Ground Water Department, Nalgonda is advised to communicate the same to the firm alongwith terms and conditions under intimation to Commissioner of Industries and Head Office, Ground Water Department.

Further, the Deputy Director, Ground Water Department, Nalgonda is advised to conduct pump test on the recommended DCB and DW, when tank is empty to assess the sustainability of recommended wells and report the performance of the wells.

Sd/- B.M.MURALI KRISHNA RAO,
DIRECTOR.

To
The Deputy Director, Ground Water Department, Nalgonda.

///t.c.f.b.o///

0180 Kuman
SUPERINTENDENT

GOVERNMENT OF TELANGANA
ABSTRACT

Irrigation & CAD Department - Industrial Water supply to Divi's Lab at Lingo jigudem Village, Choutuppall Mandal, Nalgonda District - Permission to draw water 0.01 TMC per annum from Musi River at Gokaram (V), Valigonda (M), Nalgonda District - Accorded - Orders - Issued.

IRRIGATION & CAD (REFORMS) DEPARTMENT

G.O.Ms.No.47,

Dated:02-07-2016.
Read the following:-

1. G.O.Ms.No.39, I&CAD (PW:COD)Department, Dt.02-04-2002.
2. G.O.Ms.No.115, I& CAD (Reforms) Department, Dt:27-06-2015.
3. From the Engineer-in-Chief(I), Lr.No.ENC(I)/DCEI/OT2/AEE5/ Divis Lab/ 2015, Dt: 30-05-2016.

-o0o-

ORDER:-

In the reference 3rd read above, the Engineer-in-Chief(Irrigation) has requested and recommendation to accord permission for allocation of 0.01 TMC per annum of water from Rama Samudhram Minor Irrigation Tank to Divi's Labs Ltd., situated at Lingo jigudem (V), Choutuppall (M), Nalgonda District from Musi River from the unutilized Minor Irrigation allocations in K-10 sub basin of Krishna River, subject to usual terms & conditions without disturbing URR, LRR collection of royalty/seigniorage charges with the conditions in addition to usual terms and conditions.

2. Government after careful examination of the proposed hereby accord permission for drawl of 0.01 TMC per annum of water to Divi's Labs Limited situated at Lingo jigudem (V), Choutuppall (M), Nalgonda District from Musi River from the unutilized Minor Irrigation allocations in K-10 sub basin of Krishna River and subject to payment of water rate for consumptive use without disturbing URR, LRR collection of royalty/seigniorage charges and as per Government orders vide G.Os 1st and 2nd read above at the rate as fixed by Government from time to time and subject to the concurrence of District Collector, Nalgonda and the clearance of Pollution Control Board and subject to the following Special terms & Conditions apart from usual terms & conditions and also subject to obtaining other Department permissions as per Law/Rules :

1. The firm should make its own arrangements for creating storage facilities to avoid drawl from river during non-monsoon period.
2. The department is no way responsible of non-supply/non availability of water due to any reason in any particular water year.
3. The annual requirement of water of 0.01 TMC to be spared from Musi River from the unutilized MI allocations in K-10 sub basin of River Krishna.
4. The utilization should not exceed 0.01 TMC per annum under any circumstance and necessary measuring arrangements have to be made by the firm.

3. The Engineer-in-Chief (Irrigation), Hyderabad shall take necessary action accordingly.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

DR. SHAILENDRA KUMAR JOSHI
SPICIAL CHIEF SECRETARY TO GOVERNMENT

To
The Engineer-in-Chief (Irrigation), I&CAD Department,
Jalasoudha, Errummanzil, Hyderabad.

(PTO)

::2::

The Collector & District Magistrate, Nalgonda.

Copy to:

- The Commissioner of Industries, Chirag Ali Lane, Telangana State, Hyderabad.
- The Pollution Control Board, Telangana State, Hyderabad.
- The P.S. to Hon'ble Minister (Irrigation)
- The P.S. to Spl. Chief Secretary to Government, I & CAD Department.
- The P.S. to Secretary to Government, Energy Department.
- The P.S. to Secretary to Government, Industries Department
- The Director, Ground Water Department, Telangana, Hyderabad.
- The I&CAD (W.R.G) Department
- SF/SC (C.No.5664/Reforms/2016).

//Forwarded:: By order//

Rejwan H.
SECTION OFFICER

127
GOVERNMENT OF TELANGANA
IRRIGATION & CAD DEPARTMENT

Present.
Sri.M.A.Hameed Khan, B.E.,
Chief Engineer, Minor Irrigation,
Krishna basin, Erramanzil,
Hyderabad.

Proc. No: DCE-I/OT1/AEE4/TSiPASS / M/s Divis Laboratories/ water allocation

Dt: 29.02.2020.

Sub: I&CAD Dept.,-TS-IPASS Act 2014- Online application of M/s Divis Laboratories Limited.,- Request for allocation of 2000 KL (0.0258 TMC per Annum) per day of water - Permission Accorded - Orders Issued – Reg.

- Ref:** 1. Govt Memo No.7288/Reforms/A2/2016 Dt:-15.03.2017
2. ENC(I)/DCE-I/OT1/AEE5/ Automatic allocation/2016, Dt: 24.03.2017
3. SE/IC/Nalgonda - Lr.No.SE/IC-NLG/DEE/T3/2019-20/ 107M dt: 27.02.2020

ORDER

In the reference 1st cited the Government have delegated the powers to the concerned Chief Engineers for allocation of water up to 0.20TMC or 200Mcf/Annum from irrigation sources to the Industrial Units under intimation to the ENC (Irrigation) / Government so as to enable the Industries department to expedite the clearance of schemes under TS- IPASS Act of 2014.

In the reference 2nd cited, the Engineer-in-Chief, (Irrigation) has requested to take necessary action according to Govt. memo 1st cited under intimation to Engineer-in-Chief (Irrigation).

In the reference 3rd cited the Superintending Engineer, Irrigation Circle, Nalgonda, has reported that, permission may be issued for water drawl of 2000 KLD (0.0258 TMC per Annum) from Musi river at Jalu Kalwa (V), Voligonda (M), Yadadri-Bhongir District.

After careful examination of matter, permission is hereby accorded for drawl of 2000 KL / day of water (0.0258 TMC/annum) to M/s Divis Laboratories Limited., from Musi river at Jalu Kalwa (V), Voligonda (M), Yadadri-Bhongir District subject to the concurrence of the Nodal Agency of appropriate Committee of TS- IPASS, District Collector concerned, the clearance of Pollution control Board, Ground water Department and obtaining of all other departments permissions necessary as per the orders/ Laws / Rules / enacts of the state and

central government in force and as issued time to time subject with the following terms and conditions apart from usual terms and conditions.

1. The applicant should furnish the required information to the competent Authority and also to the Nodal Agency simultaneously.
2. The firms should make its own arrangements with their own costs for drawl of water including procurement of the land necessary near the river bank and wherever the pipe lines proposed to be laid and also lifting, pumping all other arrangements required to create storage facilities at their own cost etc.
3. The Department is no way responsible for non-supply / non availability of water due to any reason in any particular water year.
4. The utilization should not exceed 0.0258 TMC/annum and the necessary measuring arrangements have to be made by the firm only.
5. The applicant shall pay the water royalty charges to the Government as per Govt. Order G.O. Ms. No. 115 Dated: 27.06.2015 and subsequent amendments.

Sd/- Dt: 29.02.2020,
M.A Hameed Khan
Chief Engineer, Minor Irrigation,


For Chief Engineer, Minor Irrigation (K.B).

To,

1. M/s Divis Laboratories Limited. Through Chief Engineer, Minor Irrigation, Irrigation & CAD, Department. Jalasoudha, Hyderabad with a request to communicate this proceedings to State Nodal Agency, TS-IPASS Act-2014, Hyderabad to serve the applicant.
2. Copy submitted to the Principal Secretary to the Government, I & CAD. Department, Secretariat, Hyderabad for kind information.
3. Copy submitted to the Engineer-in-Chief (Irrigation), Irrigation & CAD, Department, Jalasoudha, Hyderabad for information.
4. The District collector, Nalgonda, for information & necessary action.
5. The District Nodal Agency, through District collector, Nalgonda.
6. Copy to the Superintending Engineer, Irrigation Circle, Nalgonda for information and necessary action.

Feasibility Study for Piezometric Wells in and around Divis Laboratories Ltd. Unit – I, Lingojigudem Village Choutuppal Mandal, Yadadri Bhuvangiri District, TS



Sponsor
M/s. Divis Laboratories Limited
Lingojigudem, Telangana



**CSIR-National Environmental Engineering
Research Institute**
Hyderabad Zonal Centre
IICT Campus, Uppal Road, Hyderabad-500007



September 2018



Foreword

Divis Laboratories Ltd. Was established in 1990 and it is a global manufacturer and supplier of Active Pharma Ingredients and Intermediates. Divis Laboratories Unit – 1 is located at Lingojigudem Village, Choutuppal Mandal, Yadadri Bhuvanagiri District (formerly Nalgonda District), Telangana State, which is about 55 Km away from Hyderabad. Laboratory comprises 13 multipurpose production blocks covering an area of 507.32 acres, which has sufficient space for further growth and expansion. This laboratory is primarily engaged in the manufacturing of Active Pharmaceutical Ingredients (APIs) & Intermediates for Generics Custom Synthesis of API's and Advanced intermediates for discovery compounds for pharma giants, building blocks for Peptides, building blocks for Nucleotides and Carotenoids Chiral ligands. For monitoring of groundwater quality and water level Telangana State Pollution Control Board (TSPCB) instructed Divis Laboratories to install piezometric wells in and around Divis.

In this regard, Divis Laboratories Ltd. approached CSIR-NEERI to locate the piezometric wells in the area and carry out the feasibility study of installed piezometric wells in and around the Campus by monitoring the groundwater level and quality of the piezometric well. CSIR-NEERI had carried out a groundwater survey in the study area in March 2018. Ground water samples (09 nos.) were collected from of Divis Piezometric wells and analyzed for physical, chemical and microbiological parameters.

The help and cooperation extended by officials of Divis Laboratories is gratefully acknowledged.

Nagpur

(Rakesh Kumar)
Director

Project Personnel

CSIR-NEERI, Hyderabad Zonal Centre

Dr. T.V.B.P.S. Rama Krishna	Mrs Morami Kalita
Mrs. Ramya Sanam	Mrs. M. Sumathi
Mr. S. Harirama Kumar	Mr. K. Yadagiri
Mr. Shaik Fareed	Mr. D. Praveen Kumar
Ms. P. Priyanka	Mr. P. Ramulu
Mr. Pareshkumar Moradeeya	Mr. A. Suresh
Ms. B. Hyndhavi	Mr. B. Nagaraju

Project Leader(s)

Dr Raghuvanshi Ram

Dr Meganathan P.R.

Dr Shaik Basha

Project Coordinator

Dr. Rakesh Kumar
Director, CSIR-NEERI, Nagpur



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GLOSSARY

S.No.	Term	Definition
1.	Aquifer	An aquifer is a geologic formation that contains water or allows water to pass through it.
2.	Drainage map	The drainage map includes catchment basin, drainage features and drainage network that shows where surface runoff water flows.
3.	Drawdown	The vertical distance the water level is lowered when the well is pumped.
4.	Geology	The science, which deals with the physical structure and substance of the earth, their history, and the processes, which act on them.
5.	Hydrochemistry	The science of the chemical composition of natural waters and the laws governing the changes in composition as a result of the chemical, physical and biological processes occurring in the surrounding environment.
6.	Groundwater	Groundwater is water that exists in the pore spaces and fractures in rocks and sediments beneath the Earth's surface.
7.	Hydraulic Conductivity	The Hydraulic Conductivity or Coefficient of Permeability is equal to the discharge per unit area of soil mass under unit hydraulic gradient.
8.	Hydrogeology	The area of geology that deals with the distribution and movement of groundwater in the soil and rocks of the Earth's crust.
9.	Specific Yield	Specific yield is the ratio of the volume of water that drains from a saturated rock owing to the attraction of gravity (or by pumping from wells) to the total volume of the saturated aquifer.
10.	Storage Coefficient or Storativity	Storage coefficient is the volume of water released from storage, or taken into storage, per unit of aquifer storage area per unit change in head.
11.	Transmissivity	Transmissivity (T) is the discharge rate at which water is transmitted through a unit width of an aquifer under a unit hydraulic gradient
12.	Water level (bgl)	The depth water level below ground level where water stands in a well when it's not being pumped. It is also called static water level.
13.	Water Table	The water table is the surface of water level where the water pressure head is equal to the atmospheric pressure.



Executive Summary

Divis Laboratories Ltd. was established in 1990 and it is a global manufacturer and supplier of Active Pharma Ingredients and Intermediates. Divis Laboratories Unit – 1 is located at Lingojigudem Village, Choutuppal Mandal, Yadadri Bhuvanagiri District (formerly Nalgonda District), Telangana State, which is about 55 Km away from Hyderabad. Laboratory comprises 13 multipurpose production blocks covering an area of 507.32 acres, which has sufficient space for further growth and expansion. This laboratory is primarily engaged in the manufacturing of Active Pharmaceutical Ingredients (APIs) & Intermediates for Generics Custom Synthesis of API's and Advanced intermediates for discovery compounds for pharma giants, building blocks for Peptides, building blocks for Nucleotides and Carotenoids Chiral ligands. Several industries exist in the upstream of Divis Laboratories. For monitoring of groundwater quality and water level Telangana State Pollution Control Board (TSPCB) instructed Divis Laboratories to install piezometric wells in and around Divis.

In view of above, Divis Laboratories Ltd. approached CSIR-NEERI to locate the piezometric wells in the study area and conduct the feasibility study of installed piezometric wells in and around the Campus by monitoring the groundwater level and quality of the piezometric well. Accordingly, CSIR-NEERI had carried out a groundwater survey in the study area in February 2018. Groundwater samples were collected and analyzed for physical, chemical and microbiological parameters immediately after the piezowells are installed.

The results indicate that pH values varied in normal range and within the permissible limit at all locations. Turbidity, except two samples, which are below permissible limit and remaining all are above the permissible limit. Many samples showed higher TDS values in comparison with BIS norms. Higher TDS may be attributed to local geology/anthropogenic activities in the study area. Total Alkalinity values are found below the permissible limit for more than 50% of the samples. Total Hardness including



calcium, magnesium, chloride, sulphate and sodium are found above the permissible limit for all the locations whereas potassium and fluoride have the values within the permissible limit. Nitrate is above permissible limit for two samples whereas remaining samples are well within the permissible limit. All the heavy metals were within the permissible limits. The reason behind the increase of many parameters is due to the underlying rocks in the study area. The groundwater samples from the piezo wells have been collected and analysed immediately after the installation of the piezometers.

Periodical monitoring of the groundwater level and quality through piezometers is necessary. It is recommended that hydrometric monitoring (water levels) be undertaken monthly, while hydrochemical monitoring should be undertaken biannually. In order to, accurately assess the contamination source, it is recommended that an integrated long-term hydrogeological and geochemical study of the soil, rocks, surface water should be undertaken.



Chapter I

Introduction



1.1 Preamble

Divis Laboratories Ltd. was established in 1990 and it is a global manufacturer and supplier of Active Pharma Ingredients and Intermediates. Divis Laboratories operates four multi-purpose manufacturing facilities with all support infrastructure like utilities, environment management and safety systems from its Headquarters and Registered Office at Hyderabad.

Divis Laboratories Unit – 1 is located at Lingojigudem Village, Choutuppal Mandal, Yadadri Bhuvanagiri District (formerly Nalgonda District), Telangana State, which is about 55 Km away from Hyderabad. Laboratory comprises 13 multipurpose production blocks covering an area of 507.32 acres, which has sufficient space for further growth and expansion. This laboratory is primarily engaged in the manufacturing of Active Pharmaceutical Ingredients (APIs) & Intermediates for Generics Custom Synthesis of API's and Advanced intermediates for discovery compounds for pharma giants, building blocks for Peptides, building blocks for Nucleotides and Carotenoids Chiral ligands. For monitoring of groundwater quality and water level Telangana State Pollution Control Board (TSPCB) instructed Divis Laboratories to install piezometric wells in and around Divis.

In this regard, Divis Laboratories Ltd. approached CSIR-NEERI to locate the piezometric wells in the area and carry out the feasibility study of installed piezometric wells in and around the Campus by monitoring the groundwater level and quality of the piezometric well.

1.2 Objectives of Study

- To assess the present water level in the Piezometric wells installed in and around the Industry
- To assess the present water quality of the Piezometric wells installed in and around the Industry
- To measure the water level of the Piezometric wells installed in and around the Industry



-
- Assessment of water level and water quality status of Piezometers installed in and around the Divis Laboratories campus, Choutuppal.

1.2 Scope of Work

The salient features of the study are as follows:

- Reconnaissance survey of the Industry will be undertaken to understand the various activities and preliminary assessment of the groundwater level and quality status
- The assessment will be done on the basis of available data and field studies and monitoring to develop a clear understanding of current situation and facilitate assessment of potential impacts of the Industry on groundwater through installed piezometric wells.
- Groundwater level data and groundwater samples collection from piezometers in and around the laboratories will be carried out to characterize ground water quality
- Delineation of drainage map on 1:50,000 scale of study area
- The ground water quality parameters shall be monitored as per APHA (2012) protocol
- Groundwater qualities for major cations, anions (pH, EC, TDS, Total alkalinity, Ca, Mg, Na, K, Cl, SO₄, PO₄, NO₃) and trace elements (As, B, Ba, Cd, Co, Cr, Cu, F, Fe, Mn, Ni, Pb, Zn) will be analyzed
- A detailed assessment of groundwater level and quality status will be carried out and reported for the study sites



1.4 Layout of the report

The report is presented in the following structure:

Chapter I: Introduction (this chapter)

Chapter II: Description of Study Area

Chapter III: Baseline Data Generation

Chapter IV: Groundwater Quality

Chapter V: Conclusions and Recommendations

Chapter II

Description of the study area



2.0 Study Area

2.1 Reconnaissance Survey

A team of CSIR – NEERI officials visited Divis Laboratories Ltd (DLL), Choutuppal Mandal, Yadadri Bhuvangiri District, Telangana State to carry out the study in and around campus on 08.01.2018. Team had detail discussions for the sites selection of piezometric wells and surveyed the entire area in and around DLL to install the piezometers to monitor the groundwater levels and groundwater quality. Initially with the consultation of NEERI, two piezometric wells were installed by Divis where one was present in the inside of Industry (downstream) and the other outside the Industry (upstream). Further, 07 locations were identified by CSIR – NEERI, HZC on the basis of drainage and slope pattern of the study area and well locations were demarcated on the layout map (**Fig. 2.1**) of the plant and later remaining piezometric wells were installed by DLL. Total 09 piezometers were installed with 07 inside the Industry and 02 outside the Industry.

2.2 Description of the Study Site

The existing manufacturing unit located at Lingojigudem Village, Choutuppal Mandal, Yadadri Bhuvangiri District, Telangana State. The project site is adjacent to NH 9 connecting Hyderabad with around 55 km W. Plot No/Survey/Khasra no. are 238, 247 to 250, 260 to 279, 289 to 293 & 302 of Lingojigudem Village and 505 & 506 in Aregudem (Hamlet of Pantangi Village). Total Area is 507.32 Acres. Ownership/Occupancy of the laboratories is with M/s Divi's Laboratories Limited (Unit-1). Nearest Railway station is Chityal Railway Station about 24 Km away, adjacent Road highway NH 65 connecting Hyderabad to Vijayawada, nearest Airport Rajiv Gandhi International located at Shamshabad is about 53 Km, nearest local villages Ankireddygudem about 3 km and Lingojigudem about 2 Km in North and Nearest Water body is Ityala Cheruvu 2.9 Km South-East and Tangadapalli Cheruvu 7 Km West from the Divis Laboratories Ltd. The project commenced commercial operations in October 1995 with production of Naproxen and other APIs for the export markets. The Company has triple Certifications ISO-9001 (Quality Systems), ISO-14001 (Environment Management Systems) and OHSAS-18001 (Occupational Health and Safety systems) for its manufacturing facilities and adheres to cGMP and standard operating practices in its manufacturing/operating activities.

Divis Laboratories has set up continuously monitoring system of Air & Water.



Total water requirement is about 2227 KLD (fresh water 1030 KLD and treated 1197 KLD) and extra water consumption is 300 to 400 KLD for Green belt. Wastewater generation is 1340 KLD (low TDS 1125 KLD and high TDS 215 KLD). The wastewater generated is segregated based on TDS and treated using various treatment options such as Stripper, MEE, ATFD, RO, etc. and treated wastewater is reused and Zero Liquid Discharge is continuously maintained.

2.3 Geology and Geomorphology

Geologically, the proposed site is covered with Peninsular Gneissic Complex (PGC), includes granites, Gneisses and Migmatite. There are few basic intrusive rocks represented by dolerite in the form of dykes. There are three major lineaments observed within the sites, which are trending NNW-SSE direction.

Geomorphologically, the study site is considered as rocky upland, sloping towards West from East. Surface is covered with flat topped area with local undulations. There are no prominent hills / mounds within the site. The site is forming weathered Pedi - planes underlain by Gneisses and Granites. Major part of pedi-plain constitutes low relief area having matured dissected rolling topography with erosional landscape covered by layers of red soil of varied thickness. Few parts of the pedi-plain are covered by streamlets mostly flowing in Eastern direction.

The total surface area of site and its surrounding occupied by red sandy loam soil. These soils are derived from acidic rocks, such as Granites and Granitic Gneisses. These soils occur on gently sloping pediplains with maximum thickness of 3 m (bgl) from the surface.

Natural surface drainage network is present within the site in the form of second order streams. The drainage pattern in the area can be described as semi dendritic to dendritic. The drains are flowing within the site including the catchment water shed area is draining into the existing scattered surface tanks and further into



the surface stream existing in the eastern direction of the site. The water flow direction from these drains is from west to east. Several industries exist on the west side of Divis Laboratories.

The study area and its surroundings are underlain by crystalline rocks Granites and Gneisses. The groundwater in these formations occurs in the weathered & fractured zones under water table & semi confined condition respectively. These rocks types do not possess primary porosity. Due to fractured and weathering they have developed secondary porosity often giving rise to potential aquifer at depths. The static ground water levels in and around the site is ranging from 4.72 to 75.46 m bgl.

Divis Laboratories Ltd is trying to optimise the water consumption through process modification and the adoption of new technologies. The Industry recycles usable water from the effluents after treatment with the aim of reducing fresh water intake. It has also implemented rain-water harvesting facilities, enabling recharging of groundwater. For Rain/Roof water collection from all the buildings roof tops the rain water harvesting structures has been established in the plant. The efforts of implementation of the new technologies are being adopted by Laboratories are good efforts for “Natural Resource Conservation and Pollution free Environment”.

To monitor the changes in Groundwater quantity and quality in and around the DLL's 09 Piezometric wells were proposed by CSIR – NEERI, HZC officials based on upstream and downstream concept because in general the groundwater flow follows the topographic elevations. After installation of all the Piezometers, the fieldwork for collecting groundwater level and water samples were carried out for all the installed 09 Piezometers (**Location is shown in Fig. 2.1**).

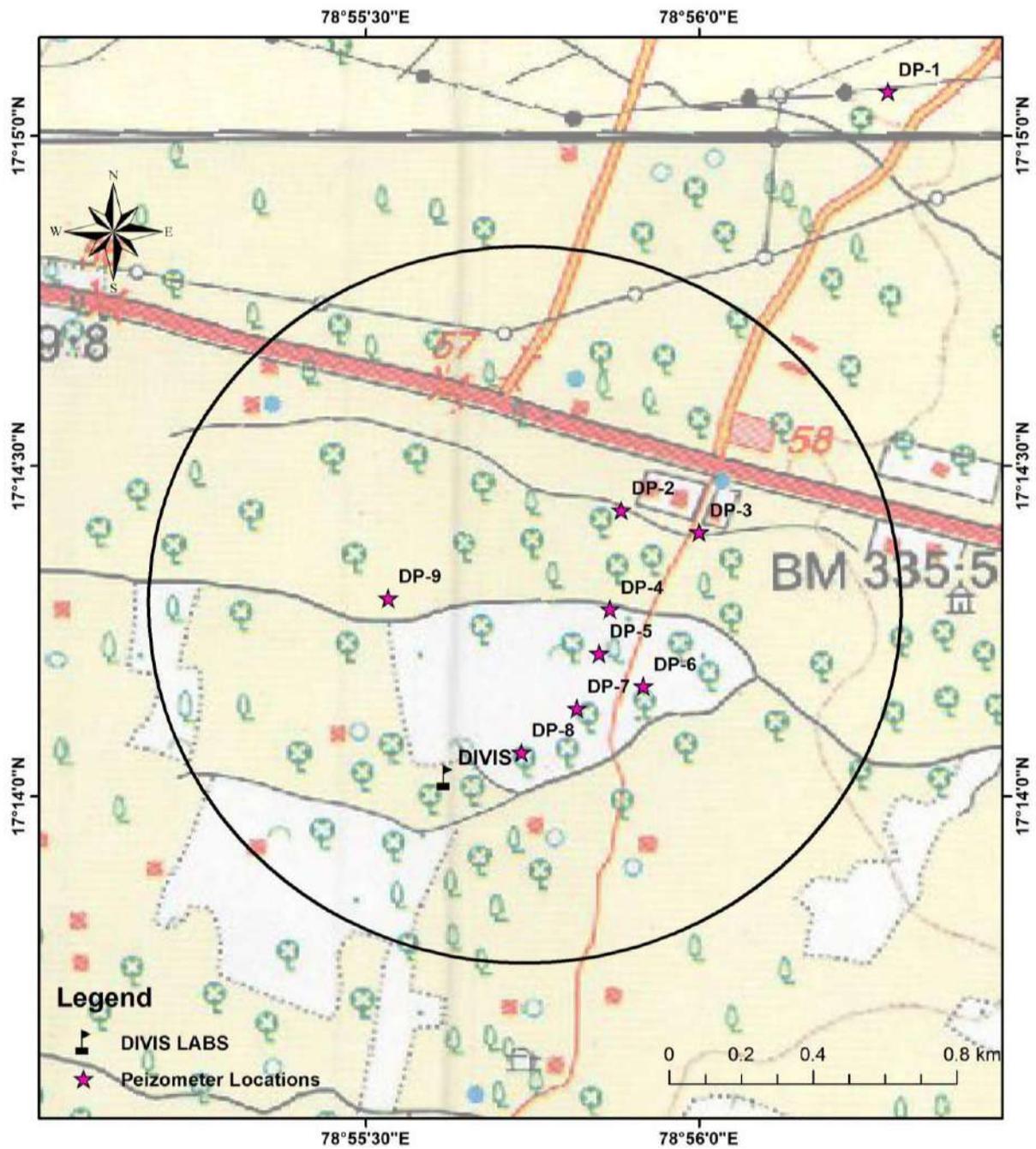


Fig. 2.1 Study area map

Chapter III

Baseline Data Generation



3.1 Introduction

Groundwater chemistry is primarily controlled by the weathering of source rock and atmospheric deposition. In addition, parameters like climate, soil characteristics, circulation pattern through various rock types, topography of the area, saline water intrusion and human activity have significant effect on the chemistry of water. The human activities such as urbanization, ever-increasing population and deforestation have interrupted the natural hydrological cycle. Geochemical processes that are taking place within the groundwater system due to the reaction with the aquifer material have profound effect on water quality. The quality of groundwater is very important in evaluating its utility for agricultural, domestic and industrial purposes. Hence, protection and management of groundwater quality is emerging as a great concern around the world and especially in India.

The baseline data is useful for identification of significant environmental concerns in the study area. The quality of water in the study area serves as the baseline status for assessing the feasibility.

3.2 Groundwater Quality

The impact on water environment due to development and operations of industries on surrounding water environment will be in two ways, one is in the form of stress through withdrawal of water resources and the other is discharge of effluents from the industries into surrounding environment causing impacts on water quality. Due to these activities the impact is always on surface and groundwater resources existing in that area. To address these issues, it is important to consider available water resource information along with collection of water quality information in the study area. The data collected is the baseline status of water environment as part of assessment study.

3.2.1 Groundwater Quality Monitoring

Samples of groundwater were collected and stored in 1 litre and 100 ml PP



bottles which were thoroughly cleaned and rinsed with distilled water. The collected samples were labelled properly as per the project area. Samples were collected to evaluate the feasibility of piezometric wells. 1litre PP bottles were analysed for general physico-chemical parameters and samples for heavy metal analysis was collected in 100 ml bottles. The 100 ml bottles are then acidified with conc. HNO_3 to retain the metals present in water samples.

The standard methods prescribed for surface and groundwater sampling and analysis of individual parameters is followed in this study. The determination of physico-chemical parameters of groundwater samples was carried out by adopting standard protocols given by APHA, 2012. The temperature was measured by using thermometer in the field. The pH and conductivity were measured with respective meters. TDS was calculated by using the gravimetric method. The chemical parameters like Total hardness (TH), Calcium (Ca), Chloride (Cl), Alkalinity were determined titrimetrically. Magnesium (Mg) was calculated by taking the differential values between TH and Ca concentrations. Sodium (Na) and Potassium (K) were measured by Flame Photometer. Sulphate (SO_4) was determined by turbidity method using visible Spectrophotometer. Heavy metals like Arsenic (As), Boron (B), Barium (Ba), Cadmium (Cd), Cobalt (Co), Chromium (Cr), Copper (Cu), Iron (Fe), Manganese (Mn), Nickel (Ni), Lead (Pb) and Zinc (Zn) were determined by using ICP-OES (iCAP 6300 Duo, Make: Thermo Scientific).

The observed data related to physical and inorganic characteristics of water samples collected from various piezometric wells have been presented in the Chapter 4.

Chapter IV

Groundwater Quality



4.1 Groundwater Level

Piezometric wells (09 nos.) were monitored on March 1, 2018 for groundwater level in and around the Divis Laboratories Ltd., Choutuppall, Telangana State. The depth to groundwater level, total depth of the Piezometers and the total depth of the water in the bores were measured with the help of water level indicator. The Piezometric wells locations (Longitude and Latitude) were noted with the help of Garmin Global Positioning System (GPS) and the details are shown in Table 4.1. The objective of the groundwater level monitoring is to find out the presence of level of groundwater in piezometric wells of the study area to compare the quality variation with respect to depths variation.

The coding of the Piezometric wells in an around the Divis Laboratories Ltd. is done as DP - 1, DP – 2, DP – 3, DP - 4, DP - 5, DP – 6, DP – 7, DP – 8 and DP – 9. The depth to groundwater level in the Piezometric wells DP – 1 to 9 are 17.02, 75.46, 17.29, 12.53, 9.77, 9.06, 6.90, 4.72 and 7.9 m (bgl), respectively. The total depth of the Piezometric wells DP – 1 to 9 are 79.25, 79.25, 74.68, 33.53, 33.53, 28.96, 42.67, 33.53 and 42.67 m (bgl) respectively. The total depth of the water in the Piezometric wells DP – 1 to 9 are 62.23, 03.79, 57.39, 21.00, 23.76, 19.90, 35.77, 28.81 and 34.77 m (bgl) respectively.

It is observed from the above data that the lowest depth to groundwater level is reported as 4.72 m (bgl) in the Piezometric well DP - 08 whereas the deepest groundwater level is reported as 75.46 m (bgl) in the Piezometric well DP – 02. The greatest depth to water is 62.23 m in the Piezometric Well DP - 1 and lowest is 3.79 m in Piezometric well DP – 02. The graphical presentation of the groundwater level is shown in **Fig. 4.2**.

4.2 Groundwater Quality Sampling

Physico-chemical parameters have been analysed for assessing the impacts due to industries developmental activities in and around Divis Laboratories Ltd. Campus, Choutuppall, Telangana State. In order to assess the water quality, standard methods as per APHA, 2012 were followed for sample collection, preservation and analysis in the laboratory. Water quality is assessed for all the



piezometric wells and the results of the analysis of various parameters as mentioned below:

4.2.1 Water Quality - Physical Parameters

pH

pH is an important variable in water quality assessments as it influences many biological and chemical processes within a water body and all processes associated with supply and treatment. The pH value of groundwater in the Piezometric wells in Divi's Laboratories varied from 6.6 (DP – 6) to 7.6 (DP – 2). The pH values of all the samples is within the permissible levels of BIS standards.

TDS (Total Dissolved Solids)

TDS mainly comprises of inorganic salts like calcium, magnesium, potassium and sodium, which are all cations, and carbonates, nitrates, bicarbonates, chlorides and sulphates, which are all anions. TDS values in piezometric wells ranges from 1520 (DP – 2) to 5520 mg/l (DP – 9). TDS value of all the samples are above the permissible limits of BIS. The high values of TDS may be due to the geological nature of the study area and also attributed to anthropogenic activities in the surrounding area. TDS also varies from season to season.

4.2.2 Groundwater Quality - Inorganic Parameters

Total Alkalinity

Alkalinity refers to the capacity of water to neutralize acid. The primary source of natural alkalinity is carbon dioxide in the atmosphere and in soil gases that dissolves in rain, surface water, and groundwater. Bicarbonate released through dissolution of carbonate minerals also contributes to alkalinity. The total alkalinity values in the Piezometric wells ranged from 320 (DP – 1) to 720 mg/l (DP – 3).

Total Hardness

Hardness is defined as the concentrations of dissolved calcium and magnesium expressed as an equivalent amount of calcium carbonate. The



acceptable limit as per IS10500:2012 for hardness is 200 mg/l whereas the permissible limit for the same is 600 mg/l beyond this limit encrustation in water supply structure and adverse effects on domestic use will be observed.

The total hardness values in the Piezometric wells varied from 235 (DP – 8) to 1210 mg/l (DP – 3). This reveals that some of the samples showed hardness values more than the acceptable limits of BIS. The hardness is also confirmed by the piper diagram prepared for the study area. High values of hardness in Piezometric wells may be due to the underlying rocks, which contribute significant calcium and magnesium to groundwater.

4.2.3 Groundwater Quality - Inorganic & Nutrients Parameters

Chlorides (Cl)

Chloride is present in all natural waters, mostly at low concentrations. It is highly soluble in water and moves freely with water through soil and rock. BIS (Bureau of Indian Standard) have recommended a desirable limit of 250 mg/l of chloride in drinking water; this concentration limit can be extended to 1000 mg/l of chloride in case no alternative source of water with desirable concentration is available.

The chlorides concentrations in the Piezometric wells ranged from 493 mg/l (DP – 2) to 2725 mg/l (DP – 9). High chloride in the study area is attributed to anthropogenic activities taking place in the surrounding area. It can also be due to the septic tank systems and other faecal discharges. The concentration of chloride in many samples is above the BIS limits.

Sulphates (SO₄²⁻)

Sulphate in ground water is sourced primarily from the decomposition of organic matter, soluble waste, such as construction wastes or ash, synthetic detergents and inert waste, such as dredged river sediments. High levels of sulphate (>400 mg/l) may make water unpleasant to drink.



The sulphate concentrations in the Piezometric wells ranged from 6 mg/l (DP – 8) to 203 mg/l (DP – 3). Sulphate levels are within the permissible levels of BIS.

Fluoride (F)

Most of the fluoride found in groundwater is naturally occurring and affected by the type of rocks, climatic conditions, nature of hydrogeological strata and time of contact between rock and the circulating groundwater.

The Fluoride concentrations in the Piezometric wells ranged from 0.5 mg/l (DP – 9) to 1.4 mg/l (DP – 4). Hence, all the samples have fluoride levels within the limits of BIS.

Nitrate (NO₃)

Nitrate in groundwater generally originates from nonpoint sources such as leaching of chemical fertilizers & animal manure, septic and sewage discharges etc. It is difficult to identify the natural and manmade sources of nitrogen contamination of groundwater. The Nitrate concentration in the Piezometric wells varied from 3.9 mg/l (DP – 1) to 19.9 mg/l (DP – 9). The nitrate concentration is within the limits of BIS standards. High concentration of nitrate might be attributed to the fertilizers being used in the fields which may leach through soil and then to groundwater. Both locations DP-1 and DP-9 are located in the upstream of DLL.

Groundwater Quality - Heavy Metals (mg/l)

Arsenic (As)

Arsenic contamination of groundwater, poses a serious risk to human health. Arsenic poisoning culminates into potentially fatal diseases like skin and internal cancers. Arsenic contamination of groundwater in different parts of the world is an outcome of natural and/or anthropogenic sources, leading to adverse effects on human health and ecosystem. The As concentrations in the Piezometric wells ranged from BDL (DP – 5) to 0.005 mg/l (DP – 2 & DP-9). All the samples are within the limits for Arsenic.



Chromium (Cr)

Chromium (Cr) naturally occurs in the Earth's crust and is commercially produced by chromite (FeCr_3O_4) for a variety of metallurgical, refractory and chemical use. The most common forms of chromium in the environment are trivalent, hexavalent and the metal form. The Chromium concentrations in the Piezometric wells varied from 0.001 mg/l to 0.018 mg/l (DP – 3). All the samples are within the limits for chromium.

Copper (Cu)

Copper is a metal that occurs naturally in rock, soil, plants, animals, and water. The level of copper in surface and groundwater is generally very low. High levels of copper may get into the environment through mining, farming, manufacturing operations, and municipal or industrial wastewater releases into rivers and lakes. Corrosion of pipes is by far the greatest cause for concern. The Copper concentrations in the Piezometric wells ranged from 0.001 mg/l to 0.005 mg/l (DP – 3). All the samples are within the limits for copper.

Iron (Fe)

The presence of iron in ground water is a direct result of its natural existence in underground rock formations and precipitation water that infiltrates through these formations. As the water moves through the rocks some of the iron dissolves and accumulates in aquifers which serve as a source for groundwater. The iron concentrations in the Piezometric wells ranged from 0.005 mg/l (DP – 2) to 1.921 mg/l (DP – 9). Iron is above the limits for all the samples except for three locations. This may be due to the laterite nature of soil which contributes to the high concentration in groundwater.

Lead (Pb)



Lead enters into environment from industry, mining, plumbing, gasoline, coal, and as a water additive. It affects red blood cell chemistry; delays normal physical and mental development in babies and young children. The Lead concentrations in the Piezometric wells varied from BDL (DP – 3) to 0.034 mg/l (DP – 5). All the samples are within the limits for lead.

Zinc (Zn)

Zinc is found naturally in water, most frequently in areas where it is mined. It enters into environment from industrial waste, metal plating, and plumbing, and is a major component of sludge. The Zinc concentrations in the Piezometric wells ranged from BDL to 0.038 mg/l (DP – 3). All the samples are within the limits for Zinc.

4.2.4 Piper Diagram

A **piper diagram** is a graphical representation of the chemistry of a water sample or samples. The cations and anions are shown by separate ternary plots. The apexes of the cation plot are calcium, magnesium and sodium plus potassium cations. The apexes of the anion plot are sulfate, chloride and carbonate plus hydrogen carbonate anions. The two ternary plots are then projected onto a diamond. The diamond is a matrix transformation of a graph of the anions (sulfate + chloride/total anions) and cations (sodium + potassium/total cations). Water samples shown on the Piper diagram can be grouped in hydrochemical facies. The cation and anion triangles can be separated in regions based on the dominant cation(s) or anion(s) and their combination creates regions in the diamond shaped part of the diagram.

Piper diagram has been prepared for the groundwater quality of Piezometric wells using AQUACHEM software. The water type and piper diagram is shown in figure 4.8 and 4.9. Figure 4.8 shows that the dominant cations in each sample and this dominant cations and anions are in agreement with the water quality data. The piper diagram reveals that the dominant cations are in the order $Na > Ca > Mg$ and the dominant anions are Cl, HCO_3 . The major reason for this dominance is the



presence of rocks which contribute for this increase in ions and also due to the anthropogenic activities.


Table 4.1: Details of Divi's Piezometric Wells

S.No.	Sample Code	Longitude	Latitude	Source	Total Depth (m)	Water level (m)	Total Depth (m)
1.	DP – 1	78°56'17"	17°15'04"	BW	79.25	17.02	62.23
2.	DP – 2	78°55'53"	17°14'26"	BW	79.25	75.46	03.79
3.	DP – 3	78°56'00"	17°14'24"	BW	74.68	17.29	57.39
4.	DP – 4	78°55'52"	17°14'17"	BW	33.53	12.53	21.00
5.	DP – 5	78°55'51"	17°14'13"	BW	33.53	9.77	23.76
6.	DP – 6	78°55'55"	17°14'10"	BW	28.96	9.06	19.90
7.	DP – 7	78°55'49"	17°14'08"	BW	42.67	6.90	35.77
8.	DP – 8	78°55'44"	17°14'04"	BW	33.53	4.72	28.81
9.	DP – 9	78°55'32"	17°14'18"	BW	42.67	7.90	34.77

Table 4.2: Groundwater Quality - Physical Parameters

S.No.	Sample code	pH	Turbidity (NTU)	TSS (mg/l)	TDS (mg/l)	Electrical Conductivity (µS/cm)
Desirable Limits		6.5	--	--	500	--
Permissible Limits		8.5	--	--	2000	--
1.	DP - 1	7.4	17	0.2	2796	4660
2.	DP - 2	7.6	10	1.6	1520	2550
3.	DP - 3	7.0	9	4.4	2881	4750
4.	DP - 4	7.2	3.5	17.2	2790	4600
5.	DP - 5	6.9	15	7.4	3300	5450
6.	DP - 6	6.6	10	6.8	3512	5750
7.	DP - 7	6.7	11	17	3200	5250
8.	DP - 8	7.1	3.5	6.8	2309	3700
9.	DP – 9	7.3	5.1	50	5520	8900



Table 4.3: Groundwater Quality- Inorganic Parameters

S.No.	Sample Code	Total Alkalinity	Total Hardness	Calcium Hardness	Magnesium Hardness	Chlorides	Sulphates
Desirable Limits		200	200	--	--	250	200
Permissible Limits		600	600	--	--	1000	400
1.	DP – 1	320	1101	546	555	1273	191
2.	DP – 2	500	428	155	273	493	93
3.	DP – 3	720	1201	555	646	1028	203
4.	DP – 4	560	308	164	144	1310	42
5.	DP – 5	560	738	378	360	1460	40
6.	DP – 6	700	587	327	260	1583	42
7.	DP – 7	600	317	182	135	1455	15
8.	DP – 8	620	235	102	133	958	6
9.	DP – 9	648	870	593	277	2725	171

*All units in mg/l


Table 4.4: Groundwater Quality- Inorganic & Nutrient Parameters

S.No.	Sample code	Na	K	Fluoride	Nitrate	Total Phosphate
Desirable Limits		--	--	1.0	45	--
Permissible Limits		--	--	1.5	NR	--
1.	DP – 1	629	4	1.3	3.9	0.2
2.	DP – 2	425	1	1.2	9.3	0.1
3.	DP – 3	620	5	1	2.21	0.1
4.	DP – 4	920	2	1.4	3.54	0.2
5.	DP – 5	1020	4	0.6	10.1	0.2
6.	DP – 6	1080	5	0.6	10.1	0.1
7.	DP - 7	1150	3	1.2	6.2	0.01
8.	DP - 8	790	5	0.8	3.98	0.1
9.	DP - 9	1710	3	0.5	19.9	0.1

*All units in mg/l



Table 4.5: Groundwater Quality-Heavy Metals

S.N	Sample code	As	B	Cd	Co	Cr	Cu	Fe	Mn	Ni	Pb	Zn
		(mg/l)										
Desirable Limits		0.01	0.5	0.003	--	0.05	0.05	0.3	0.1	--	0.01	5
Permissible Limits		0.05	1.0	NR	--	NR	1.5	NR	0.3	--	NR	15
1.	DP - 1	0.002	0.08	BDL	0.001	0.001	0.003	0.007	0.004	0.002	BDL	0.005
2.	DP - 2	0.005	0.140	BDL	0.001	0.002	0.003	0.005	0.001	0.002	BDL	0.004
3.	DP - 3	0.003	0.977	0.001	0.001	0.018	0.005	0.712	0.207	0.031	0.007	0.038
4.	DP - 4	0.003	1.217	0.001	0.009	0.001	0.003	0.453	3.283	0.037	0.025	0.014
5.	DP - 5	BDL	1.169	0.001	0.014	0.005	0.003	1.169	5.084	0.051	0.034	0.021
6.	DP - 6	0.001	1.322	0.001	0.010	0.001	0.003	0.610	7.986	0.072	0.016	0.018
7.	DP - 7	0.003	1.003	0.001	0.009	0.002	0.002	0.766	6.177	0.041	0.009	0.013
8.	DP - 8	0.003	0.508	0.001	0.008	0.001	0.001	0.507	3.139	0.027	0.028	0.015
9.	DP - 9	0.005	0.001	0.001	0.005	0.002	0.001	1.921	6.147	0.04	0.013	BDL

*All units in mg/l; NR: No Relaxation; BDL: Below Detection Limit

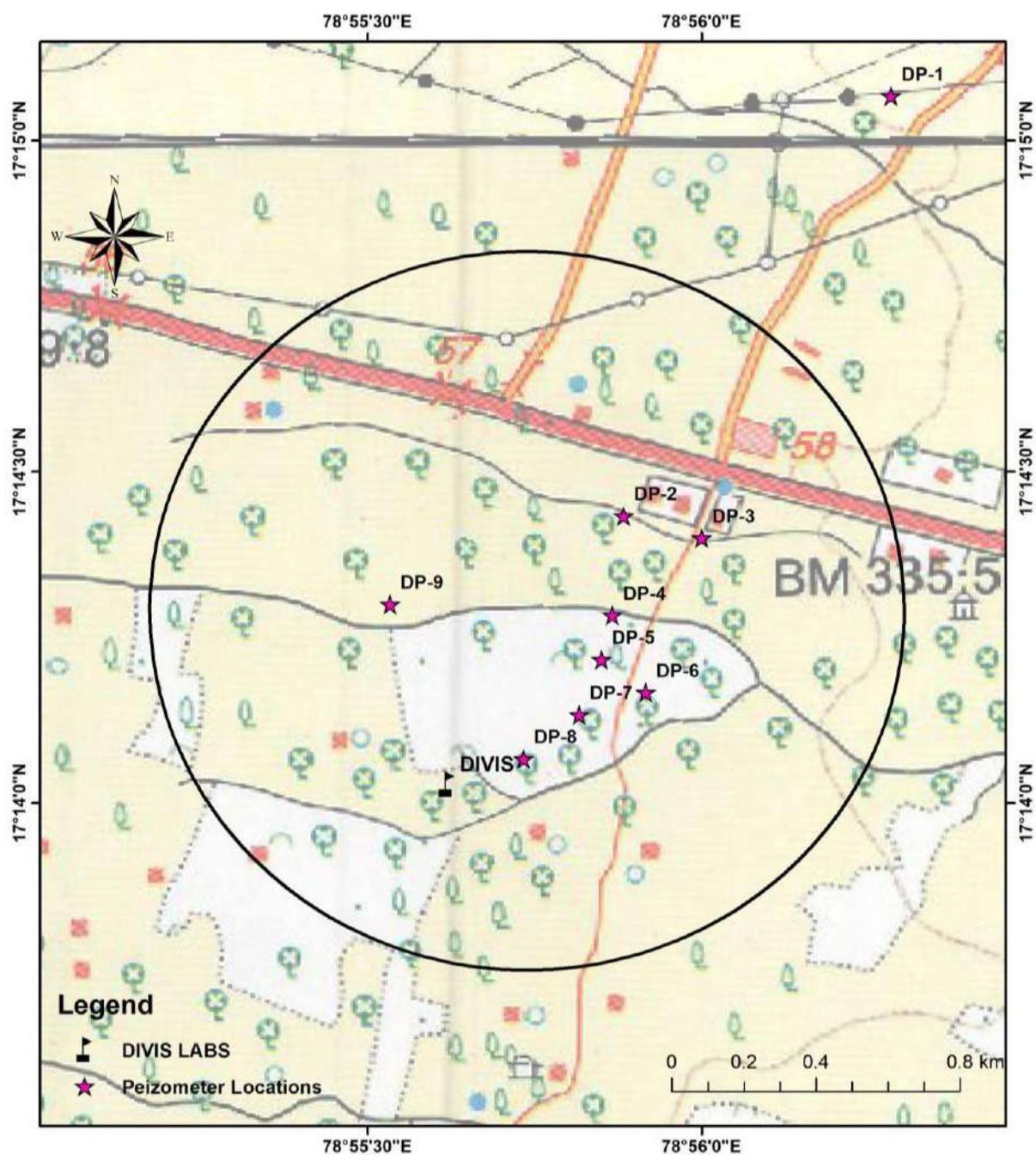


Fig. 4.1: Piezometric locations in the study area

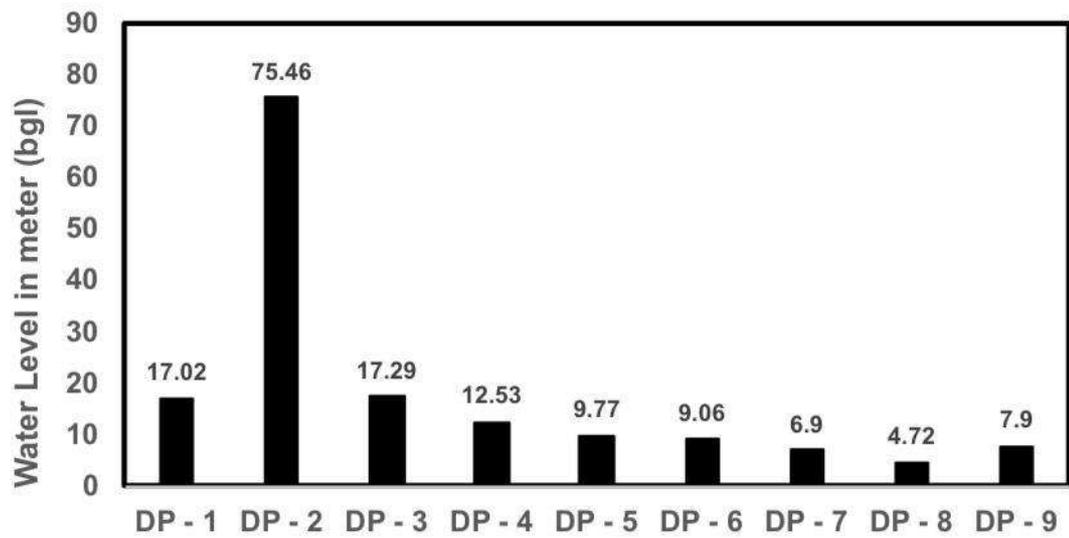


Fig. 4.2: Graphical Presentation of Groundwater Level in Piezometric wells

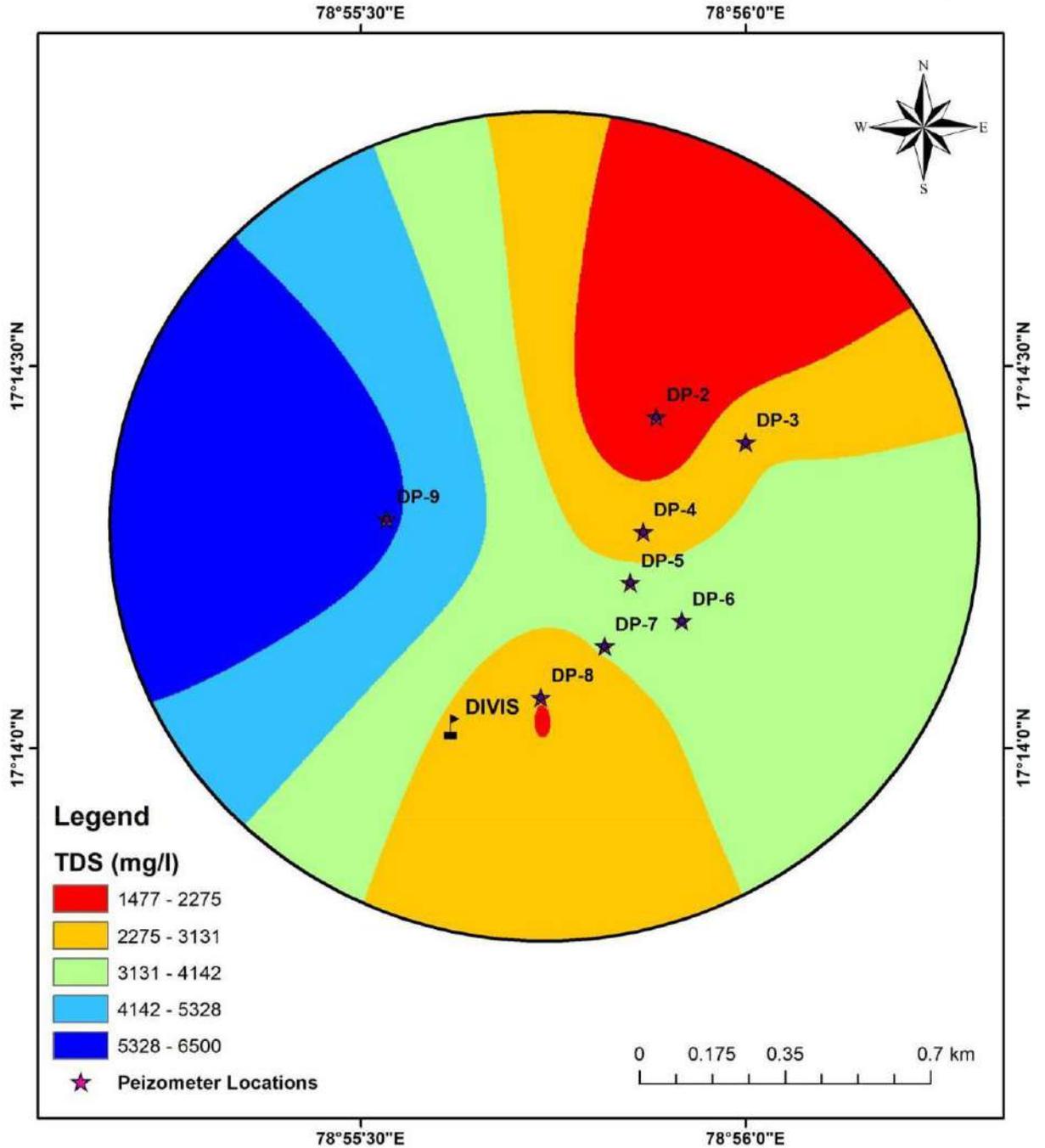


Fig. 4.3: TDS map of the study area

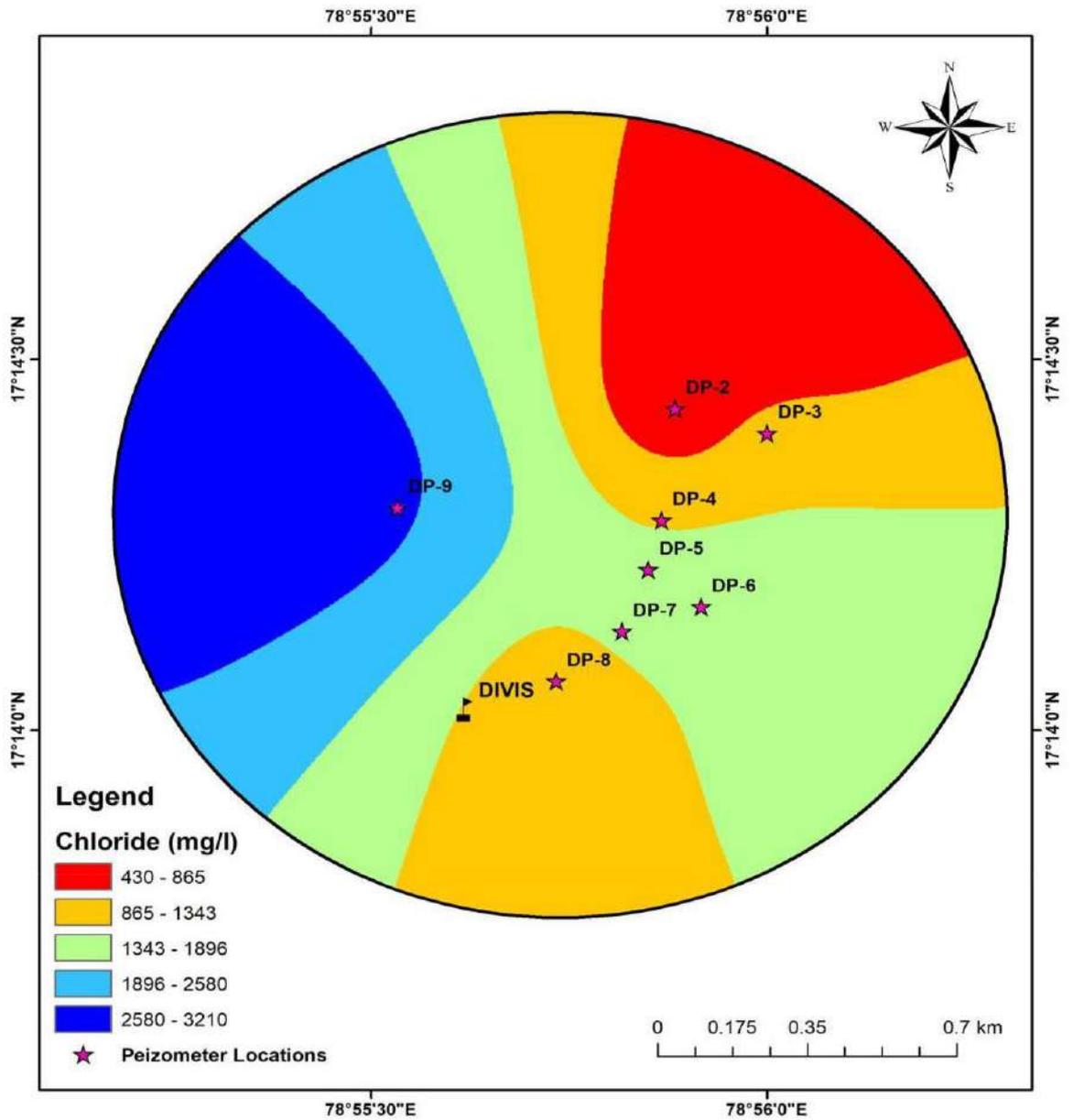


Fig. 4.4: Chloride map of the study area

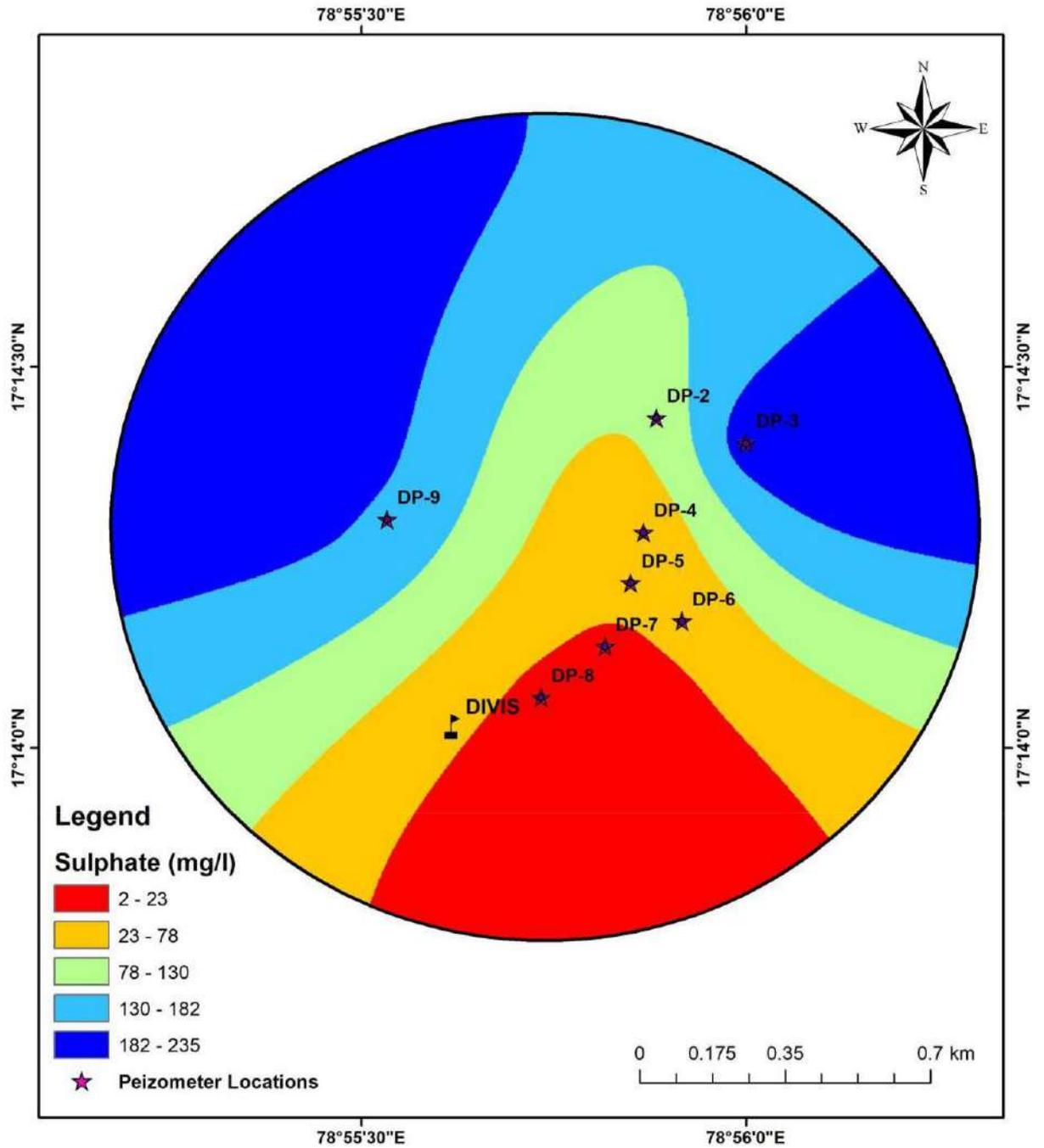


Fig. 4.5: Sulphate map of the study area

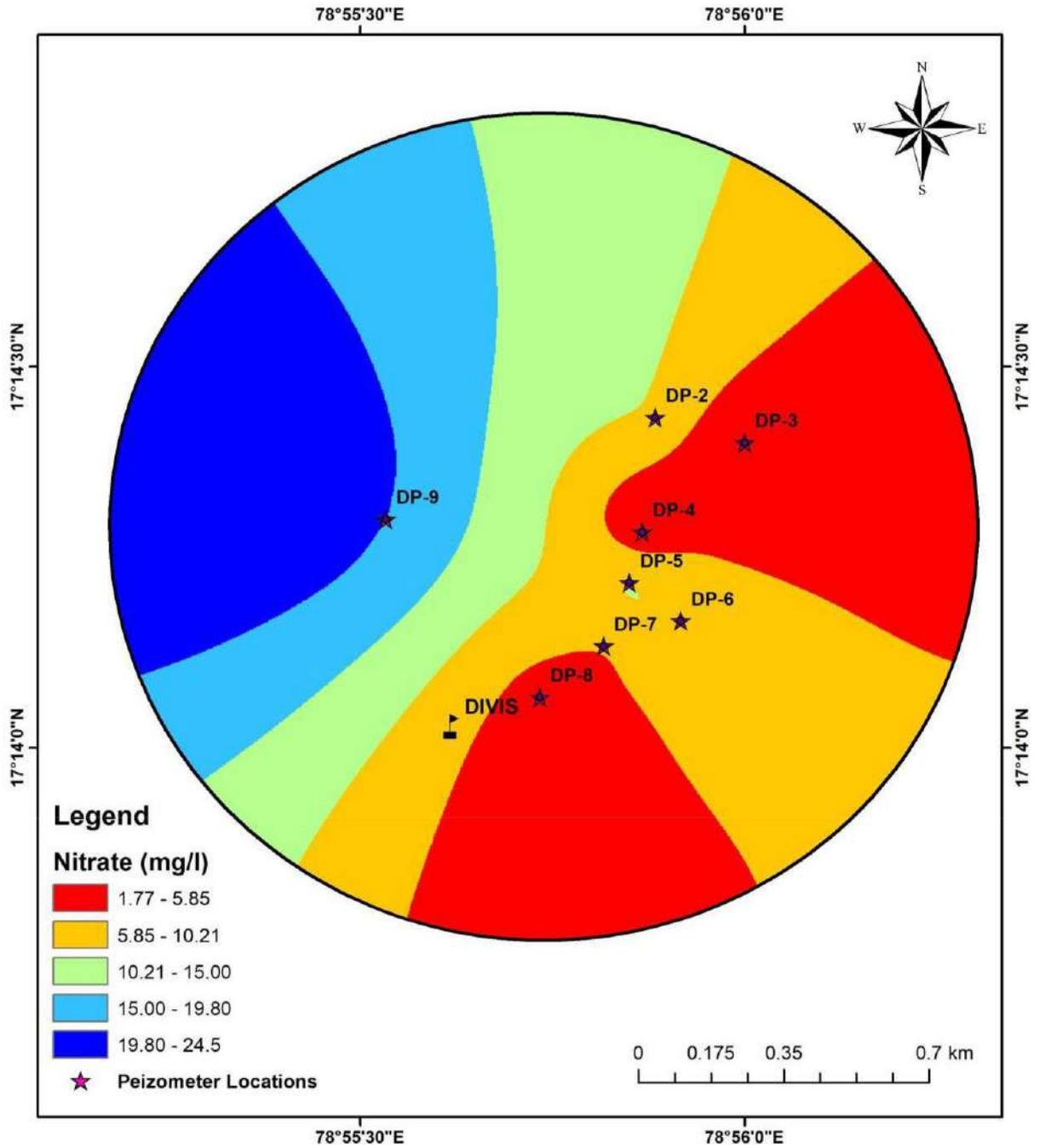


Fig. 4.6: Nitrate map of the study area

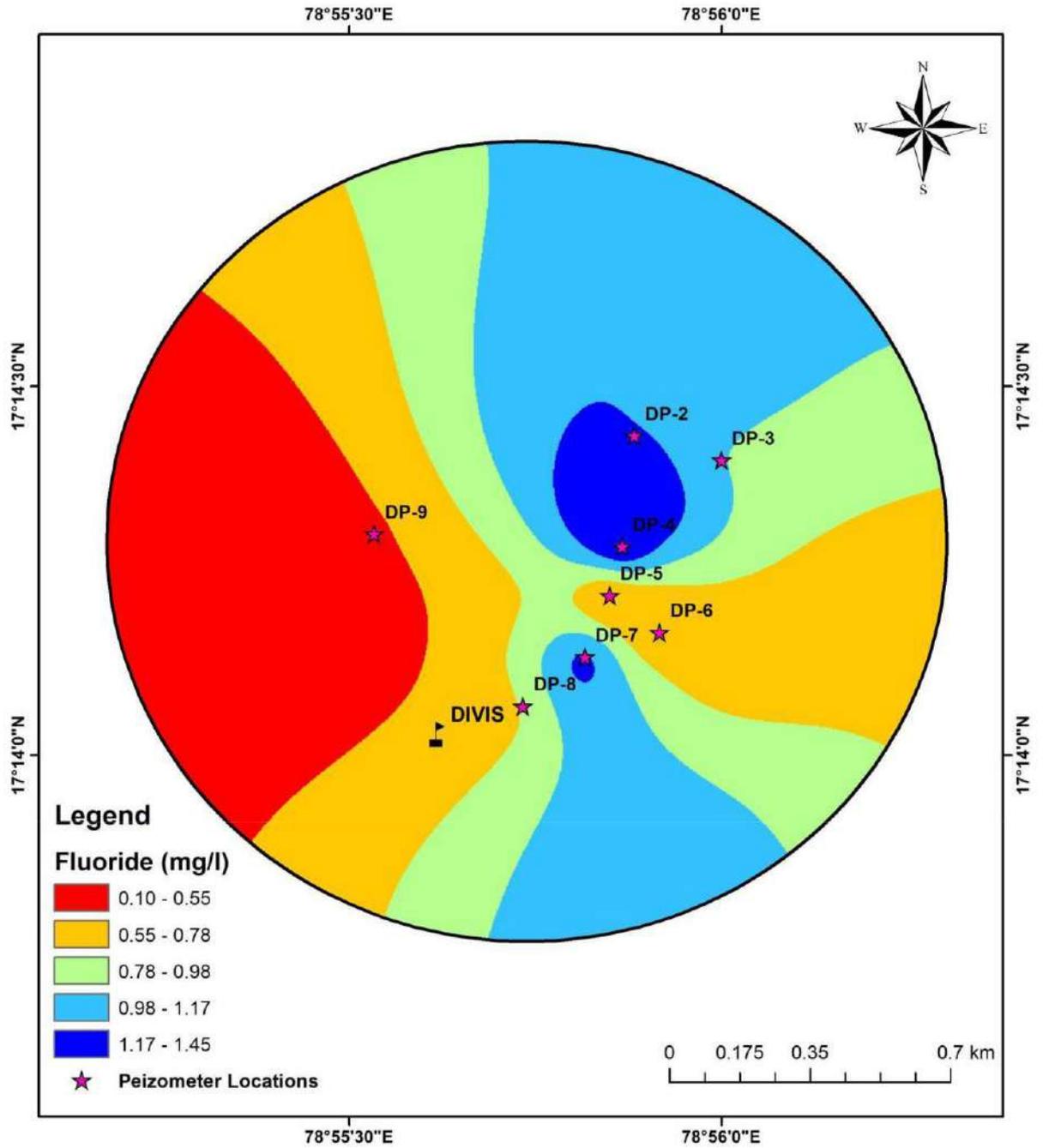


Fig. 4.7: Fluoride map of the study area

AquaChem 2014.2 - [Sample List - 9 Active Samples / 1 selected (11.1%)]

File Edit View Filter Samples Plots Reports Tools Window Help

Stations Samples

Filter Selection

ID	Station	Date	SampleID	WATERTYPE	GEOLOGY	SYMBOL	REP
1	DP - 1		DP - 1	Na-Ca-Mg-Cl		2	<input checked="" type="checkbox"/>
2	DP - 2		DP - 2	Na-Mg-Cl-HCO3		3	<input type="checkbox"/>
3	DP - 3		DP - 3	Na-Mg-Cl		4	<input type="checkbox"/>
4	DP - 4		DP - 4	Na-Mg-Ca-Cl		5	<input type="checkbox"/>
5	DP - 5		DP - 5	Na-Mg-Ca-Cl		6	<input type="checkbox"/>
6	DP - 6		DP - 6	Na-Mg-Ca-Cl		7	<input type="checkbox"/>
7	DP - 7		DP - 7	Na-Mg-Ca-Cl		8	<input type="checkbox"/>
8	DP - 8		DP - 8	Na-Mg-Cl		9	<input type="checkbox"/>
9	DP - 9		DP - 9	Mg-Ca-Cl		10	<input type="checkbox"/>

Fig. 4.8: Dominant cations and anions in the study area

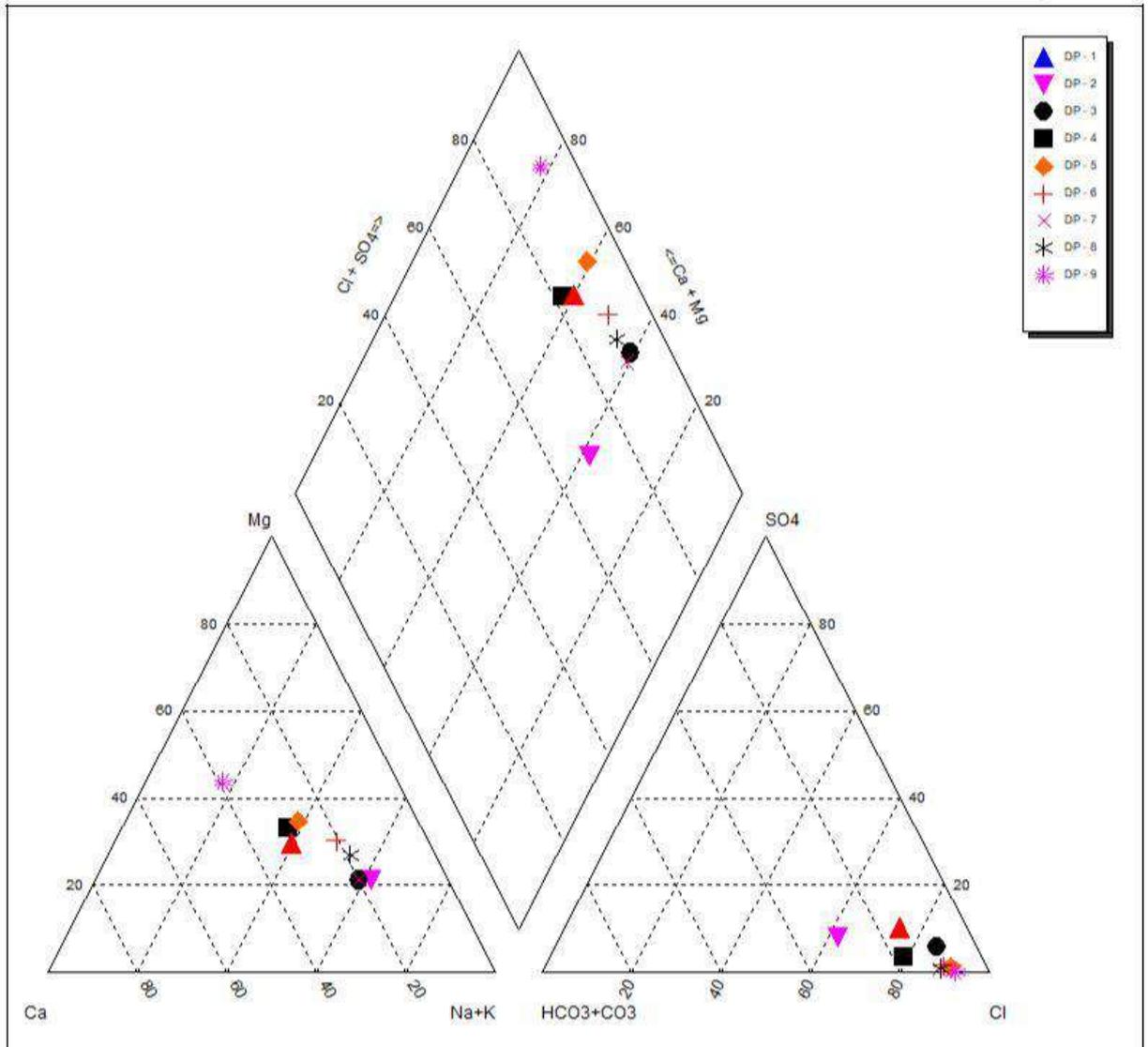


Fig. 4.9: Piper diagram of the study area

Chapter 5

Conclusions & Recommendations

5.1 Conclusions

1. A piezometer is a purpose-built observation well that facilitates measurement of the piezometric head of the selected aquifer. Since the study area is largely made up of consolidated formations, the bulk of the piezometers constructed in these formations has been designed as bore-wells. In order to be effective, these piezometers have the necessary hydraulic connection with the targeted aquifers and suitably isolated from overlying/underlying aquifers. Hence, the water levels monitored in these piezometers will continue to provide a reliable water level elevation, representative of the regional piezometric elevation in its vicinity.
2. Ground water samples (09 nos.) were collected from of Divi's Piezometric wells and analyzed for physical, chemical and microbiological parameters. The results indicate that pH values varied in normal range and within the permissible limit at all locations. Turbidity, except two samples, which are below permissible limit and remaining all are above the permissible limit. TDS is mainly due to the anthropogenic activities in the surrounding areas. Total Alkalinity values are found below the permissible limit for more than 50% of the samples. Total Hardness including calcium, magnesium, chloride, sulphate and sodium are found above the permissible limit for all the locations whereas potassium and fluoride have the values within the permissible limit. Nitrate is above permissible limit for two samples whereas remaining samples are well within the permissible limit. The reason behind the increase of some parameters is due to the underlying rocks in the study area.
3. It can be concluded that metalloid and metals like Arsenic, Boron, Cadmium, Chromium, Copper, Manganese and Zinc are found to be within the permissible limit recommended by WHO & BIS while Iron, Nickel and Lead were above the permissible limit in some of the samples. Almost all groundwater samples taken from Piezometers situated in and around the DLL are found to contain most of the heavy metals within the permissible limit.

5.2 Recommendations

Some recommendations for avoiding the groundwater contamination in future are as follows:

- ❖ Zero Liquid discharge system is being practised by DLL and this must be continued.
- ❖ In order to know the status and taking adequate measures, a regular monitoring of the groundwater level and quality through piezometers is necessary. It is recommended that hydrometric monitoring (water levels) be undertaken monthly, while hydrochemical monitoring should be undertaken biannually. The following parameters are recommended for groundwater hydrochemical monitoring:
 - Electrical Conductivity
 - Temperature
 - Fluoride
 - pH
 - Nutrients: Orthophosphate, Total phosphorous
 - Nutrients: Kjeldahl Nitrogen and Total Nitrogen
 - Major Ions: Ca, Na, K, Mg, Cl, HC03, S04, NO3
 - Heavy metals: Ni, Pb, Cr, Co, Cu, Fe, Zn, Mn, B and metalloid As
- ❖ Rainwater-harvesting system for artificial groundwater recharge to reduce the concentration of contamination and raise the water level is recommended.
- ❖ In order to, accurately assess the contamination source, it is recommended that an integrated long-term hydrogeological and geochemical study of the soil, rocks, surface water should be undertaken.



References

APHA (2012). Standard methods for analysis of the water and waste water analysis,
22nd editions.

BIS (2012). Indian standard specification for drinking water. IS: 10500.



Annexures

Annexure-I

Specifications for Drinking Water - (IS 10500: 2012)

S. No.	Substance or characteristic	Requirement (Acceptable limit)	Permissible limit in the absence of alternate Source	Remarks
Essential Characteristics				
1.	Colour Hazen Units, max	5	15	Extended to 15 only if toxic substances are not suspected in absence of alternate sources
2.	Odour	Agreeable	Agreeable	a. test cold and when heated b. test after several dilutions
3.	Taste	Agreeable	Agreeable	Test to be conducted only after safety has been established
4.	Turbidity (NTU) Max	1	5	-
5.	pH value	6.5 to 8.5	No relaxation	-
6.	Total hardness (mg/L, CaCO ₃) Max.	200	600	-
7.	Iron (mg/L, Fe) Max	0.3	No relaxation	Total concentration of manganese (as Mn) and iron (as Fe) shall not exceed 0.3 mg/l
8.	Chlorides (as Cl) mg/L Max	250	1000	-
9.	Free residual chlorine (mg/L), Min	0.2	1	To be applicable only when water is chlorinated. Tested at consumer end. When protection against viral infection is required, it should be minimum 0.5 mg/L
Desirable Characteristics				
10.	Total dissolved solids, mg/l, max	500	2000	-
11.	Calcium (mg/L, Ca) Max.	75	200	-
12.	Magnesium (mg/L, Mg) Max.	30	100	-
13.	Copper (mg/L, Cu) Max.	0.05	1.5	-
14.	Manganese (mg/L, Mn) Max.	0.1	0.3	Total concentration of manganese (as Mn) and



S. No.	Substance or characteristic	Requirement (Acceptable limit)	Permissible limit in the absence of alternate Source	Remarks
				iron (as Fe) shall not exceed 0.3 mg/l
15.	Sulphate (mg/L, SO ₄) Max.	200	400	May be extended upto 400 provided Magnesium (as Mg) does not exceed 30
16.	Nitrate (mg/L, NO ₃) Max.	45	No relaxation	-
17.	Fluoride (mg/L, F) Max.	1.0	1.5	-
18.	Phenolic compounds (mg/L C ₆ H ₅ OH) Max.	0.001	0.002	-
19.	Mercury (mg/L, Hg) Max	0.001	No Relaxation	-
20.	Cadium (mg/L, Cd) Max.	0.003	No Relaxation	-
21.	Selenium (mg/L, Se) Max.	0.01	No Relaxation	-
22.	Total Arsenic (mg/L, As) Max.	0.01	0.05	-
23.	Cyanide (mg/L, CN) Max.	0.05	No Relaxation	-
24.	Lead (mg/L, Pb) Max.	0.01	No Relaxation	-
25.	Zinc (mg/L, Zn) Max.	5	15	-
26.	Anionic detergents (mg/L, MBAS) Max	0.2	1.0	-
27.	Total Chromium (mg/L), Max.	0.05	No relaxation	-
28.	Polynuclear aromatic hydrocarbons (mg/L, PAH) Max.	0.0001	No relaxation	-
29.	Mineral oil (mg/L) Max.	0.05	No relaxation	-
30.	Pesticides (mg/L) Max.	-	No relaxation	-
Radioactive materials				
31.	Alpha emitters Bq/L Max.	0.1	No relaxation	-
32.	Beta emitters pci/L Max.	1.0	No relaxation	-
33.	Alkalinity (mg/L) Max.	200	600	-
34.	Aluminium (mg/L, Al) Max.	0.03	0.2	-



S. No.	Substance or characteristic	Requirement (Acceptable limit)	Permissible limit in the absence of alternate Source	Remarks
35.	Boron (mg/L) Max.	0.5	1.0	-

**Annexure-II****Methods for Preservation and Analysis of Water Samples**

S. No.	Parameter	Units of Expression	Preservative and Storage Condition	Reference : APHA 21 st Edition Methods
Physical Parameters				
1.	Temperature	°C	Analyze immediately	2550 – B: (Thermometer)
2.	pH	--	Analyze immediately	4500-H ⁺ - B: (Electrode)
3.	Conductivity	µs/ms	Refrigeration at 4°C	2510 – B: (Conductivity meter)
4.	Total dissolved solids	mg /L	Refrigeration at 4°C	2540 – C: (dried at 180°C & gravimetric)
5.	Total suspended solids	mg /L	Refrigeration at 4°C	2540 – D: (dried at 103°C-105°C & gravimetric)
6.	Turbidity	NTU	Refrigerate and Analyze immediately	2130 – B: (Nephelometric)
Inorganic Parameters				
7.	Total alkalinity	as CaCO ₃ mg/L	Refrigerate and Analyze immediately	2320 – B: (Titration)
8.	Hardness	as CaCO ₃ mg/L	Add HNO ₃ to pH < 2 and refrigerate	2340 – C: (EDTA Titrimetric)
9.	Chloride	mg /L	Not Required	4500-Cl ⁻ - B: (Argentometric)
10.	Sulphate	mg /L	Refrigeration at 4°C	4500-SO ₄ ²⁻ - E: (Turbidimetric)
11.	Fluoride	mg /L	Not Required	4500-F ⁻ - D: (SPADNS)
12.	Sodium and potassium	mg /L	Not Required	3500- K, Na-B: (Flame Photometric)
Nutrient and Demand Parameter				
13.	Nitrate	as NO ₃ ⁻ - N mg /L	Refrigerate and analyze immediately	4500-NO ₃ ⁻ B: (UV spectrophotometric)
14.	Total Phosphate	mg/L	Refrigeration at 4°C	4500-P-D: (Stannous Chloride)

Photographs







ZLD technique in operation at Divis



Divi's Laboratories Limited

Date: 10.10.2018

Lr. No: DLL-1/NEERI Report/10-10-18/01

To
The Environmental Engineer,
Telangana State Pollution Control Board,
Regional Office,
Nalgonda – 508 001.

Sir,

Sub: Submission of NEERI report – Reg.

Ref: Order No: NLG-20/TSPCB/RCP/UH-II/2016-3875; Dated: 16.02.2018.

With reference to the above, herewith we submit the NEERI study report for your perusal.

Please find the enclosed.

Regards
For Divi's Laboratories Limited.,

S. RAMA KRISHNA
GENERAL MANAGER



Copy submitted to: The Member Secretary, TSPCB, Sanathnagar, Hyd.

“An ISO-9001, ISO-14001 and OHSAS-18001 Triple certified company”

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Tel. : 91-40-2378 6300 / 400 Fax : 91-40-2378 6460
E-mail : mail@divislaboratories.com, Website : www.divislaboratories.com.

**BEFORE THE HON'BLE
NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE BENCH AT
CHENNAI**

OA No. 80 of 2020

Between:

KALUSHYA PARIRAKSHANA
SAMITHI (Erstwhile Society)

...Appellants

And

Union of India & Ors.

...Respondents

**TYPED SET OF DOCUMENTS
FILED BY 8th RESPONDENT**

COUNSEL FOR 8th RESPONDENT

M/s. RAHUL BALAJI

Ph.8825980374