ACTION PLAN

FOR

RESTORATION OF ENVIRONMENTAL QUALITIES WITH REGARD TO THE IDENTIFIED POLLUTED INDUSTRIAL CLUSTER

OF

KUKATPALLY

Telangana State Pollution Control Board, Hyderabad
March, 2019

1.0 Background:

The Central Pollution Control Board (CPCB) has evolved a Comprehensive Environmental Pollution Index (CEPI) for polluted areas in the country. The CPCB during the year 2009-10 carried out assessment of 88 identified industrial areas / clusters across the country and ranked them based on the CEPI score.

Comprehensive Environmental Pollution Index (CEPI) is a rational number to characterize the environmental quality at a given location following the algorithm of source, pathway and receptor. Increasing value of CEPI indicates severe adverse effects on environment and also is an indication of large percentage of population experiencing health hazards. CEPI is calculated separately for air, water and land. CEPI is based on three factors namely pollutants, pathway and receptor.

The CEPI score of Kukatpalli Industrial cluster was 56.56. It is suggested that areas having aggregated CEPI scores of 70 and above should be considered as critically polluted industrial clusters/ areas, whereas the areas having CEPI between 60-70 should be considered as severely polluted areas and shall be kept under surveillance and pollution control measures should be efficiently implemented, whereas, the critically polluted industrial clusters/areas need further detailed investigations in terms of the extent of damage and an formulation of appropriate remedial action plan. As the CEPI score of the Kukatpalli was below 60 no action plan was required.

The CPCB has revised CEPI concept in concurrence with MoEF & CC in 2016, which is formulated by eliminating the subjective factors but retaining the factors which can be monitored, in order to ensure greater transparency and objectivity in evaluating the environmental quality scenario in the industrial clusters. The CPCB vide lr. Dt. 26.04.2016 issued directions to SPCBs communicating the 'Revised CEPI Concept 2016' wherein the CPCB has directed the SPCBs to carryout environmental quality monitoring in all the Critically Polluted Areas (CPAs), installation of Continuous Ambient Air Quality and Water Quality monitoring stations and action plans for restoring environmental quality and bring down CEPI Scores.

The CPCB has undertaken a project on monitoring, sampling and analysis for Ambient Air Quality, Surface Water Quality and Ground Water Quality in around 100 Polluted Industrial Areas (PIAs) for evaluation of CEPI Scores as per the revised concept – 2016 and carried out monitoring in Kukatpally Polluted Industrial Area in the year 2017.

The Hon'ble NGT, Principal Bench in OA No. 1038 of 2018 has taken up news item published in 'The Asian Age' titled 'CPCB to rank industrial units on pollution levels'.

The Hon'ble NGT vide above order directed as follows: -

i. An Action Plan has to be prepared with regard to identified Polluted Industrial Clusters in accordance with the revised norms laid down by CPCB by the State Government by the Committee constituted by the Chief Secretary within one month; as several Departments may be involved in the exercise.

ii. Time Bound Action Plans shall be finalized within 3 months from the date of receipt of the copy of the order with regard to indentified polluted industrial clusters in accordance with the revised norms laid down by the CPCB to restore environmental qualities within norms.

iii. The final preparation of the action plan including its execution may be overseen by the Chief Secretary of the concerned State, along with the other connected major environmental issues of the States, such as pollution of river stretches, non-attainment cities in terms of air quality and solid waste management, utilization of treated sewage.

iv. The Chief Secretary will take meetings in all these issues quarterly and forward the report to NGT by e-mail.

v. The action plan furnished by the States may be thereafter be looked into by CPCB, which shall be the Nodal Agency and steps taken for implementation so as to ensure that all the industrial clusters comply with the parameters laid down as per Water & Air Acts.

vi. CPCB shall forward Assessment Report for all 100 areas carried out during 2017 – 2018 to MoEF&CC by 28.02.2019 for appropriate action.

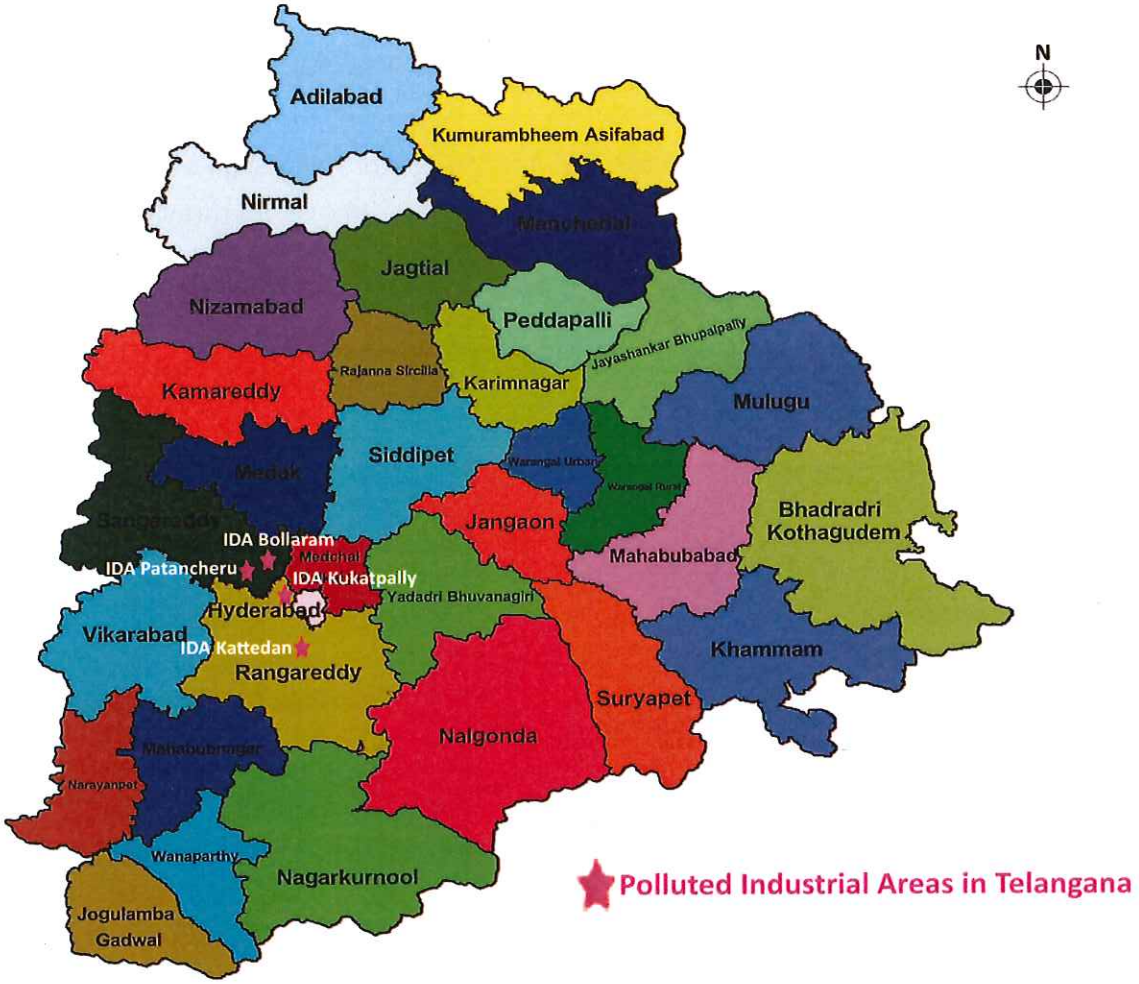
vii. MoEF&CC may take necessary steps based on CPCB report for 100 areas in accordance with law.

viii. The report on the action taken in the matter by the CPCB and MoEF&CC may be furnished to the Tribunal before 31.05.2019 by e-mail.

In view of the above, as per the directions of the Hon'ble NGT, the action plan for Kukatpally Industrial Cluster is prepared by TSPCB.

2.0 Polluted Industrial Areas in Telangana State:

Telangana, as a geographical and political entity was born on June 2, 2014 as the 29th and the youngest state in Union of India. The state has an area of 1,12,077 Sq. Km. and has a population of 3.5 Crore. Hyderabad is the capital city of Telangana.



Central Pollution Control Board (CPCB) has identified 88 Polluted Industrial Clusters across the Country during the year 2009-10 and subsequently increased the Polluted Industrial Areas to around 100. As per CPCB, Telangana State is having three Polluted Industrial Areas viz. (Patancheru-Bollaram, Kukatpalli and Kattedan).

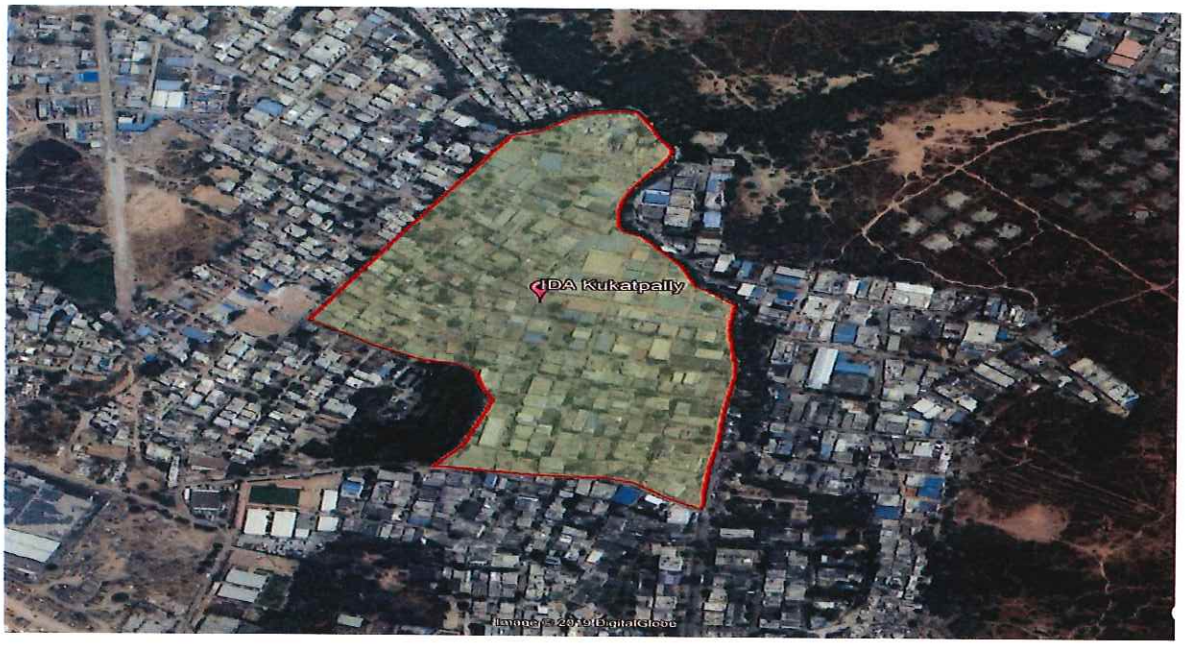
3.0 Constitution of the Committee:

The EFS&T Department, Government of Telangana vide G.O.Rt.No.2, dated: 10.01.2019 **(Annexure-I)** constituted the Committee for preparation of Action Plan for restoration of environmental qualities in respect of identified pollution industrial clusters with the following members.

1. Special chief secretary/Principal Secretary/Secretary to Govt, EFS&T, Dept	-Chairman
2. Commissioner/Director of Industries, Hyd.	-Member
3. Representative of Medical, Health & Family Welfare Department	-Member
4. VC & MD, TSIIC, Govt. of Telangana	-Member
5. MD, HMWS&SB, Govt. of Telangana.	-Member
6. Commissioner, PR&RD Department	-Member
7. Member Secretary, Telangana State Pollution Control Board, Hyd.	-Member-Convenor

The committee is constituted for preparation of Action Plan for restoration of environmental qualities in respect of identified pollution industrial clusters viz. (Patancheru-Bollaram, Kukatpalli and Kattedan).

4.0 Kukatpalli Industrial Cluster



Demographic Details:

Kukatpalli is a small Industrial area developed in the early 1990's of in the erst while Rangareddy District (presently Medchal-Malkajgiri district) of Telangana state. It is located about 10 km from the city centre. Kukatpalli is located at North-west of City. It has an average elevation of 522 metres (1712 feet). The Kukatpalli town and the industrial area was earlier part of the Gram Panchayat and now merged into the Greater Hyderabad Municipal Corporation (GHMC).

The total area of industrial estate is about 15 acres and having 71 no's of plots. The demarcated area of the I.E Kukatpally is 0.06 Sq.kms. The industrial cluster is surrounded by the residential areas of Balanagar, Kukatpally and major residential colonies have come in the vicinity of the

Industrial cluster. As per 2011 census, the total population in the Kukatpalli industrial cluster including surrounding habitations is 4,94,252.

Status of industries in Kukatpalli Industrial area:

The following categories of industries are located in the I.E Kukatpally area:

Sl.No.	Category of Industry	No. of Industries
1	Red category	15 (3 industries are under 17 category of industries)
2	Orange category	21
3	Green category	05
	Total	**41**

At present 41 industries are located in IDA Kukatpally. There are 15 Red category industries, out of which 3 industries are in 17 category which are categorized as highly polluting industries. The 3 Nos. of 17 category industries and other 12 Nos. of Red category units are members of CETP and sending their effluents to CETP for further treatment and disposal.

Details of water and air pollution sources and control systems provided by the industries are enclosed as **Annexure-II**.

Steps taken to reduce the pollution problems in "Kukatpally" area

The following measures were taken by the Board to control pollution in "Kukatpally" area:

- Establishment of a Common Effluent Treatment Plants at Patancheru (PETL), Jeedimetla (JETL) and Balanagar (IDPL) for treatment of industrial effluents generated by the member industries in and around Hyderabad. All the effluent generating industries were directed to send their effluents to CETPs regularly by duly following 6-copy manifest system for tracking of movement. Subsequently, the system was made online with online manifest generation and Vehicle Tracking System wherein all the tankers transporting effluents were provided with GPS trackers for more closer watch on transportation and tracking of effluent tankers.
- Establishment of Treatment, Storage & Disposal Facility (TSDF) with engineered land fill and industrial hazardous waste incinerator near Kazipalli industrial area for safe disposal of industrial hazardous waste. The TSDF started functioning in 2001. All the hazardous waste generating industries were directed to send their hazardous waste to TSDF regularly by duly following 6-copy manifest system for tracking of movement. Subsequently, the system was made online with online manifest generation for more closer watch on transportation of hazardous waste.

- All the 17 category industries were directed to install online monitoring systems as per the CPCB criteria and to connect to TSPCB & CPCB servers.
- Industries who have implemented ZLD or sending their pretreated effluents to CETPs were directed to install IP cameras and online flow meters and connect them to TSPCB & CPCB servers.
- On recommendation of the Board, the State Government vide GO Ms.No.62, dated 28.04.1999 and GO Ms.No.95, dated 21.09.2007 has issued ban notification prohibiting establishment / expansion of certain polluting industries in and around IDAs / IEs including industrial areas located in "Kukatpalli" areas. Subsequently the Govt vide GOMS no. 64 dated 25.07.2013 permitted expansion of existing pharmaceutical industries only subject to implementation of Zero Liquid Discharge system (ZLD).
- Number of highly water polluting industries (particularly pharmaceutical industries) were directed to achieve Zero Liquid Discharge so as to stop discharge of treated / partially treated effluents into surrounding environment and to reuse them.
- As per the directions given by the Hon'ble Supreme Court, the Board has directed all the industries to close the outlets, which may otherwise join the water bodies.
- The Government issued a GO Rt.No.286, dated 05.07.1999, to transport the effluents to CETPs between 6 AM to 6 PM and also to confiscate and penalize the tanker and transport companies indulging in illegal movement of effluent tankers operating without proper manifest forms and plying in between 6:00 PM to 6:00 AM i.e. during night times, to control illegal dumping of effluents. The Board had formed night surveillance teams to check the illegal dumping of effluents and hazardous waste and to check the illegal movement of effluent tankers.

Ground water monitoring of Kukatpally Industrial areas:

The Board is regularly monitoring ground water quality in the kukatpally area at the following locations:

1) Borewell located at House of Sri Vital Rao, H.No.2-42, 875, Asbestos colony, Gandhi Nagar, Medchal District.
2) Borewell located at House of Sri P Anjaneyulu,Plot No.25, Shakthipuram, Prashanth Nagar, I.E.Kukatpally, Medchal District
3) Borewell point at the periphery of the IDA, Balanagar.

These monitoring stations are located in the Impact Zone of IE, Kukatpally as per CEPI criteria. The analysis reports for the year 2018 are enclosed as **Annexure –III.**

Monitoring of Surface water bodies/Lakes / Tanks in Kukatpally area:

No surface water bodies are located in the Kukatpalli industrial area. However, the water bodies viz., Rangadhamuni Lake, Chinna mysamma cheruvu and Kukatpally Lake are located in the surroundings of the industrial Estate. The Board is monitoring the surface water quality in the above water bodies of kukatpally area. These monitoring stations are located in the Impact Zone of IE, Kukatpally as per CEPI criteria. The water quality shows contamination of water bodies with untreated domestic discharges from the nearby colonies The analysis reports are enclosed as **Annexure - IV**

Monitoring of inlet & outlet of CETP, IDPL:

There is no CETP located in the Kukatpalli Industrial area. However, the CETP (IDPL) is located in the Impact Zone of IE, Kukatpally. M/s. Indian Drugs & Pharmaceuticals Ltd., (CETP) is located at PO. Balanagar, Township, Medchal District within the premises of M/s. IDPL, Balanagar.

M/s. IDPL was a pharmaceutical unit established in the year 1968 and subsequently, it became sick. At present, the industry is operating the Effluent Treatment Plant as a CETP for treatment of effluents of its member industries. Pre-treated effluents received from the member industries are being treated in this CETP.

The analysis results of inlet and outlet of M/s. IDPL, are meeting the standards prescribed by the Board. The Annual Average Analysis results of inlet and outlet of M/s. IDPL are enclosed as **Annexure –V.**

Monitoring of Air quality in Kukatpally area:

The sources of air pollution in the Kukatpally area are process emissions, boiler emissions, VOC emissions (organic solvents) from the industries and dust emissions from vehicular movement in the area and poor infrastructure of roads in the industrial area..

The Board has taken following measures to control air pollution in the area:

- The industries provided scrubbers wherever there are process emissions such as gaseous emissions from pharma / chemical industries.
- The industries provided condensers wherever there are VOC emissions such as from reactions, solvent storage tanks, etc.
- All the industries installed air pollution control equipments such as dust collectors, cyclone separators, etc. to control emissions from fuel burning in the boilers.

The Board has carried out Ambient Air Quality Monitoring in Kukatpally Industrial Area as per the CEPI criteria. The status of Ambient Air Quality is enclosed as **Annexure-VI.**

Status of Solid waste Management in Kukatpally areas:

- Treatment, Storage & Disposal Facility (TSDF) with engineered land fill and industrial hazardous waste incinerator was established at Dundigal near Kazipalli industrial area for safe disposal of industrial hazardous waste.
- The TSDF started functioning in 2001.
- All the hazardous waste generating industries were directed to send their hazardous waste to TSDF regularly by duly following 6-copy manifest system for tracking of movement.
- Subsequently, the system was made online with online manifest generation for more closer watch on transportation of hazardous waste.
- The Board further permitted the industries to send their hazardous waste to cement industries for co-processing.
- Subsequently, Alternate Fuel Raw Material Facility (AFRF) was also established at TSDF, Dundigal. The hazardous wastes from the industries is processed through blending / mixing / calorific value enriching to make it suitable for use as fuel.
- The municipal solid waste is being lifted by GHMC to Integrated Municipal Solid Waste treatment Facility at Jawaharnagar for treatment and disposal.

Status of Domestic effluent management in Kukatpally area:

Two Sewage Treatment Plants (STP's) are established in Kukatpally area for treatment of domestic effluents from households located in Kukatpally, KPHB colonies, Shanthinagar, Prashanthi Nagar, etc.:

1. STP located at Rangadhamuni lake, Kukatpally, Medchal District. Capacity of this STP is 5 MLD.
2. STP located at Khazakunta lake, Kukatpally, Medchal District. Capacity of this STP is 12 MLD.

However, the above 2 STP's are not adequate as the domestic effluents generation is more than the treatment capacity.

The above STPs are regularly monitored by the Board. The analysis reports are enclosed as **Annexure-VII.**

Action Plan for improvement of Surface water quality:

1. The industries will be monitored regularly to ensure compliance with norms and conditions stipulated by the Board for treatment and disposal of industrial effluents.
2. Action will be initiated against the non-complying industries.
3. The Common Effluent Treatment Plant will be regularly monitored to ensure compliance of effluent discharge norms. Necessary action will be initiated in case of any non compliance.

4. Night patrolling teams will be continued to check illegal dumping of effluents / solid waste into natural drains & nallah's.
5. The 2 STP's at Rangadhamuni lake and Khazakunta lake are not adequate as the domestic effluents generation is more than the treatment capacity. The excess domestic effluents are by-passing into the nearby lakes along with treated effluents. The GHMC / HMWS & SB will establish STPs of adequate capacities for treatment of domestic effluents so as to avoid discharge of untreated sewage into lakes / nallahs.
6. The Board to monitor Kukatpally Nallah (Domestic sewage), back side of Kukatpally Bus Depot, Medchal Malkajgiri District regularly.

Action Plan for improvement of Ground water quality

1. Presently, the Board is regularly monitoring ground water quality at Three locations in the kukatpally area. Additional locations will be identified in the core and impact zone and will be monitored regularly to assess ground water quality.
2. To carry out further study based on the ground water monitoring results.
3. The Local Authority will encourage for establishment of rainwater harvesting structures.

Action Plan for improvement of Ambient Air Quality

1. The emission sources from the industries such as process emissions, boiler emissions and VOC emissions will be monitored regularly to ensure compliance with norms and conditions stipulated by the Board.
2. Action will be initiated against the non-complying industries.
3. As per the Ambient Air Quality Monitoring results from the stations at Kukatpally and Balanagar areas, the PM10 values are exceeding the ambient standards.
4. During the last few years, there is significant increase in urbanization in the Kukatpally area. More residential colonies were developed around the industrial areas.
5. Apart from the industries, the vehicular traffic (movement) has become a major contributing factor for higher levels of dust in the air. Hence, the Local Authorities to maintain roads in proper condition and take measures for smooth vehicular movement.
6. The Local Bodies to take up greenbelt development in the area for controlling air pollution.

ACTION PLAN FOR IMPROVOEMENT OF ENVIRONMENTAL PARAMETERS BY ALL THE STAKE HOLDER DEPARTMENTS IN THE KUKATPALLY AREA.

source	S. No.	Action points	Implementation period (short/mid/ long) term	time frame for implementation from the date of approval	Responsible Departments/agency
Air Environment	1)	Monitoring of industries for compliance of emission standards and up-gradation of Air Pollution Control equipments.	Short Under implementation	Continue as regular activity.	**TSPCB**
	2)	Regular monitoring of individual industry emissions to ensure standards and Initiating action against the industries for non-compliance of the emission standards.	Short/Mid Under implementation	60 days and continue as regular activity.	**TSPCB**
	3)	Prepare plan for improvement of infrastructure of roads.	Medium/ Long	180 days	**GHMC, TSIIC**
	4)	Blacktopping of metalled roads, including pavement of road shoulders.	Medium/ Long Partly implemented	180 days	**GHMC, TSIIC**
	5)	Regular cleaning of the roads with mechanised sweepers and removing the silt from the roads	Short Under implementation	Regular Activity	**GHMC, TSIIC**
	6)	Regular check and control of burning of municipal solid wastes.	Short Under implementation	Within 30 days continue as regular activity.	**GHMC, TSIIC & TSPCB**
	7)	Enforcement of Construction & Demolition Rules	Short	30 days and continue as regular activity.	**GHMC & TSPCB**
	8)	Control measures for fugitive emissions from material	Short	30 days and continue as	**GHMC**

source	S. No.	Action points	Implementation period (short/mid/ long) term	time frame for implementation from the date of approval	Responsible Departments/agency
		handling, conveying and screening operations through water sprinkling, curtains, barriers and dust suppression units of C&D Waste.		regular activity	
	9)	Air quality index to be calculated and disseminated to the people through website and other media	Short Under implementation	Continue the activity	**TSPCB**
Water Environment	An action plan was submitted to the CPCB for reducing the air pollution in the non-attaining cities / towns. Hyderabad is one of the non-attainment area in the Telangana State in which Kukatpally Industrial Cluster is a part of the GHMC area.				
	1)	Regular operation of ZLD systems / ETPs or ensuring sending effluents to CETP regularly	Short Under implementation	Continue the activity	**TSPCB**
	2)	Ensure upgradation of STP's at Rangadhamuni lake and Khazakunta lake with adequate capacity to treat the domestic waste water.	Medium/ Long	180 days	**HMWSSB, TSIIC**
	3)	The Common Effluent Treatment Plant to be upgraded to reuse the treated water by the member industries.	Long	One year	**TSIIC, TSPCB**
	4)	Ensure the industries to close all the outlets and provide separate storm water drains to avoid contamination of rain water	Short/Mid Under implementation	60 days and continue as regular activity.	**TSIIC, TSPCB**

source	S. No.	Action points	Implementation period (short/mid/ long) term	time frame for implementation from the date of approval	Responsible Departments/agency
Land Environment	1)	Ensure storing of effluents in the above ground level storage tanks to avoid contamination of ground due to leakages	Short/Mid Under implementation	60 days and continue as regular activity.	TSIIC, TSPCB
	2)	Restrictions on extraction of ground water as per the guidelines issued by the Government.	Short/Mid Under implementation	60 days and continue as regular activity.	TSIIC, TSPCB & ground water dept.
	3)	Regular monitoring of the Industrial area to identify the unauthorized dumpings.	Short Under implementation	Continue the activity	TSIIC, TSPCB
	4)	Ensure no dumping of municipal solid waste along the nallas and lakes by taking necessary measures such as providing fencing arrangement, awareness programs, etc	Short/Mid Under implementation	60 days and continue as regular activity.	GHMC, TSIIC & TSPCB
	5)	Installation of CC cameras at the entry points of IDA and on the drains.	Short/Mid	60 days and continue as regular activity.	TSIIC, TSPCB

Member Secretary
TSPCB

Special Chief Secretary
EFS&T

Annexure -I

GOVERNMENT OF TELANGANA
ABSTRACT

EFS&T Department - Constitution of a Committee for preparation of Acton Plan for restoration of environmental Qualities with regard to the identified polluted industrial clusters - Orders - Issued.

ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (For.III) DEPARTMENT

G.O.Rt.No.2 Dated:10.01.2019
Read the following.

1. Orders of Hon'ble NGT, New Delhi, Dt.13-12-2018 in O.A.No.1038/2018.
2. From the MS,TSPCB, mail received , dt.8.1.2019.

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ORDER:

The Member Secretary, Telangana State Pollution Control Board (TSPCB) in his letter 2nd read above, has brought to the notice of the Government that, the Hon'ble NGT in its orders 1st read above, have directed to the State Pollution Control Boards /Committees to finalize the time bound action plans with regard to identified polluted industrial clusters in accordance with the revised norms laid down by the Central Pollution Control Board (CPCB) to restore environmental qualities within the norms. Such action plan be finalized within three months from the date of receipt of copy of the orders of the NGT. The action plan to be prepared in the States may be done by the Committee constituted by the Chief Secretary within one month. It is also laid down that the final preparation of the Action Plan including its execution may be overseen by the Chief Secretary of the State concerned.

2. Accordingly, the Member Secretary, Telangana State Pollution Control Board has requested to constitute the committee for preparation of Action Plan for restoration of environmental qualities in respect of identified pollution clusters with the following members:

i)	Special Chief Secretary / Principal Secretary / Secretary to Govt., EFS&T Department, Government of Telangana.	-	Chairman.
ii)	Commissioner / Director of Industries, Govt of Telangana.	-	Member
iii)	Representative of Medical, Health & Family Welfare Department	-	Member
iv)	VC&MD, TSIIC, Govt of Telangana.	-	Member
v)	MD, HMWS&SB, Govt of Telangana.	-	Member
vi)	Commissioner, PR&RD Department	-	Member
vii)	Member Secretary, Telangana State Pollution Control Board, Hyderabad.	-	Member - Convenor

3. Government after careful consideration of the above request of the Member Secretary, Telangana State Pollution Control Board hereby constitute the committee for preparation of Action Plan for restoration of environmental qualities in respect of identified pollution clusters with the following members:

i)	Special Chief Secretary/Principal Secretary / Secretary to Government, EFS&T Department, Government of Telangana.	-	Chairman.
ii)	Commissioner / Director of Industries, Govt of Telangana.	-	Member
iii)	Representative of Health, Medical, & Family Welfare Department	-	Member
iv)	VC&MD, TSIIC, Govt of Telangana.	-	Member
v)	MD, HMWS&SB, Govt of Telangana.	-	Member
vi)	Commissioner, PR&RD Dept.	-	Member
vii)	Member Secretary, TSPCB, Hyderabad.	-	Member – Convenor

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

AJAY MISRA
SPECIAL CHIEF SECRETARY TO GOVERNMENT (FAC)

To
The Special Chief Secretary / Prl. Secretary / Secretary to Govt., EFS&T Department, Government of Telangana.
The Commissioner / Director of Industries, Government of Telangana.
The Health Medical, & Family Welfare Department, Telangana State Secretariat, Hyderabad.
The Vice Chairman & Managing Director, Telangana State Industrial Infrastructure Corporation, Government of Telangana, Hyderabad.
The Managing Director, Hyderabad Metropolitan Water Supply and Sewerage Board , Government of Telangana. Hyderabad.
The Commissioner, Panchayat Raj and Rural Development Department, Telangana State Secretariat, Hyderabad.
The Member Secretary, Telangana State Pollution Control Board, Hyderabad.

Copy to:
The Industries and Commerce Department, Telangana State Secretariat, Hyderabad.
The Health, Medical & Family Welfare Department, Telangana State Secretariat, Hyderabad.
The Panchayat Raj and Rural Development Department, Telangana State Secretariat, Hyderabad.
SF/SC

// FORWARDED :: BY ORDER //

SECTION OFFICER

TSPCB, RO-MEDCHAL 17 Category industries

Sl.No.	Name of the industry	Date of Commissioning	Consent status	ETP Units	Emission Control System (ECS)	Status of ETP	Status of APCE	Hazardous Waste Management Provision	Remarks
1	M/s.Rasula Pharmaceuticals & Fine Chemicals, F-8, Phase-II, IDA, Kukatpally, Medchal-Malkajgiri District	Jun-84	30.09.2022	LTDS: The industry has provided above ground level Collection tank for effluent storage After neutralization, these effluents are sent to Ms. JETL, CETP, Jeedimetla for further treatment and disposal	Cyclone Dust Collector for Boiler	ADQ	ADQ	Sending to TSDF Dundigal for treatment and safe disposal	—
2	M/s. Virupaksha Laboratories Pvt. Ltd., (Unit – II), (Formerly M/s. Konar Organics Ltd., Unit – II), Plot No. F-10, IDA, Kukatpally, Medchal-Malkajgiri District	1987	30.09.2023	HTDS: MEE of JETL for treatment. LTDS: After pretreatment, lifted to PETL (CETP), Patancheru for further treatment and disposal.	Cyclone dust collector for boiler.	ADQ	ADQ	Sending to TSDF Dundigal for treatment and safe disposal	—

Annexure-I

3	M/s.Almelo Chemicals (P) Ltd, A-38 & 39, IDA, Kukatpally, Medchal-Malkajgiri District	May-80	31.03.2021	HTDS effluents sending to Multiple Effect Evaporator of M/s JETL LTDS - Primary Treatment consisting of collection and neutralization after pre-treatment sending to JETL for treatment and disposal	Cyclone separator and Dust Collector for Boiler	ADQ	ADQ	Sending to TSDF Dundigal for treatment and safe disposal	—

TSPCB, RO-MEDCHAL Red Category industries

Kukatpally									
Sl. No.	**Name of the industry**	**Date of Commissioning**	**Consent status**	**ETP Units**	**Emission Control System (ECS)**	**Status of ETP**	**Status of APCE**	**Hazardous Waste Management Provision**	**Remarks**
1	Usha Conductors (P) Ltd., Plot No. 9 & 10, 5-36/225, A & B, Prashantinagar, Kukatpally, Balanagar (M), Medchal-Malkajgiri District	1994	31.07.2021	The industry is using water for Cooling under circulation.	Catalytic convertor followed by scrubber for enameling furnace.	ADQ	ADQ	Waste oil sent to authorized agencies / dealers for Re-Processing / Re-Cycling.	-
2	Nosch Labs (P) Ltd., 5-5-35/33/3, Prashantinagar, Kukatpally, Medchal-Malkajgiri District	Dec-02	30.09.2023	LTDS: The industry has provided Collection and neutralization tanks for effluent. After neutralization, the effluents are sent to Ms. JETL, CETP, Jeedimetla for further treatment and disposal	No boiler or process emissions	ADQ	NA	ETP sludge is sent to TSDF Dundigal for treatment and safe disposal	-
3	Fountain Wire Industreis (P) Ltd., Plot No. 2 B, Type-1, IE Kukatapally, Medchal-Malkajgiri District	Nov-88	30.11.2021	The industry is using water for Cooling under circulation.	Catalytic convertor followed by scrubber for enameling furnace.	ADQ	ADQ	Waste oil sent to authorized agencies / dealers for Re-Processing / Re-Cycling.	—
4	Virupaksha Laboratories (Unit-I), F-7, IDA Kukatpally, Medchal-Malkajgiri District	Oct-02	30.09.2022	LTDS - Primary Treatment consisting of collection and neutralization after pre-treatment sending to PETL for treatment and disposal	Cyclone dust collector for boiler	ADQ	ADQ	Sending to TSDF Dundigal for treatment and safe disposal	—

5	AJ Packaging Pvt Ltd., Plot No. 120 & 129, CIE, Gandhinagar, Medchal-Malkajgiri District	Jun-18	31.10.2020	LTDS - Primary Treatment consisting of collection and neutralization after pre-treatment sending to IDPL for treatment and disposal	The industry provided wet scrubbers (2 Nos) followed by a stacks (2 Nos) of 90 ft height to the drying ovens	ADQ	ADQ	Waste oil sent to authorized agencies / dealers for Re-Processing / Re-Cycling.	—
6	Kabsonsgas Equipments Ltd., Plot No. 40, CIE, Gandhinagar, Medchal-Malkajgiri District	Apr-82	30.09.2018 (Under Process)	LTDS: Primary Treatment consisting of collection and neutralization after pre-treatment sending to IDPL for treatment and disposal	Wet Scrubber for furnace	ADQ	ADQ	ETP sludge sent to TSDF.	—
7	Syno Chem India, Plot No. 48, CIE, Gandhinagar, Medchal-Malkajgiri District	Dec-97	30.04.2023	No water is being used in the process.	Dust collector followed by bag filters are provided for furances	NA	ADQ	Waste oil sent to authorized agencies / dealers for Re-Processing / Re-Cycling.	—
8	Mekins Industries Ltd., (Formerly M/s.Mekins Agro Products Ltd.), Plot No. A/36, IDA, Kukatpally, Medchal-Malkajgiri District	1997	28.02.2023	LTDS: After pretreatment, lifted to CETP, JETL for further treatment and disposal.	Metal Filters for spray painting booth and Alkaline Scrubber for Electroplating unit provided	ADQ	ADQ	Sludge sent to TSDF.	—
9	Sri Lakshmi Industries, Plot No. D-11, IDA, Kukatpally, Medchal-Malkajgiri District	Oct-09	31.03.2020	LTDS: After pretreatment, lifted to CETP, JETL for further treatment and disposal.	Cyclone dust collectors provided for baking ovens	ADQ	ADQ	Waste oil sent to authorized agencies / dealers for Re-Processing / Re-Cycling.	—

10	Yash International, Plot No. F-17, Road No.10, IDA, Kukatpally, Medchal-Malkajgiri District	2002	30.06.2023	LTDS: After pretreatment, lifted to CETP, JETL for further treatment and disposal.	The industry has provided individual cyclone dust collectors for buffing & powder coating section as control equipment	ADQ	ADQ	Waste oil sent to authorized agencies / dealers for Re-Processing / Re-Cycling.	—
11	Gulf Oil Corporation Ltd., (Formerly IDL Industries Ltd.,), Kukatpally, Medchal-Malkajgiri District	Feb-65	31.03.2020	The industry is having Collection tank (4 Nos) — 60 KL&10 KL, 22 KL, 22KL Neutralization tank-10 KL, Settling tank-10 KL, addition tank, Sludge beds. After treatment in ETP, the treated shall be utilized for on land for Irrigation within the premises.	Dust collector followed by Bag Filter for Boiler	ADQ	ADQ	ETP sludge is lifting to M/s. HWMP (TSDF), Dundigal, Medchal District.	—
12	Ranko Metals (P) Ltd., Plot No. 23/1, Road No.07, IDA, Kukatpally, Medchal-Malkajgiri District	Jan-98	31.08.2023	After pretreatment, lifted to CETP, JETL for further treatment and disposal.	Wet Scrubber provided to control process emissions.	ADQ	ADQ	Sent to authorized waste oil Re-Processors / Re-Cycling units.	—

TSPCB, RO-MEDCHAL Orange Category industries

Sl. No.	Name & address of the Industry	Category	Date of Commissioning	ETP Status (ZLD / CETP / Individual)	Consent status	Point of disposal	Source of air pollution	Control measures
1	Aurex Laboratories (P) Ltd., Plot No. 5-35/189/A, Sy. No. 390, Prashantinagar, IE, Kukatpally, Balanagar (M), Medchal-Malkajgiri District	Orange	1965	CETP	30.04.2021	After neutralization, the wastewater shall be disposed to M/s. IDPL, Balanagar for further treatment and disposal		Scrubber
2	Indu Drugs (P) Ltd., Plot No. 13, Sy. No. 380, D. No. 5-5-35/278 & 279, Prashantinagar, IDA Kukatpally, Balanagar, Medchal-Malkajgiri District	Orange	Dec-99	CETP	30.11.2021	After neutralization, the wastewater shall be disposed to M/s. IDPL, Balanagar for further treatment and disposal	DG set of capacity 125 KVA	Acoustic enclosures
3	Indu Formulations (P) Ltd., Plot No. 14 & 15, Sy. No. 380, Prashantinagar, Kukatpally, Medchal-Malkajgiri District	Orange	Feb-13	CETP	31.03.2019	After pre-treatment, shall be sent to M/s. IDPL, Balanagar, RR District for further treatment and disposal.	DG set of capacity 62.5 KVA	Acoustic enclosures
4	Daewoong Pharmaceuticals Co Ltd., Plot No. 5 A, IE, Kukatpally, Balanagar, Medchal-Malkajgiri District	Orange	Nov-09	CETP	30.06.2022	After pre-treatment, shall be sent to M/s. JETL, IDA Jeedimetla, Rangareddy District for further treatment and disposal.	DG set of capacity 125 KVA	Acoustic enclosures
5	Kishan Laundry Services (Formerly Yashoda Laundry Services), H. No. 5-5-35/80, Prashantinagar Colony, Balanagar (M), Medchal-Malkajgiri District	Orange	Apr-15	ETP	30.09.2022	After pretreatment in ETP, the treated wastewater shall be disposed into municipal sewer, after meeting the surface water standards	DG set of capacity 125 KVA	Acoustic enclosures
6	Akin Laboratories (P) Ltd., Plot No. 88-B, CIE, Gandhinagar, Medchal-Malkajgiri District	Orange	Oct-92	CETP	30.06.2021	After neutralization, the wastewater shall be disposed to M/s. IDPL, Balanagar for further treatment and disposal	NA	NA
7	Euroflex Transmission India (P) Ltd. (Unit-I) Plot No. 99, CIE Phase-I, Gandhinagar, Balanagar M), Ranagareddy District.	Orange	May-07	Septic tank	30.09.2019	Septic tank followed by soak pit	DG set of capacity 250 KVA	Acoustic enclosures

8	Euroflex Transmission India (P) Ltd. (Unit-II), Plot No.92, Sy. No.150, CIE Gandhinagar, Medchal-Malkajgiri District.	Orange	Feb-02	Septic tank	31.03.2022	Septic tank followed by soak pit	DG set of capacity 250 KVA , 500 KVA	Acoustic enclosures
9	Ocean Pharma Coats (P) Ltd., Plot No.44, CIE, Gandhinagar, Balanagar, Medchal-Malkajgiri District.	Orange	Oct-83	CETP	31.03.2023	After pre-treatment shall be lifted to CETP i.e., M/s. JETL, Jeedimetla, Rangareddy District.	DG set of capacity 250 KVA , Coal fired Boiler of capacity 1.0 TPH	Acoustic enclosures
10	Rachamallu Forgings (P) Ltd., Plot No.86, CIE, Gandhinagar, Medchal-Malkajgiri District.	Orange	Mar-09	Septic tank	30.11.2018, Renewal under process	Septic tank followed by soak pit	1.FO fired pre-heating furnace of 2 Tons capacity. 2 FO fired pre-heating furnace of 1 Ton capacity, 3 - Electrical heating furnaces of – 90KW, 72KW, 3 x 42 KW and 30 KW	Stack for oil fired furnaces
11	Ushodaya Enterprises (P) Ltd., Plot No. 95 & 96, CIE, Gandhinagar, Medchal-Malkajgiri District	Orange	Aug-10	Septic tank	31.03.2020	Septic tank followed by soak pit	DG set of capacity 750 KVA, 500 KVA	Acoustic enclosures
12	Serin Formulations (P) Ltd., 5-35/2016, Prashantinagar, Kukatapally, Balanagar (M), Medchal-Malkajgiri District	Orange	Feb-10	CETP	31.12.2021	After neutralization, the wastewater shall be disposed to M/s. IDPL, Balanagar for further treatment and disposal	NA	NA
13	Shri Maruthi Industries, Shed No. 5-36/1/1B, Type - II, APIIC, IE, Kukatpally, Medchal-Malkajgiri District	Orange	Jan-14	Septic tank	30.06.2023	Septic tank followed by soak pit	1.oil fired melting furnace of capacity – 200 kgs/heat, 2.LPG fired Annealing furnace of capacity – 1.5 Ton/batch	
14	Uni-San Pharmaceuticals, 5-248, HP Road, Moosapet, Medchal-Malkajgiri District	Orange	Mar-12	CETP	30.09.2021	After pretreatment, the effluents shall be lifted to CETP, M/s. IDPL, Balanagar.	NA	NA
15	Lindstorm Service India Pvt. Ltd., Sy. No. 716/A, 719, 720, 721, Opp. IDPL Kukatpally, Balanagar, Medchal-Malkajgiri District	Orange	Apr-06	CETP	31.03.2021	After pre-treatment, shall be lifted to M/s. JETL, Jeedimetla, for further treatment and disposal	DG Set of capacity – 125 KVA	Acoustic enclosures

16	Hiranya Cellulose Products, Sy. No. 199, Rajeevgandhi Nagar, Kukatpally, Medchal-Malkajgiri District	Orange	Sep-09	CETP	31.03.2022	After pre-treatment, shall be sent to M/s. JETL, Jeedimetla, RR Dist.	1. Coal fired boiler-2TPH, 2. DG set of capacity – 125 KVA	Acoustic enclosures
17	Hitech Polymers, Plot No. 7, CIE Gandhinagar, Medchal-Malkajgiri District	Orange	Mar-99	Septic tank	31.03.2028	Septic tank followed by soak pit	Coal fired boiler of capacity – 0.8 TPH	Dust collectors
18	Hetero Labs Ltd., (Formerly M/s. Hetero Drugs Limited, Unit-II) (Formulations–R&D), Plot No. 16, IE, Gandhinagar, Balanagar, Medchal-Malkajgiri District	Orange	Mar-17	CETP	28.02.2022	Shall be sent to CETP i.e., M/s. JETL, Jeedimetla for further treatment and disposal.	DG Set capacity 500 KVA	Acoustic enclosures
19	Gold Fish Pharma Mythrinagar, Kukatpally, Balanagar (M), Medchal-Malkajgiri District	Orange	Jul-12	CETP	30.09.2018	After Neutralization, shall be sent to M/s. IDPL, Balanagar, Rangareddy District for further treatment and disposal.	NA	NA
20	Lamtuf Plastics Ltd., Plot No. 3/15, CIE (Expn), Gandhinagar, Medchal-Malkajgiri District	Orange	Jan-85	CETP	30.09.2019	After pretreatment, shall be lifted to CETP-IDPL, Balanagar, Rangareddy District for further treatment and disposal.	coal fired boiler of capacity 7 TPH & 2 TPH	Dust collectors
21	Castall Technologies (P) Ltd., A-55, IDA Kukatpally, Medchal District	Orange	May-00	Septic tank	31.03.2020	Septic tank followed by soak pit	1. melting furnace of capacity – 300 Kgs/heat, 2.holding furnace of capacity - 300 kg (5Nos)	cyclone dust collector

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TSPCB, RO-MEDCHAL Green Category industries

Sl. No.	Name & address of the Industry	Category	Date of Commissioning	ETP Status (ZLD / CETP / Individual)	Consent status	Point of disposal	Source of air pollution	Control measures
1	Zen Foods (P) Ltd., Plot No. A/64/1, CIE, Gandhinagar, Medchal-Malkajgiri District	Green	May-95	CETP	31.12.2020	After pretreatment, the effluents shall be lifted to M/s. IDPL (CETP), Balanagar for further treatment and disposal	75 KVA DG set	Acoustic enclosures
2	Haritha Poly Products Plot No. A-40/B2, Road No. 7, IDA Kukatpally, Medchal-Malkajgiri District	Green	Mar-16	Septic tank	30.06.2020	Septic tank followed by soak pit	NA	NA
3	Jeevan Shree Poly Packs Plot No. F-12/E, IDA Kukatpally, Medchal-Malkajgiri District	Green	Dec-17	Septic tank	30.06.2022	Septic tank followed by soak pit	200 KVA DG set	Acoustic enclosures
4	Decent Enterprises Shed No. 9 A, IE, Kukatpally, Medchal-Malkajgiri District	Green	May-10	Septic tank	30.04.2021	Septic tank followed by soak pit	NA	NA
5	In N Out Food Ingredients, Door No. 5-535/222/1, Plot No. 30, Durga Shakti Peetam Colony, Prashanth Nagar, Kukatpally (M), Medchal-Malkajgiri District	Green	2016	Septic tank	30.04.2022	Septic tank followed by soak pit	NA	NA

Annexure – III

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/2018/2223-2228
Collected on: 13/02/2018
Test method: Standard Methods of APHA, 22nd Edition
Issue date: 22/02/2018

Collected by: Ch.Srinivas, Analyst Gr-I ,RO, Medchal
Received on: 15/02/2018
Quantity of the sample: 1 Ltr. sample each
Page No.: 1 of 1

Source: Borewell samples (Monitoring of CEPI area – Kukatpally - by 3rd party appointed by CPCB).

Sample code : Sample details / collection point

2223 - M/s. Balaji Engineering, 19/B, Type – III, IE, Kukatpally, Medchal – Malkajgiri District.
2224 - M/s. SV Precision Instruments 11A, 11B, Type III IE, Kukatpally, Medchal- Malkajgiri District.
2225 - M/s. GEE PEE Electrospark Pvt. Ltd., Plot No.4B, Type –II, APIIC, Prashanthi Nagar, Kukatpally, Medchal-Malkajgiri District.
2226 - M/s. Subhash water services, 5-35, APIIC, IE, Prashanthinagar, IE, Kukatpally, Medchal – Malkajgiri District.
2227 - Sri P Ramesh (near Veeranjaneyaswamyatemple) D.No.4-133/B, Road no.9, Pragathinagar, Moosapet, Malkajgiri District.
2228 - Bhagyanagar School, Kukatpally village, Kukatpally, Medchal – Malkajgiri District.

Parameters	Unit	Results						Drinking water standards as per IS 10500: 2012
		2223	2224	2225	2226	2227	2228	
pH	-	6.8	6.6	6.7	6.4	6.5	6.7	6.5-8.5
Electrical conductivity	µS/cm	1,952	2,984	3,041	2,364	992	2,242	-
Total Dissolved Solids	mg/L	1,034	2,059	1,885	1,300	664	1,323	500* (2000**)
Chemical Oxygen Demand	mg/L	4	14	8	10	NIL	4	-
Total Alkalinity as CaCO3	mg/L	548	506	498	434	256	480	200* (600**)
Total Hardness as CaCO3	mg/L	450	1,040	748	480	262	480	200* (600**)
Calcium as Ca+2	mg/L	94	180	194	122	88	116	75* (200**)
Magnesium as Mg+2	mg/L	52	143	64	43	10	46	30* (100**)
Chlorides as Cl^-	mg/L	206	493	522	326	86	225	250* (1000**)
Sulphates as SO_4^{-2}	mg/L	92	245	246	172	40	160	200* (400**)
Fluoride	mg/L	0.93	0.3	0.81	0.13	0.29	0.89	1.0* (1.5**)
Nitrates as NO_3	mg/L	11	32	33	35	37	36	45
Phosphates as PO_4^{-3}	mg/L	0.11	0.74	0.132	0.046	0.020	0.168	-
Sodium as Na	mg/L	230	194	372	272	74	230	-
Potassium as K	mg/L	3	2	2	4	6	3	-
Phenolic compounds	mg/L	ND	ND	ND	ND	ND	ND	0.001* (0.002**)
Sulphides as H_2S	mg/L	ND	ND	ND	ND	ND	ND	0.05
Oil and Grease	mg/L	ND	ND	ND	ND	ND	ND	-
Cyanide	mg/L	ND	ND	ND	ND	ND	ND	0.05
Heavy Metals								
Copper	mg/L	ND	ND	ND	ND	ND	0.1	0.05* (1.5**)
Nickel	mg/L	ND	0.21	ND	ND	ND	ND	0.02*
Zinc	mg/L	1	1.2	0.8	1.1	1	1.2	5* (15**)
Cadmium	mg/L	ND	ND	ND	ND	ND	ND	0.003*
Lead	mg/L	ND	ND	ND	ND	ND	ND	0.01*
Total Chromium	mg/L	ND	ND	ND	ND	ND	ND	0.05*

Note: Results related to sample as received.
* Acceptable limit.
** Permissible limit in the absence of alternate source.
ND: Not Detected

(P.VEERANNA)
Joint Chief Environmental Scientist (FAC)

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/2018/2229-2230
Collected on: 13/02/2018
Test method: Standard Methods of APHA, 22nd Edition
Issue date: 22/02/2018

Collected by: Ch.Srinivas, Analyst Gr-I ,RO, Medchal
Received on: 15/02/2018
Quantity of the sample: 1 Ltr. sample each
Page No.: 1 of 1

Source: Borewell samples (Monitoring of CEPI area – Kukatpally - by 3rd party appointed by CPCB).

Sample code : Sample details / collection point

2229 - M/s. Keerthi Industries, Plot No.400 IE Balanagar, Medchal- Malkajgiri District.

2230 - R/o. Sri M.Yadagiri chary back side of Rachamalla Industries, Rangareddynagar, Gandhinagar, Medchal-Malkajgiri District.

Parameters	Unit	Results		Drinking water standards as per IS 10500: 2012
		2229	2230	
pH	-	7	6.4	6.5-8.5
Electrical conductivity	µS/cm	2,226	1,712	-
Total Dissolved Solids	mg/L	1,291	1,112	500* (2000**)
Chemical Oxygen Demand	mg/L	4	NIL	-
Total Alkalinity as CaCO3	mg/L	410	372	200* (600**)
Total Hardness as CaCO3	mg/L	480	584	200* (600**)
Calcium as Ca+2	mg/L	104	140	75* (200**)
Magnesium as Mg+2	mg/L	53	57	30* (100**)
Chlorides as Cl^-	mg/L	240	120	250* (1000**)
Sulphates as SO_4^{-2}	mg/L	336	258	200* (400**)
Fluoride	mg/L	0.05	0.86	1.0* (1.5**)
Nitrates as NO_3	mg/L	31	30	45
Phosphates as PO_4^{-3}	mg/L	0.06	0.038	-
Sodium as Na	mg/L	256	94	-
Potassium as K	mg/L	1	0.75	-
Sulphide as H_2S	mg/L	ND	ND	0.05
Phenolic compounds	mg/L	ND	ND	0.001* (0.002**)
Oil and Grease	mg/L	ND	ND	-
Cyanide	mg/L	ND	ND	0.05
Heavy Metals				
Copper	mg/L	ND	ND	0.05* (1.5**)
Nickel	mg/L	ND	ND	0.02*
Zinc	mg/L	1	0.9	5* (15**)
Cadmium	mg/L	ND	ND	0.003*
Lead	mg/L	ND	ND	0.01*
Total Chromium	mg/L	ND	ND	0.05*

Note: Results related to sample as received.
* Acceptable limit.
** Permissible limit in the absence of alternate source.
ND: Not detected

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CENTRAL LABORATORY

Analysis Report

Reg. No.SR/05/TSPCB/HO/R00/LAB/2018/2337-2342
Collected on: 20/02/2018
Test method: Standard Methods of APHA, 22nd Edition
Issue date: 02/03/2018

Collected by: Sri Kumar Pathak, EE , RO, Medchal
Received on: 20/02/2018
Quantity of the sample: 1 Ltr. sample each
Page No.: 1 of 1

Source: Borewell samples (Monitoring of CEPI area – Kukatpally - by 3rd party appointed by CPCB).

Sample code : Sample details / collection point

2337 - M/s. Balaji Engineering, 19/B, Type – III, IE, Kukatpally, Medchal – Malkajgiri District.
2338 - M/s. SV Precision Instruments 11A, 11B, Type III IE, Kukatpally, Medchal- Malkajgiri District.
2339 - M/s. GEE PEE Electrospark Pvt. Ltd., Plot No.4B, Type –II, APIIC, Prashanthi Nagar, Kukatpally, Medchal-Malkajgiri District.
2340 - M/s. Subhash water services, 5-35, APIIC, IE, Prashanthinagar, IE, Kukatpally, Medchal – Malkajgiri District.
2341 - Sri P Ramesh (near Veeranjaneyaswamyatemple) D.No.4-133/B, Road no.9, Pragathinagar, Moosapet, Malkajgiri District.
2342 - Bhagyanagar School, Kukatpally village, Kukatpally, Medchal – Malkajgiri District.

Parameters	Unit	Results						Drinking water standards as per IS 10500: 2012
		2337	2338	2339	2340	2341	2342	
pH	-	6.75	6.42	6.7	6.75	6.82	6.7	6.5-8.5
Electrical conductivity	µS/cm	1,972	2,992	3,023	2,410	976	2,234	-
Total Dissolved Solids	mg/L	1,024	2,065	1,856	1,364	672	1,214	500* (2000**)
Chemical Oxygen Demand	mg/L	4	12	4	4	Nil	3	-
Total Alkalinity as CaCO3	mg/L	550	502	492	430	258	476	200* (600**)
Total Hardness as CaCO3	mg/L	452	1044	750	484	264	478	200* (600**)
Calcium as Ca+2	mg/L	95	182	196	124	90	118	75* (200**)
Magnesium as Mg+2	mg/L	52	143	63	42	9	44	30* (100**)
Chlorides as Cl^-	mg/L	211	489	517	331	91	220	250* (1000**)
Sulphates as SO_4^{-2}	mg/L	90	248	244	174	42	162	200* (400**)
Fluoride	mg/L	0.89	0.32	0.78	0.14	0.3	0.9	1.0* (1.5**)
Nitrates as NO_3	mg/L	12	31	32	34	36	37	45
Phosphates as PO_4^{-3}	mg/L	0.113	0.72	0.130	0.043	0.019	0.017	-
Sodium as Na	mg/L	232	192	370	270	72	322	-
Potassium as K	mg/L	3	2	2	4	5	4	-
Sulphide as H_2S	mg/L	ND	ND	ND	ND	ND	ND	0.05
Phenolic compounds	mg/L	ND	ND	ND	ND	ND	ND	0.001* (0.002**)
Oil and Grease	mg/L	ND	ND	ND	ND	ND	ND	-
Cyanide	mg/L	ND	ND	ND	ND	ND	ND	0.05
Heavy Metals								
Copper	mg/L	ND	ND	ND	ND	ND	0.1	0.05* (1.5**)
Nickel	mg/L	ND	ND	0.2	ND	ND	ND	0.02*
Zinc	mg/L	1.1	1.1	1.4	1	1.4	1.3	5* (15**)
Cadmium	mg/L	ND	ND	ND	ND	ND	ND	0.003*
Lead	mg/L	ND	ND	ND	ND	ND	ND	0.01*
Total Chromium	mg/L	ND	ND	ND	ND	ND	ND	0.05*

Note: Results related to sample as received.
* Acceptable limit.
** Permissible limit in the absence of alternate source.
ND: Not detected

(P.VEERANNA)
Joint Chief Environmental Scientist (FAC)

TELANGANA STATE POLLUTION CONTROL BOARD

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CENTRAL LABORATORY

Analysis Report

Reg. No.SR/05/TSPCB/HO/R00/LAB/2018/2343-2344
Collected on: 20/02/2018
Test method: Standard Methods of APHA, 22nd Edition
Issue date: 02/03/2018

Collected by: Sri Kumar Pathak, EE , RO, Medchal
Received on: 20/02/2018
Quantity of the sample: 1 Ltr. sample each
Page No.: 1 of 1

Source: Borewell samples. (Monitoring of CEPI area – Kukatpally - by 3rd party appointed by CPCB).

Sample code : Sample details / collection point

2343 - M/s. Keerthi Industries, Plot No.400 IE Balanagar, Medchal- Malkajgiri District

2344 - R/o. Sri M.Yadagiri chary back side of Rachamalla Industries, Rangareddynagar, Gandhinagar, Medchal-Malkajgiri District

Parameters	Unit	Results		Drinking water standards as per IS 10500: 2012
		2343	2344	
pH	-	6.92	6.4	6.5-8.5
Electrical conductivity	µS/cm	2,224	1,736	-
Total Dissolved Solids	mg/L	1,334	1,086	500* (2000**)
Chemical Oxygen Demand	mg/L	4	NIL	-
Total Alkalinity as CaCO3	mg/L	412	376	200* (600**)
Total Hardness as CaCO3	mg/L	484	580	200* (600**)
Calcium as Ca+2	mg/L	107	142	75* (200**)
Magnesium as Mg+2	mg/L	52	55	30* (100**)
Chlorides as Cl^-	mg/L	244	124	250* (1000**)
Sulphates as SO_4^{-2}	mg/L	330	360	200* (400**)
Fluoride	mg/L	0.05	0.9	1.0* (1.5**)
Nitrates as NO_3	mg/L	32	31	45
Phosphates as PO_4^{-3}	mg/L	0.06	0.037	-
Sodium as Na	mg/L	258	92	-
Potassium as K	mg/L	1.1	0.73	-
Sulphide as H_2S	mg/L	ND	ND	0.05
Phenolic compounds	mg/L	ND	ND	0.001* (0.002**)
Oil and Grease	mg/L	ND	ND	-
Cyanide	mg/L	ND	ND	0.05
Heavy Metals				
Copper	mg/L	ND	ND	0.05* (1.5**)
Nickel	mg/L	ND	ND	0.02*
Zinc	mg/L	1.4	0.9	5* (15**)
Cadmium	mg/L	ND	ND	0.003*
Lead	mg/L	ND	ND	0.01*
Total Chromium	mg/L	ND	ND	0.05*

Note: Results related to sample as received.
* Acceptable limit.
** Permissible limit in the absence of alternate source.
ND: Not detected

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Annexure - IV

TELANGANA STATE POLLUTION CONTROL BOARD

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CENTRAL LABORATORY

Analysis Report

Reg. No.SR/05/TSPCB/HO/R00/LAB/2018/2231-2232
Collected on: 13/02/2018
Test method: Standard Methods of APHA, 22nd Edition
Issue date: 22/02/2018

Collected by: Ch.Srinivas, Analyst Gr-I ,RO, Medchal
Received on: 15/02/2018
Quantity of the sample: 1 Ltr. sample each
Page No.: 1 of 1

Source: Lake samples (Monitoring of CEPI area – Kukatpally - by 3rd party appointed by CPCB).

Sample code : Sample details / collection point

2231 - Water sample collected from Rangadhamunilake, Kukatpally, Medchal – Malkajgiri District

2232 - Water sample collected from Chinnamysammacheruvu, Sevalalnagar, Kukatpally, Medchal – Malkajgiri District

Parameters	Unit	Results	
		2231	2232
pH	-	7.4	6.92
Electrical conductivity	µS/cm	1,492	1,554
Total Dissolved Solids	mg/L	818	832
Total Suspended Solids	mg/L	24	28
Chemical Oxygen Demand	mg/L	76	82
BOD 3 at 27°C	mg/L	17	19
Dissolved Oxygen	mg/L	4.3	4.1
Boron	mg/L	ND	ND
SAR	-	3.4	3.3
Sulphide as H_2S	mg/L	ND	1.8
Phenolic compounds	mg/L	ND	ND
Oil and Grease	mg/L	ND	ND
Cyanide	mg/L	ND	ND
T.Coli (MPN)	-	2,700	5,800
F. Coli (MPN)	-	NIL	250
Heavy Metals			
Copper	mg/L	ND	ND
Nickel	mg/L	ND	ND
Zinc	mg/L	0.2	0.1
Cadmium	mg/L	ND	ND
Lead	mg/L	ND	ND
Total Chromium	mg/L	ND	ND

Note: Results related to sample as received.
ND: Not detected

CPCB Water Quality Criteria					
Parameters	A	B	C	D	E
pH	6.5 – 8.5	6.5 – 8.5	6.0 – 9.0	6.5 – 8.5	6.0 – 8.5
Electrical conductivity	-	-	-	-	Max 2250
Dissolved oxygen	6 or >6	5 or >5	4 or >4	4 or >4	-
BOD 3 at 27°C	2 or < 2	3 or < 3	3 or < 3	-	-
SAR	-	-	-	-	Max 26
Boron	-	-	-	-	Max 2
Total coliform	50 or < 50	500 or < 500	5000 or < 5000	-	-

Water quality criteria as per CPCB: Below E: Not Meeting A,B,C,D & E Criteria.

(P.VEERANNA)
Joint Chief 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/2018/2233
Collected on: 13/02/2018
Test method: Standard Methods of APHA, 22nd Edition
Issue date: 22/02/2018

Collected by: Ch.Srinivas, Analyst Gr-I ,RO, Medchal
Received on: 15/02/2018
Quantity of the sample: 1 Ltr. sample each
Page No.: 1 of 1

Source:

Sample code : **Sample details / collection point**

2233 - Kukatpally Lake, Shanthinagar, Kukatpally (Village), Medchal – Malkajgiri District. (Monitoring of CEPI area – Kukatpally by 3rd party appointed by CPCB).

Parameters	Unit	Result (2233)
pH	-	6.4
Electrical conductivity	µS/cm	446
Total Dissolved Solids	mg/L	245
Total Suspended Solids	mg/L	60
Chemical Oxygen Demand	mg/L	72
Dissolved Oxygen	mg/L	3.1
BOD 3 at 27°C	mg/L	23
Boron	mg/L	ND
Sulphide as H_2S	mg/L	2.6
Phenolic compounds	mg/L	ND
Oil and Grease	mg/L	ND
Cyanide	mg/L	ND
SAR	-	1.2
T. Coliform	MPN	2,250
F. Coliform	MPN	Nil
Heavy Metals		
Copper	mg/L	ND
Nickel	mg/L	ND
Zinc	mg/L	0.2
Cadmium	mg/L	ND
Lead	mg/L	ND
Total Chromium	mg/L	ND

Note: Results related to sample as received.

ND: Not Detected

CPCB Water Quality Criteria					
Parameters	A	B	C	D	E
pH	6.5 – 8.5	6.5 – 8.5	6.0 – 9.0	6.5 – 8.5	6.0 – 8.5
Electrical conductivity	-	-	-	-	Max 2250
Dissolved oxygen	6 or >6	5 or >5	4 or >4	4 or >4	-
BOD 3 at 27°C	2 or < 2	3 or < 3	3 or < 3	-	-
SAR	-	-	-	-	Max 26
Boron	-	-	-	-	Max 2
Total coliform	50 or < 50	500 or < 500	5000 or < 5000	-	-

Water quality criteria as per CPCB: Below E: Not Meeting A,B,C,D & E Criteria.

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Joint Chief Environmental Scientist (FAC)

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CENTRAL LABORATORY

Analysis Report

Reg. No.SR/05/TSPCB/HO/R00/LAB/2018/2345-2346
Collected on: 20/02/2018
Test method: Standard Methods of APHA, 22nd Edition
Issue date: 02/03/2018

Collected by: Sri Kumar Pathak, EE , RO, Medchal
Received on: 20/02/2018
Quantity of the sample: 1 Ltr. sample each
Page No.: 1 of 1

Source: Lake Water samples.

Sample code : Sample details / collection point

2345 - Water sample collected from Rangadhamunilake, Kukatpally, Medchal – Malkajgiri District

2346 - Water sample collected from Chinnamysammacheruvu, Sevalalnagar, Kukatpally, Medchal – Malkajgiri District

Parameters	Unit	Results	
		2345	2346
pH	-	7.4	6.92
Electrical conductivity	µS/cm	1,434	1,552
Total Suspended Solids	mg/L	28	32
Total Dissolved Solids	mg/L	786	745
Chemical Oxygen Demand	mg/L	68	74
BOD 3 at 27°C	mg/L	15	18
Boron	mg/L	ND	ND
SAR	-	3.5	3.5
Sulphide as H_2S	mg/L	ND	1.6
Phenolic compounds	mg/L	ND	ND
Oil and Grease	mg/L	ND	ND
Cyanide	mg/L	ND	ND
T.Coli (MPN)	-	2,672	6,300
F. Coli (MPN)	-	NIL	215
Heavy Metals			
Copper	mg/L	ND	ND
Nickel	mg/L	ND	ND
Zinc	mg/L	0.1	0.14
Cadmium	mg/L	ND	ND
Lead	mg/L	ND	ND
Total Chromium	mg/L	ND	ND

Note: Results related to sample as received.
ND: Not detected.

CPCB Water Quality Criteria					
Parameters	A	B	C	D	E
pH	6.5 – 8.5	6.5 – 8.5	6.0 – 9.0	6.5 – 8.5	6.0 – 8.5
Electrical conductivity	-	-	-	-	Max 2250
Dissolved oxygen	6 or >6	5 or >5	4 or >4	4 or >4	-
BOD 3 at 27°C	2 or < 2	3 or < 3	3 or < 3	-	-
SAR	-	-	-	-	Max 26
Boron	-	-	-	-	Max 2
Total coliform	50 or < 50	500 or < 500	5000 or < 5000	-	-

Water quality criteria as per CPCB: Below E: Not Meeting A, B, C, D & E Criteria.

Remark: * DO Sample not collected.

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CENTRAL LABORATORY

Analysis Report

Reg. No.SR/05/TSPCB/HO/R00/LAB/2018/2347
Collected on: 20/02/2018
Test method: Standard Methods of APHA, 22nd Edition
Issue date: 02/03/2018

Collected by: Sri Kumar Pathak, EE , RO, Medchal
Received on: 20/02/2018
Quantity of the sample: 1 Ltr. sample each
Page No.: 1 of 1

Source:

Sample code : Sample details / collection point

2347 - Kukatpally Lake, Shanthinagar, Kukatpally (Village), Medchal – Malkajgiri District. (Monitoring of CEPI area – Kukatpally, carried out by 3rd party, appointed by CPCB)

Parameters	Unit	Result (2347)
pH	-	6.4
Electrical conductivity	µS/cm	442
Total Dissolved Solids	mg/L	238
Total Suspended Solids	mg/L	58
Chemical Oxygen Demand	mg/L	64
BOD 3 at 27°C	mg/L	21
Boron	mg/L	ND
Sulphide as H_2S	mg/L	2.4
Phenolic compounds	mg/L	ND
Oil and Grease	mg/L	ND
Cyanide	mg/L	ND
SAR	-	1.3
T. Coliform	MPN	2,140
F. Coliform	MPN	Nil
Heavy Metals		
Copper	mg/L	ND
Nickel	mg/L	ND
Zinc	mg/L	0.2
Cadmium	mg/L	ND
Lead	mg/L	ND
Total Chromium	mg/L	ND

Note: Results related to sample as received.
* Acceptable limit.
** Permissible limit in the absence of alternate source.

CPCB Water Quality Criteria					
Parameters	**A**	**B**	**C**	**D**	**E**
pH	6.5 – 8.5	6.5 – 8.5	6.0 – 9.0	6.5 – 8.5	6.0 – 8.5
Electrical conductivity	-	-	-	-	Max 2250
Dissolved oxygen	6 or >6	5 or >5	4 or >4	4 or >4	-
BOD 3 at 27°C	2 or < 2	3 or < 3	3 or < 3	-	-
SAR	-	-	-	-	Max 26
Boron	-	-	-	-	Max 2
Total coliform	50 or < 50	500 or < 500	5000 or < 5000	-	-

Water quality criteria as per CPCB: Below E: Not Meeting A,B,C,D & E Criteria.

Remark: * DO Sample not collected.

(P.VEERANNA)
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Annexure - V

TELANGANA STATE POLLUTION CONTROL BOARD

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CENTRAL LABORATORY

Analysis Report

Reg. No.SR/05/TSPCB/HO/R00/LAB/2018/2234
Collected on: 13/02/2018
Test method: Standard Methods of APHA, 22nd Edition
Issue date: 22/02/2018

Collected by: Ch.Srinivas, Analyst Gr-I ,RO, Medchal
Received on: 15/02/2018
Quantity of the sample: 1 Ltr. sample each
Page No.: 1 of 1

Source: M/s. IDPL (CETP), Balanagar, Medchal – Malkajgiri District.

Sample code : Sample details / collection point

2234 - Outlet of CETP. (Monitoring of CEPI area – Kukatpally - by 3rd party appointed by CPCB).

Parameters	Unit	Result (2234)	Discharge Standards As Per CFO Order
pH	-	7.2	5.5 – 9.0
Total Suspended Solids	mg/L	34	100
TDIS	mg/L	674	2,100
Chemical Oxygen Demand	mg/L	54	250
Sulphide as S^{-2}	mg/L	ND	2.8
Phenolic compounds	mg/L	ND	1.0
Oil and Grease	mg/L	ND	10
Cyanide	mg/L	ND	0.2
Heavy Metals			
Copper	mg/L	ND	3.0
Nickel	mg/L	ND	3.0
Zinc	mg/L	1.5	5
Cadmium	mg/L	ND	1.0
Lead	mg/L	ND	0.1
Total Chromium	mg/L	ND	2.0

Note: Results related to sample as received.

ND: Not Detected

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CENTRAL LABORATORY

Analysis Report

Reg. No.SR/05/TSPCB/HO/R00/LAB/2018/2348
Collected on: 20/02/2018
Test method: Standard Methods of APHA, 22nd Edition
Issue date: 02/03/2018

Collected by: Sri Kumar Pathak, EE , RO, Medchal
Received on: 20/02/2018
Quantity of the sample: 1 Ltr. sample each
Page No.: 1 of 1

Source: M/s. IDPL (CETP), Balanagar, Medchal – Malkajgiri District.

Sample code : Sample details / collection point

2348 - Outlet of CETP. (Monitoring of CEPI area – Kukatpally - by 3rd party appointed by CPCB).

Parameters	Unit	Result (2348)	Discharge Standards As Per CFO Order
pH	-	7.2	5.5 – 9.0
Total Suspended Solids	mg/L	42	
TDIS	mg/L	680	-
Chemical Oxygen Demand	mg/L	72	250
Sulphide as S_2^-	mg/L	ND	2.8
Phenolic compounds	mg/L	ND	1.0
Oil and Grease	mg/L	ND	10
Cyanide	mg/L	ND	0.2
Heavy Metals			
Copper	mg/L	ND	3.0
Nickel	mg/L	ND	3.0
Zinc	mg/L	1.4	5
Cadmium	mg/L	ND	1.0
Lead	mg/L	ND	0.1
Total Chromium	mg/L	ND	2.0

Note: Results related to sample as received.

ND: Not detected

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ANALYSIS RESULTS OF IDPL

Effluent quality data of M/s. IDPL (January to December 2018)

	INLET															OUTLET													
Parameters	pH	TSS	TDIS	COD	BOD	NH_3-N	Oil & Grease	Phenolic compounds	Boron	Nickel	Copper	Zinc	Lead	Cadmium	Chromium	pH	TSS	TDIS	COD	BOD	NH_3-N	Oil & Grease	Phenolic compounds	Boron	Nickel	Copper	Zinc	Lead	Cadmium	Chromium
Standards	5.50-9.00	-	5,000 mg/l	15,000 mg/l	-	50.00 mg/l	20 mg/l	5 mg/l	2 mg/l	3 mg/l	3 mg/l	15 mg/l	1 mg/l	1 mg/l	2 mg/l	5.50-9.00	100 mg/l	2100 mg/l	250 mg/l	30.00 mg/l	50.00 mg/l	10 mg/l	1 mg/l	2 mg/l	3 mg/l	3 mg/l	15 mg/l	0.1 mg/l	1 mg/l	2 mg/l
January	6.80	180	4826	3346	1027	28	2.0	2.7	BDL	ND	0.031	0.242	0.06	ND	ND	7.20	72	1070	104	9	6	BDL	BDL	BDL	ND	ND	0.024	0.005	ND	ND
February	7.14	209	4203	695	185	39	0.7	3.2	BDL	ND	0.034	0.256	0.058	ND	BDL	7.63	42	1338	149	13	17	BDL	BDL	BDL	ND	ND	0.037	0.005	ND	BDL
March	6.70	391	4810	1968	439	34	2.0	BDL	BDL	0.3	0.490	2.300	0.430	0.21	BDL	7.50	29	1103	118	10	28	BDL	BDL	BDL	BDL	BDL	0.900	BDL	BDL	BDL
April	7.32	449	4906	1977	441	39	1.6	2.0	BDL	0.28	0.320	1.900	0.210	0.19	BDL	7.12	23	1640	174	16	17	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
May	7.48	418	4258	2120	113	34	2.0	1.9	BDL	0.23	0.300	1.800	0.250	0.23	BDL	8.16	77	1022	100	9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
June	6.69	404	4452	455	119	34	0.3	BDL	BDL	0.2	0.700	1.400	BDL	0.05	BDL	7.10	32	1200	64	6	BDL	BDL	BDL	BDL	0.05	BDL	0.070	BDL	BDL	BDL
July	6.70	262	2358	890	260	39	0.7	BDL	BDL	ND	0.074	0.134	0.108	ND	ND	6.40	4	520	89	8	6	BDL	BDL	BDL	ND	ND	0.067	0.059	ND	ND
August	7.80	121	3648	465	132	22	BDL	BDL	BDL	ND	0.062	0.128	0.102	ND	ND	8.30	22	1196	107	11	BDL	BDL	BDL	BDL	ND	ND	0.058	0.063	ND	ND
September	6.90	248	3094	1184	308	28	0.9	BDL	BDL	ND	0.060	0.120	0.108	ND	ND	7.20	30	890	100	10	BDL	BDL	BDL	BDL	ND	ND	0.052	0.06	ND	ND
October	6.90	287	2642	1069	290	34	0.8	BDL	BDL	ND	0.050	0.140	0.102	ND	ND	7.20	12	1620	123	10	BDL	BDL	BDL	BDL	ND	ND	0.060	0.07	ND	ND
November	6.95	365	3522	1143	264	22	4	0.3	BDL	BDL	BDL	0.140	0.130	BDL	BDL	7.38	32	1538	160	14	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
December	7.40	422	4010	2208	495	45	4.8	BDL	BDL	BDL	0.100	0.100	0.100	BDL	BDL	7.70	38	828	120	10	6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Avg	7.07	313	3911	1460	339	33	1.8	2.0	BDL	0.25	0.203	0.722	0.151	0.17	BDL	7.41	34	1164	117	11	13	BDL	BDL	BDL	0.05	BDL	0.159	0.044	BDL	BDL

Note: All values are expressed in mg/L except pH.
BDL: Below detectable limit
ND: Not detected

Joint Chief Environmental Scientist (FAC)

TELANGANA STATE POLLUTION CONTROL BOARD

CENTRAL LABORATORY

Paryavarana Bhavan, I.E. A – 3, Sanathnagar, Hyderabad – 500 018

PM10 levels for the year 2018

PM_{10} in µg/m^3

S.NO	Station Name	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
1	Balanagar , CITD office	162	143	141	140	131	110	85	101	134	147	128	173
13	Kukatpally, JNTU	160	146	140	130	113	100	84	78	100	138	137	162

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Annexure - VI

TELANGANA STATE POLLUTION CONTROL BOARD

CENTRAL LABORATORY

Paryavarana Bhavan, I.E. A – 3, Sanathnagar, Hyderabad – 500 018

PM2.5 levels for the year 2018

$PM_{2.5}$ in µg/m^3

S.NO	Sampling Location	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
1	Balanagar , CITD office	50	54	56	54	55	56	50	42	49	53	69	54
7	Kukatpally, JNTU	65	57	59	56	57	61	-	-	-	-	-	-

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Paryavarana Bhavan, I.E. A – 3, Sanathnagar, Hyderabad – 500 018

Sulphur Dioxide levels for the year 2018

SO_2 in µg/m^3

S.NO	Sampling Location	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
1	Balanagar , CITD office	4.8	5.1	4.8	4.6	4.8	4.6	4.5	4.6	4.6	4.6	4.7	4.7
13	Kukatpally, JNTU	5.0	5.5	4.8	4.5	4.7	4.7	4.4	4.7	4.7	4.5	4.6	5.1

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TELANGANA STATE POLLUTION CONTROL BOARD

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Paryavarana Bhavan, I.E. A – 3, Sanathnagar, Hyderabad – 500 018

Oxides of Nitrogen levels for the year 2018

NO_x in $\mu g/m^3$

S.NO	Sampling Location	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
1	Balanagar , CITD office	40.5	36.2	35.7	34.0	32.9	30.2	31.8	29.1	31.0	35.8	33.1	62.8
13	Kukatpally, JNTU	38.1	35.7	34.1	35.4	34.9	32.0	29.6	26.5	32.4	34.9	37.4	47.5

Annexure -VII

TELANGANA STATE POLLUTION CONTROL BOARD

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CENTRAL LABORATORY

Analysis Report

Reg. No.SR/05/TSPCB/HO/R00/LAB/2018/3011-3014
Collected on: 28/02/2018
Test method: Standard Methods of APHA, 22nd Edition
Issue date: 09 /03/2018

Collected by: Kumar Pathak, EE, RO,Medchal
Received on: 02/03/2018
Quantity of the sample: 1 Ltr. sample each
Page No.: 1 of 1

Sample code	:	Sample details / collection point
3011	-	Inlet Samples collected from Pragathi Nagar 2.5 MLD STP
3012	-	Outlet Samples collected from Pragathi Nagar 2.5 MLD STP
3013	-	Inlet Samples collected from Rangadhamuni Lake 5 MLD STP
3014	-	Outlet Samples collected from Rangadhamuni Lake 5 MLD STP

Parameters	Unit	Results				STP standards
		3011	3012	3013	3014	
pH	-	6.97	7.49	7.48	7.41	5.5 - 9.0
Electrical conductivity	µS/cm	1940	1670	1750	1730	-
Total Suspended Solids	mg/L	283	32	179	24	100
Total Dissolved Solids	mg/L	854	695	1139	1006	-
Dissolved oxygen	mg/L	-	Nil	-	2.6	-
Chemical Oxygen Demand	mg/L	492	189	206	113	250
BOD 3 at 27°C	mg/L	150	48	62	31	30
Total coliform	MPN/100ml	-	14,875	-	Nil	-
Fecal coliform	MPN/100ml	-	Nil	-	Nil	-

Note: Results related to sample as received.

(P.VEERANNA)
Joint Chief Environmental Scientist (FAC)

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

TELANGANA STATE POLLUTION CONTROL BOARD

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CENTRAL LABORATORY

Analysis Report

Reg. No.SR/05/TSPCB/HO/R00/LAB/2018/3017-3018
Collected on: 28/02/2018
Test method: Standard Methods of APHA, 22nd Edition
Issue date: 09 /03/2018

Collected by: Kumar Pathak, EE, RO,Medchal
Received on: 02/03/2018
Quantity of the sample: 1 Ltr. sample each
Page No.: 1 of 1

Sample code : Sample details / collection point

3017 - Inlet Samples collected from Khazakunta 12 MLD STP

3018 - Outlet Samples collected from Khazakunta 12 MLD STP

Parameters	Unit	Results		STP standards
		3017	3018	
pH	-	7.41	7.43	5.5 - 9.0
Electrical conductivity	µS/cm	1890	1870	-
Total Suspended Solids	mg/L	123	14	100
Total Dissolved Solids	mg/L	1201	1002	-
Dissolved oxygen	mg/L	-	4.5	-
Chemical Oxygen Demand	mg/L	391	105	250
BOD 3 at 27°C	mg/L	126	25	30
Total coliform	MPN/100ml	-	1875	-
Fecal coliform	MPN/100ml	-	Nil	-

Note: Results related to sample as received.

(P.VEERANNA)
Joint Chief Environmental Scientist (FAC)

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

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CENTRAL LABORATORY

Analysis Report

Reg. No.SR/05/TSPCB/HO/R00/LAB/2018/3182-3185
Collected on: 12/03/2018
Test method: Standard Methods of APHA, 22nd Edition
Issue date: 19 /03/2018

Collected by: Kumar Pathak, EE, RO,Medchal
Received on: 12/03/2018
Quantity of the sample: 1 Ltr. sample each
Page No.: 1 of 1

Sample code : Sample details / collection point

3182 - Inlet Samples collected from Pragathi Nagar 2.5 MLD STP
3183 - Outlet Samples collected from Pragathi Nagar 2.5 MLD STP
3184 - Inlet Samples collected from Rangadhamuni Lake 5 MLD STP
3185 - Outlet Samples collected from Rangadhamuni Lake 5 MLD STP

Parameters	Unit	Results				STP standards
		3182	3183	3184	3185	
pH	-	6.62	7.03	6.93	7.28	5.5 - 9.0
Electrical conductivity	µS/cm	1868	2128	2072	1998	-
Total Suspended Solids	mg/L	178	32	205	15	100
Total Dissolved Solids	mg/L	897	831	635	790	-
Dissolved oxygen	mg/L	-	Nil	-	-	-
Chemical Oxygen Demand	mg/L	250	140	246	140	250
BOD 3 at 27°C	mg/L	102	37	74	26	30
Total coliform	MPN/100ml	-	20,000	-	27,500	-
Fecal coliform	MPN/100ml	-	Nil	-	Nil	-

Note: Results related to sample as received.

(P.VEERANNA)
Joint Chief Environmental Scientist (FAC)

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

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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/2018/3449-3450
Collected on: 31/03/2018
Test method: Standard Methods of APHA, 22nd Edition
Issue date: 09/03/2018

Collected by: Kumar Pathak, EE, RO,Medchal
Received on: 31/03/2018
Quantity of the sample: 1 Ltr. sample each

Sample code : Sample details / collection point

3449 - Inlet Samples collected from Khazakunta 12 MLD STP

3450 - Outlet Samples collected from Khazakunta 12 MLD STP

Parameters	Unit	Results		STP standards
		3449	3450	
pH	-	6.51	6.89	5.5 - 9.0
Electrical conductivity	µS/cm	1717	1692	-
Total Suspended Solids	mg/L	184	<4	100
Total Dissolved Solids	mg/L	995	921	-
Dissolved oxygen	mg/L	-	4.5	-
Chemical Oxygen Demand	mg/L	326	140	250
BOD 3 at 27°C	mg/L	119	42	30
Total coliform	MPN/100ml	-	250	-
Fecal coliform	MPN/100ml	-	Nil	-

Note: Results related to sample as received.

(P.VEERANNA)
Joint Chief Environmental Scientist (FAC)

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