

# TELANGANA STATE POLLUTION CONTROL BOARD, CENTRAL LAB, HYDERABAD

ANALYSIS RESULTS OF HUSSAINSAGAR LAKE BEFORE, DURING AND AFTER IMMERSION OF GANESH IDOLS IN SEPTEMBER., 2019

Location: Opposite to NTR Park at Platform No.1

Parameters	Before	During immersion					After	CPCB Water Quality Criteria
	26.08.2019	*03.09.2019	05.09.2019	08.09.2019	11.09.2019	**12.09.2019	20.09.2019	
pH	7.98	8.10	8.10	7.85	8.16	7.32	7.6	6.0-9.0
Turbidity	27	69	97	69	43	31	24	-
Electrical Conductivity ( $\mu$ mhos/cm)	1386	1360	1373	1359	1380	1371	1437	Max - 2250 $\mu$ mhos/cm
Total Dissolved Solids (TDS) (mg/L)	826	724	765	756	851	806	754	-
Total Suspended Solids (TSS) (mg/L)	75	62	118	38	72	69	41	0
Chemical Oxygen Demand (COD) (mg/L)	141	79	104	93	100	120	93	-
Biochemical Oxygen Demand (BOD) (mg/L)	38	23	31	28	43	36	20	Max - 3 mg/L
Dissolved Oxygen (DO) (mg/L)	6.4	5.8	4.3	2.9	2.4	2.1	3.3	Min - 4 mg/L
Total Coli (MPN/100ml)	>1600	>1600	>1600	>1600	>1600	1600	1600	50 - 5000 MPN/100 ml
Faecal Coli (MPN/100ml)	350	280	350	350	280	350	920	-
Heavy Metals								
Chromium (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
Copper (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
Zinc (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
Lead (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-

Note: All values are expressed in mg/L except pH, Turbidity, Electrical Conductivity, Total coli and Faecal coli:

BDL - Below detectable limit

\* Ganesh Festival Celebrated on 02-09-2019

\*\* Final Ganesh Immersion on 12-09-2019



Joint Chief Environmental Scientist (FAC)

**TELANGANA STATE POLLUTION CONTROL BOARD, CENTRAL LAB, HYDERABAD**  
ANALYSIS RESULTS OF HUSSAINSAGAR LAKE BEFORE, DURING AND AFTER IMMERSION OF GANESH IDOLS IN SEPTEMBER., 2019

Location: Opposite to NTR Park at Platform No.2

Parameters	Before	During immersion					After	CPCB Water Quality Criteria
	26.08.2019	*03.09.2019	05.09.2019	08.09.2019	11.09.2019	**12.09.2019	20.09.2019	
pH	7.92	7.90	8.00	7.85	8.05	7.90	7.8	6.0-9.0
Turbidity	30	76	74	69	62	54	39	-
EC ( $\mu$ mhos/cm)	1410	1382	1403	1359	1395	1402	1598	Max - 2250 $\mu$ mhos/cm
TDS (mg/L)	795	766	777	756	816	845	832	-
TSS (mg/L)	68	78	149	38	84	83	58	-
COD (mg/L)	181	131	116	93	124	181	113	-
BOD (mg/L)	45	33	35	28	62	54	25	Max - 3 mg/L
DO (mg/L)	3.1	3.2	2.8	2.9	2.2	2.2	2.7	Min - 4 mg/L
Total Coli (MPN/100ml)	1600	>1600	>1600	>1600	>1600	>1600	>1600	50 - 5000 MPN/100 ml
Faecal Coli (MPN/100ml)	94	350	540	430	430	540	540	-
<b>Heavy Metals</b>								
Chromium (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
Copper (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
Zinc (mg/L)	BDL	BDL	BDL	BDL	BDL	0.251	BDL	-
Lead (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-

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\*\* Final Ganesh Immersion on 12-09-2019



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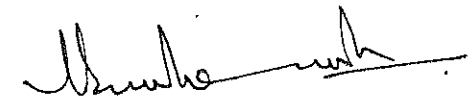
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ANALYSIS RESULTS OF HUSSAINSAGAR LAKE BEFORE, DURING AND AFTER IMMERSION OF GANESH IDOLS IN SEPTEMBER., 2019

Location: Near Lumbini Park

Parameters	Before	During immersion					After	CPCB Water Quality Criteria
	26.08.2019	*03.09.2019	05.09.2019	08.09.2019	11.09.2019	**12.09.2019	20.09.2019	
pH	7.80	8.20	7.90	7.75	8.05	8.15	8.0	6.0-9.0
Turbidity	27	58	66	101	58	46	35	-
EC ( $\mu$ mhos/cm)	1405	1355	1443	1356	1403	1352	1573	Max - 2250 $\mu$ mhos/cm
TDS (mg/L)	840	764	820	812	808	856	818	-
TSS (mg/L)	73	72	148	52	78	41	44	-
COD (mg/L)	129	87	140	102	144	132	85	-
BOD (mg/L)	34	21	42	26	58	40	19	Max - 3 mg/L
DO (mg/L)	4.1	4.0	2.1	2.0	3.5	3.0	6.0	Min - 1 mg/L
Total Coli (MPN/100ml)	540	1600	1600	1600	1600	920	1600	50 - 5000 MPN/100 ml
Faecal Coli (MPN/100ml)	79.0	220	280	280	350	220	430	-
<b>Heavy Metals</b>								
Chromium (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
Copper (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
Zinc (mg/L)	BDL	BDL	0.107	BDL	BDL	0.117	BDL	-
Lead (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-

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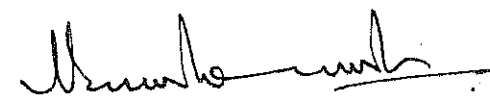
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ANALYSIS RESULTS OF HUSSAINSAGAR LAKE BEFORE, DURING AND AFTER IMMERSION OF GANESH IDOLS IN SEPTEMBER., 2019

Location: Near Lepakshi Handicrafts – Near immersion point

Parameters	Before	During immersion					After	CPCB Water Quality Criteria
	26.08.2019	*03.09.2019	05.09.2019	08.09.2019	11.09.2019	**12.09.2019	20.09.2019	
pH	7.80	8.20	8.00	7.70	8.02	7.96	7.8	6.0-9.0
Turbidity	21	58	96	57	33	30	33	-
EC (µmhos/cm)	1400	1377	1356	1351	1362	1350	1559	Max - 2250 µmhos/cm
TDS (mg/L)	848	725	662	703	729	740	838	-
TSS (mg/L)	39	48	102	50	59	50	49	-
COD (mg/L)	125	99	144	114	140	153	101	-
BOD (mg/L)	34	24	43	29	42	46	24	Max - 3 mg/L
DO (mg/L)	1.0	1.5	3.1	3.4	2.9	1.8	3.8	Min - 1.5 mg/L
Total Coli (MPN/100ml)	920	>1600	1600	>1600	>1600	>1600	>1600	50 - 5000 MPN/100 ml
Faecal Coli (MPN/100ml)	140	540	170	540	430	350	350	-
<b>Heavy Metals</b>								
Chromium (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
Copper (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
Zinc (mg/L)	0.2	BDL	BDL	BDL	BDL	BDL	BDL	-
Lead (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-

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 ANALYSIS RESULTS OF HUSSAINSAGAR LAKE BEFORE, DURING AND AFTER IMMERSION OF GANESH IDOLS IN SEPTEMBER., 2019

Location: At Necklace Road

Parameters	Before	During immersion					After	CPCB Water Quality Criteria
	26.08.2019	*03.09.2019	05.09.2019	08.09.2019	11.09.2019	**12.09.2019	20.09.2019	
pH	8.00	7.90	7.90	7.81	8.16	7.95	7.6	6.0-9.0
Turbidity	12	55	60	60	44	43	19	-
EC ( $\mu$ mhos/cm)	1393	1368	1336	1338	1340	1338	1555	Max - 2250 $\mu$ mhos/cm
TDS (mg/L)	862	708	817	718	740	798	822	-
TSS (mg/L)	40	66	125	53	60	41	50	-
COD (mg/L)	137	91	88	106	108	149	98	-
BOD (mg/L)	38	23	26	27	32	45	23	Max - 3 mg/L
DO (mg/L)	5.6	1.7	2.2	3.1	3.9	3.2	0.1	Min - 1 mg/L
Total Coli (MPN/100ml)	>1600	>1600	>1600	>1600	>1600	>1600	>1600	50 - 5000 MPN/100 ml
Faecal Coli (MPN/100ml)	170	350	540	220	540	430	540	-
<b>Heavy Metals</b>								
Chromium (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
Copper (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
Zinc (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
Lead (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-

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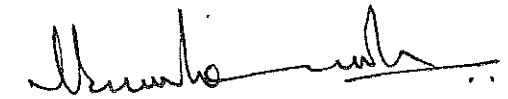
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Location: Near Budha Statue (midstream) – Control point

Parameters	Before	During immersion					After	CPCB Water Quality Criteria
	26.08.2019	*03.09.2019	05.09.2019	08.09.2019	11.09.2019	**12.09.2019	20.09.2019	
pH	7.8	8.0	7.9	7.7	8.0	7.9	7.8	6.0-9.0
Turbidity	21	63	84	57	30	35	27	-
EC ( $\mu$ mhos/cm)	1400	1374	1354	1342	1346	1357	1573	Max - 2250 $\mu$ mhos/cm
TDS (mg/L)	755	720	666	709	737	752	815	-
TSS (mg/L)	43	64	79	55	56	47	38	-
COD (mg/L)	125	95	112	110	116	141	64	-
BOD (mg/L)	35	22	34	28	35	42	12	Max - 3 mg/L
DO (mg/L)	2.9	1.4	1.9	2.5	2.0	2.8	3.5	Min - 1 mg/L
Total Coli (MPN/100ml)	1600	1600	>1600	920	1600	1600	>1600	50 - 5000 MPN/100 ml
Faecal Coli (MPN/100ml)	140	350	350	280	350	280	540	-
<b>Heavy Metals</b>								
Chromium (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
Copper (mg/L)	BDL	BDL	0.624	BDL	BDL	BDL	BDL	-
Zinc (mg/L)	BDL	BDL	0.197	BDL	BDL	0.112	0.114	-
Lead (mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-

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