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Kolhapur Municipal Corporation

**BEFORE THE NATIONAL GREEN TRIBUNAL
WESTERN ZONE BENCH, PUNE**

**EXECUTION APPLICATION NO. 23 OF 2023 (WZ)
IN
ORIGINAL APPLICATION NO. 124 OF 2022 (WZ)**

**SELF ASSESSMENT OF ENVIRONMENTAL DAMAGE
COMPENSATION OF KOLHAPUR MUNICIPAL CORPORATION**

NOVEMBER 2024

**BEFORE THE NATIONAL GREEN TRIBUNAL, WESTERN ZONE
BENCH PUNE**

Application No. 23/2023

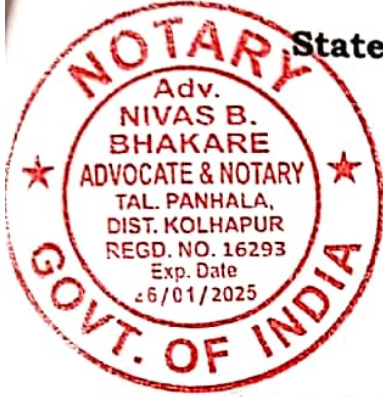
Vrinda Basu

-----Applicant

V/S

State of Maharashtra,

-----Respondent



**Affidavit in compliance of order dated
14.08.2024 and 04.11.2024 on behalf of
Kolhapur Municipal Corporation.**

I, Pandit Khandu Patil age 48 years, Occupation service, Deputy Commissioner (II) of Kolhapur Municipal Corporation (KMC), Kolhapur, do hereby state on solemn affirmation as under.

With reference to the order passed by Hon. NGT in the matter of O/A 23/2023 Vrinda Basu V/S State and Others, herewith we are submitting self assessment of environmental damage compensation of Kolhapur municipal corporation.

I. BACKGROUND

A. GEOGRAPHICAL STATUS OF KOLHAPUR MUNICIPAL CORPATION.

Kolhapur municipal corporation city is situated on the banks of the river Panchaganga. The geographical location of Kolhapur city is towards the Western side of Maharashtra state and the city is situated at the height of 580 m. above the mean sea level. Kolhapur city has flow from South to north direction and all the nalas flowing in the City are flowing towards river panchganga. The total area of Kolhapur city is 6682 ha. River panchganga is flowing from west side to north side

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and then towards east side of the city. City have major lakes viz. rankala lake, kotitirth Lake, rajaram lake and kalamba Lake etc. The maps showing geographical status of city are attached herewith as annexure-I.

B. RAINFALL AND STORM WATER

The average rainfall at Kolhapur rain-gauge station is 1025 mm. But in five years of last 7 years, the rainfall is exceeding the average. So the surface and subsurface runoff is contributing the flow in nalas till end of January month each year. Also the overflow and percolation from water bodies like kalamba lake, rankala lake, lakshtirth lake, new palace Lake and kotitirth Lake etc is also contributing to the flow in nalas. The excess rainfall is flowing through nalas as storm water, so not as pollution causing wastewater. City has faced severe flood in 2019, 2021 and 2024 . Rainfall data is attached here with as annexure-II.

C. WATER BODIES IN CITY.

River panchganga is flowing from west side to north side and then towards east side of the city. City have major lakes viz. kalamba lake, rankala lake, rajaram lake, lakshtirth lake, new palace Lake and kotitirth Lake etc.

D. PERIPHERAL VILLAGES AND ITS POPULATION.

Kolhapur municipal corporation is surrounded with villages like uchgaav, kalamba, morewadi, pachgaav, shinganapur, padali etc. The population of these villages is near about 1,25,000 and Kolhapur city nalas receiving nearly 18MLD waste water from these villages.

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II. CURRENT STATUS.

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A. NALAS AND THEIR PROPERTIES

S N	NAME OF NALA	LENGTH OUTSIDE CITY (KM)	LENGTH IN CITY (KM)	TOTAL LENGTH (KM)	WASTE WATER FLOW MLD	CATCHMENT AREA (Ha)	CURRENT STATUS
1	Shinganapur	1.5	1	2.5	0.2	1447.87	Primary treatment is being done.
2	Padali- Fulewadi	2	2	4	0.3	260.23	Primary treatment is being done.
3	Dudhali	-	3	3	17.6	1210	Treated in STP
4	Juna Budhwar	-	0.3	0.3	0.2	26.61	Connected to underground line and treated in STP.
5	CPR	-	0.2	0.2	0.2	20.21	
6	Kalamba Jayanti	7	6	13	59.5	2446.62	Treated in STP. part of Wastewater coming from villages like kalamba, morewadi, pachgaav.
7	Morewadi- Gomati.	4	4	8	16.9	1140	Merges in Jayanti Nala. Treated in STP.
8	Rajhans	-	1.5	1.5	3.8	106.82	I&D work is at final stage of completion.
9	Polo ground	-	1	1	0.3	125.82	
10	Raman mala	-	1	1	0.5	125.82	
11	Line bazar	-	2.5	2.5	7	166.01	Treated in STP
12	Chhatrapati colony	-	0.8	0.8	0.2	131.09	I&D work is in progress. Primary treatment is being done.
13	Kasaba bawada bapat camp	-	0.8	0.8	0.5	982.83	Treated in STP
14	Bapat camp	-	5	5	9	592.83	
15	Uchgaav vitbhatti	3	1.5	4.5	1.5	217.33	To be diverted to STP under AMRUT-II. Primary treatment is being done.
Total		17.5	30.6	48.1	117.7	9000.09	

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PERIPHERAL VILLAGES WASTE WATER QUANTITY CHART

S N	NAME OF NALA	PERIPHERAL VILLAGE WASTE WATER (MLD)
1	Shinganapur	0.2
2	Padali-Fulewadi	0.3
6	Kalamba Jayanti	9.0
7	Morewadi-Gomati.	7.0
15	Uchgaav vitbhatti	1.5
<u>TOTAL</u>		<u>18.0</u>

As mentioned in the above tables, along with the sewage water the majority of the waste water in the nalas are diverted to the STP for treatment.

B. PRIMARY TREATMENT

- i. Removing floating material - Kolhapur municipal corporation is continuously removing floating material on Nalas flowing in the City as a primary treatment. The material removed from the Nalas is send for treatment in solid waste processing facility.
- ii. Bleaching - Kolhapur municipal corporation is continuously treating the Nalas with the dose of bleaching powder as a primary treatment. This disinfects the waste water flowing in the Nala.
- iii. Phytoremediation - Kolhapur municipal corporation is continuously doing Phytoremediation on all the nalas flowing in the City as a primary treatment.
- iv. Agriculture use - as the majority of the area near by the river Panchaganga is still used for agriculture purpose, the water flowing in the Nalas is used for watering of the crops in the agricultural land.

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C. STATUS OF THE STP'S

- i. 76 MLD STP - is constructed near kasaba bawada area and is functional from year 2014. This STP is operational with 10% additional treatment capacity.
- ii. 17 MLD STP - is constructed near dudhali area and is functional from year 2017. This STP is operational with 10% additional treatment capacity.
- iii. 4 MLD STP - is constructed near 76 MLD STP at kasaba bawada area and is functional from year 2023. This STP is operational with 10% additional treatment capacity.
- iv. 6 MLD STP - is under construction near 17 MLD STP at dudhali and planned to be completed and operational from December 2024.

TREATMENT CAPACITY OF STPs

S N	Name of STP	Capacity in MLD	Additional 10% capacity in MLD	Total capacity	Remark
1	Kasaba Bawada STP	76.00	7.60	83.60	presently in working condition
2	Dudhali STP	17.00	1.70	18.70	presently in working condition
3	Kasaba Bawada STP	4.00	0.40	4.4	presently in working condition
Total		97.00	9.70	106.7	-
4	Dudhali STP	6.00	0.60	6.60	Expected to be completed by December 2024
Total		103.00	10.30	113.30	-

The work of 6 MLD STP is delayed due to natural calamities mentioned below

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- Flood in 2019, 2021 and 2024 (The location of STP is in flood prone area)
- Nationwide lock down imposed due to Global pandemic corona from March 2020

Currently erection work of mechanical components is completed. Electromechanical work is in progress and work is expected to be completed by December 2024.

D. INBUILT STP'S FOR TOWNSHIPS, APARTMENTS, HOTELS AND HOSPITALS.

As per prevailing by-laws and as per the UDCPR by-laws under section 13.4.1 as per the area proposed in the construction the STP's are proposed. In Kolhapur municipal corporation area 70 building permissions are given with provision of STPs.

E. WORKS PROPOSED UNDER AMRUT -II SCHEME

New direct Kalamawadi water supply scheme for Kolhapur city is recently commissioned. Considering this Kolhapur Municipal corporation has prepared 4 sewerage management DPRs to cater to future demand of waste water as mentioned below.

SN	Name of zone	Cost in Cr.	Length of Sewerage system	No of pumping station	No of S.T.P.'s & capacity	Present status
1	Jayanti	51.13	37 km	1	1 no, 9 MLD	Contractor has been finalized and work order has been issued.
2	Dudhali	57.32	13 km	3	1 no, 19.50 MLD	
3	Line Bazaar	31.96	26 km	1	-	
4	Bapat Camp	139.21	56.76 km	1	1 no, 15 MLD	
Total		279.62				

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III. SELF ASSESSMENT

S N	EDC CALCULATED BY MPCB	SELF ASSESSMENT BY KMC	REMARK
1	14,40,00,000/- For 6 Nalas @Rs. 5 Lakh per month for 48 months.	0/-	No any sewage water is flowing in the nalas. Also Kolhapur municipal corporation has already started work of interception and diversion of waste water from nalas to the STP for treatment, which will be completed in coming months so no waste water will be entering into the river. Meanwhile, KMC is continuously treating wastewater in nalas by bleaching dosing and Phytoremediation as a primary treatment. Also floating material is continuously being removed from the nalas as a primary treatment. (Annexure-IV)
2	9,60,00,000/- for commencement of setting up of 4 STPs @Rs. 5 Lakh per month for 48 months.	0/-	There are total 3 STPs (76MLD, 17MLD & 4MLD) being continuously run by KMC with 10% additional treatment capacity. Before 1 st april 2020, Kolhapur Municipal Corporation had total capacity of 102.3MLD which is more than the sewage generated in the city. Now, Kolhapur Municipal Corporation have total treatment capacity of STP of 106.7 MLD which is also more than the sewage generated in the city. As per the
3	14,40,00,000/- for commissioning of 4 STPs @Rs. 10 Lakh per month for 36	0/-	

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months.		CPCB reports of water quality monitoring programme in 2020 and 2021, the reports of BOD at the upstream and downstream location of river panchaganga in Kolhapur municipal corporation stretch is less than 3 Mg/L, which shows Kolhapur municipal corporation is not causing pollution of the river panchaganga.(Annexure- V)
38,40,00,000/-	0/-	Total

IV. SUBMISSION

1. In five years of last 7 years, the rainfall is exceeding the average rainfall. So the surface and subsurface runoff is contributing the flow in nalas till end of January month each year. Also the overflow and percolation from water bodies like kalamba lake, rankala lake, lakshtirth lake, new palace Lake and kotitirth Lake etc is also contributing to the flow in nalas. So, this water in the nalas is not polluting the river.
2. KMC is continuously treating wastewater in nalas by bleaching dosing and Phytoremediation as a primary treatment. Also floating material is continuously being removed from the nalas. No nala is flowing directly into the river Panchaganga without any treatment.
3. One STP having treatment capacity of 6MLD is under construction for which work is delayed due to natural calamities like Flood in 2019, 2021 and 2024 (The location of STP is in flood prone area) and Nationwide lock down imposed due to Global pandemic corona from March 2020. Construction of this STP is hampered every year due to flood situation near dudhali area.

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4. Kolhapur municipal corporation is treating wastewater generated by nearby villages which is flowing in the nalas in the municipal area. The fact that waste water is coming from nearby villages in nalas is communicated to Zilla Parishad of Kolhapur time to time.
5. There are total 3 STPs (76MLD, 17MLD & 4MLD) being continuously run by KMC with 10% additional treatment capacity and treated water parameter never been exceeded the standard limits of treated water.
6. There are total 64 bandhara's constructed over 338km stretch of rivers. So, irrigation department of Kolhapur should maintain the flow in river Panchaganga so as not to cause pollution in the river.
7. As per prevailing by-laws and as per the UDCPR by-laws under section 13.4.1 as per the area proposed in the construction the STP's are proposed. In Kolhapur municipal corporation 70 building permissions are given with provision of STPs. So, treated water from STP is discharged in the nalas which is not causing any pollution in the river Panchaganga.
8. Kolhapur municipal corporation is taking samples of the nalas before and after bleaching as a primary treatment for disinfection. Also KMC is testing STP treated water and parameters are never been exceeded the desired values.
9. Under AMRUT-II project, remaining area of the city which was unsewered has been taken care off so that after completion of the project 100% city area will be sewerred & for this additional 3 STPs having total capacity of 43.5 MLD has been proposed for which work order has been issued to the contractor.

Kolhapur Municipal Corporation is taking serious efforts to reduce the pollution of river Panchaganga by means of operating SBR based advanced STPs of 76 MLD from December 2014, 17 MLD from

1 July 2017 and 4 MLD from 16 December 2023 continuously on long term basis which nearly costs Rs. 60 lakhs per month for operation and maintenance to Kolhapur Municipal Corporation. Also Kolhapur Municipal Corporation has already invested Rs. 21 Cr towards own funding of AMRUT-I scheme and putting Rs. 91 Cr towards own funding of AMRUT-II scheme. Also Kolhapur Municipal Corporation is following guidelines and directions issued by Hon. High court, Hon. National Green tribunal, state government and pollution control boards to reduce the pollution of river panchaganga.

The permissible standards of the effluent wastewater have not exceeded the permissible limits for the period mentioned in penalty imposed (Annexure-III) & hence Kolhapur Municipal Corporation is not liable for the penalty calculated by MPCB Board. Although Kolhapur Municipal Corporation is a nonprofit public service institution and having tight financial situation, Kolhapur Municipal Corporation has been prioritizing treatment of wastewater and curbing pollution in Panchaganga River.

Hence we humbly request Hon. Court to kindly consider our plead regarding submission and facts presented by Kolhapur municipal corporation towards self assessment of Rs. 0/- with respect to environmental damages compensation.

J. H. H. H.
Deputy Commissioner (II)
Kolhapur Municipal Corporation

Annexure Attached -

Annexure - I	KOLHAPUR CITY BASIN MAPS
Annexure- II	RAINFALL DATE YEAR 2018-2024
Annexure- III	LATEST STP AND NALA WATER TESTING REPORTS
Annexure- IV	BLEACHING AND PHYTOREMEDIATION PHOTOS
Annexure- V	CPCB reports of water quality monitoring programme in 2020 and 2021

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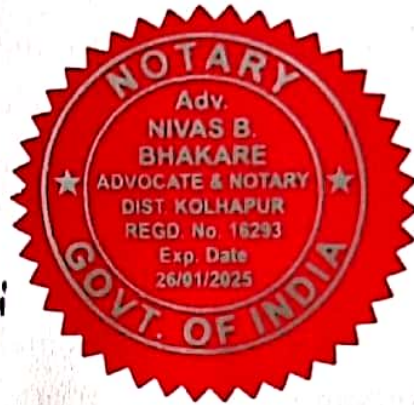
SOLEMNLY affirmed before me

by Pandit Khandu Patil
At: Shindewadi (AR4)

Who is identified before me
by Aadhar card
Whom I personally know

This 22nd day of Nov 2024

Tal:- Miraj.
Dist:- Sangali



Nivas B. Bhakare

NIVAS B. BHAKARE
Advocate & Notary
Mitharwadi, Post. Ambavade,
Tal. Panhala, Dist. Kolhapur.

Notary Regi. Sr. No. 4178

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 भारत सरकार
GOVERNMENT OF INDIA

माझे आधार, माझी ओळख

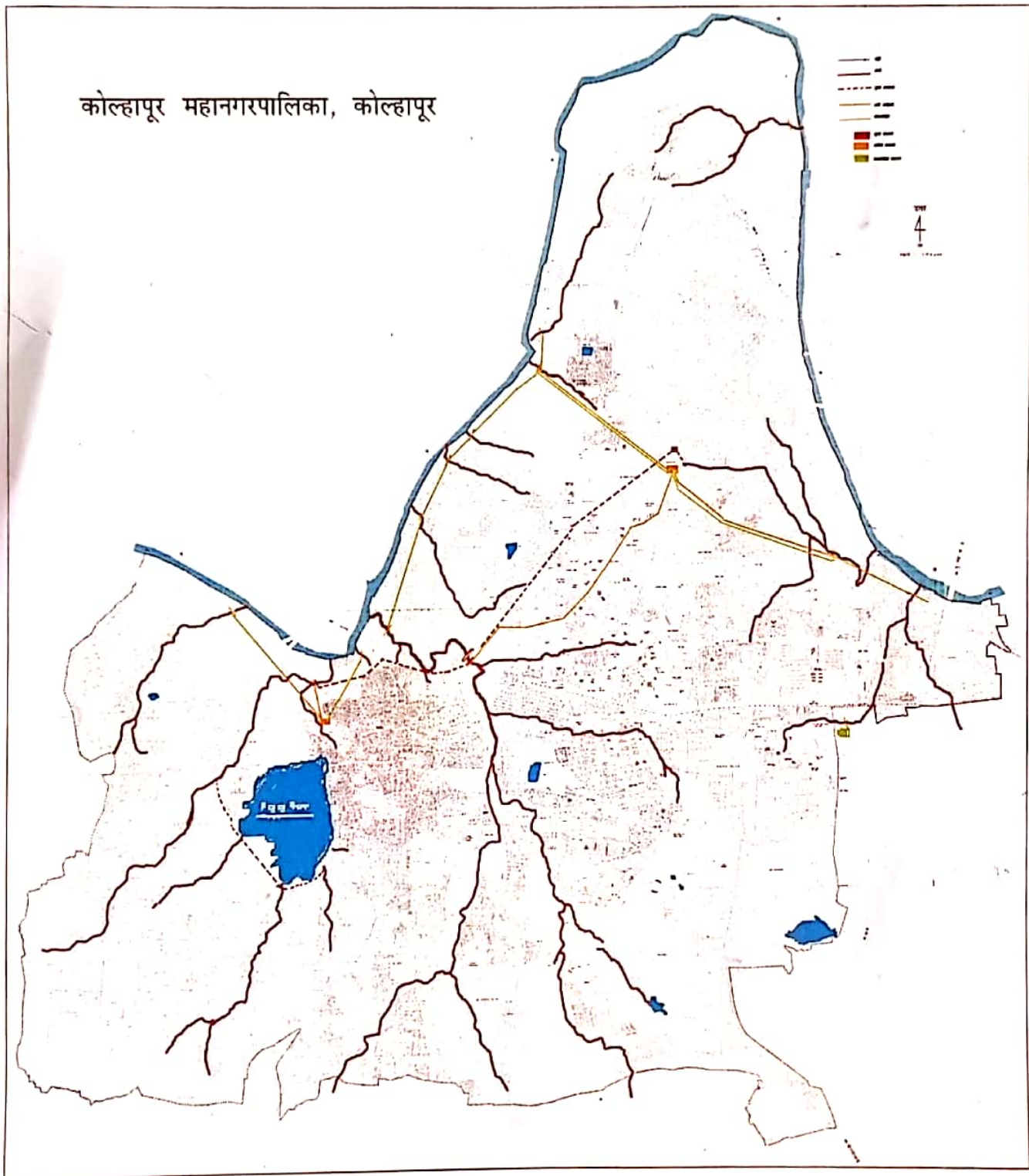
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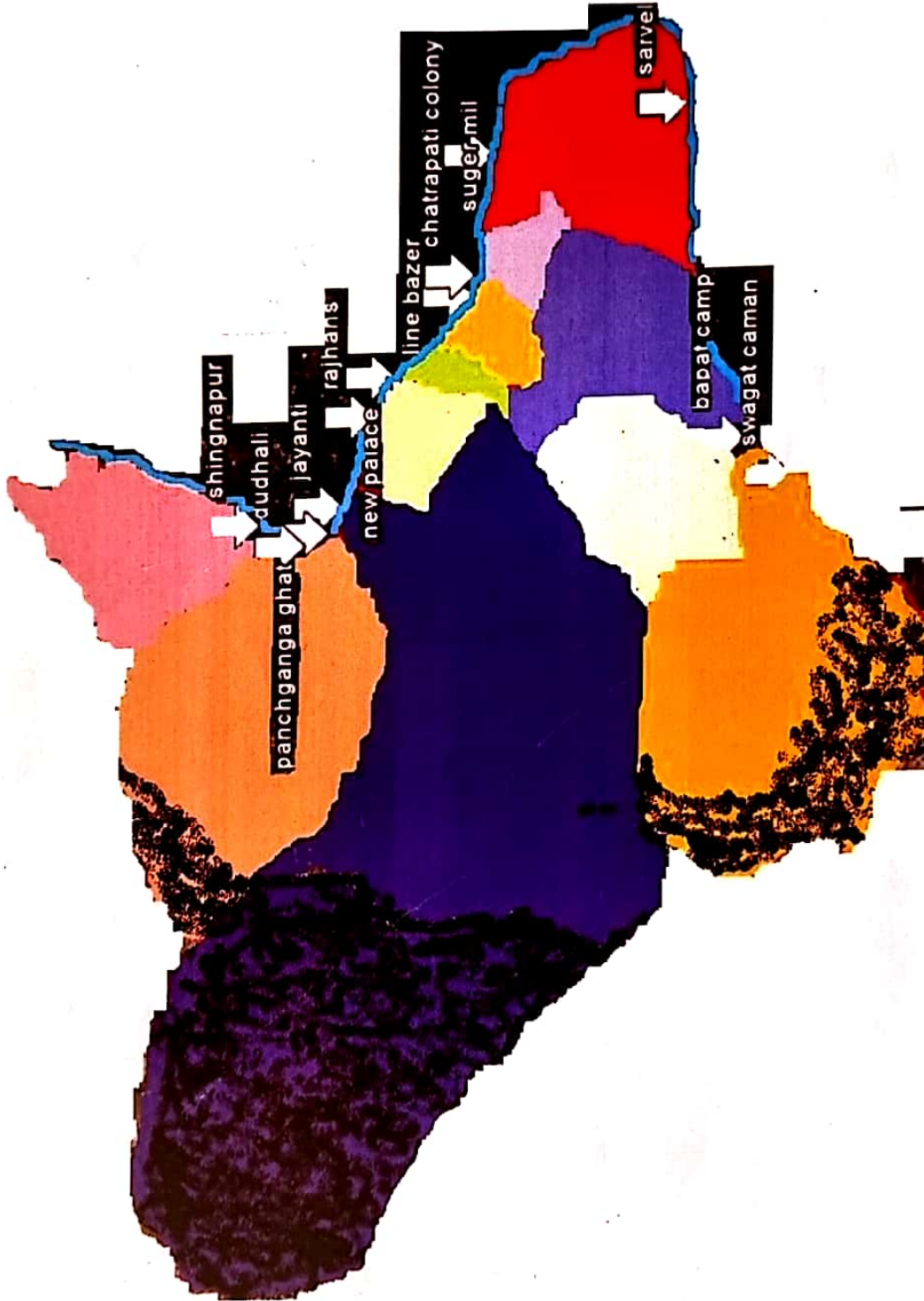
GOVERNMENT OF INDIA
BHAKARE
ADVOCATE & NOTARY
TAL. PANHALA,
DIST. KOLHAPUR
REGD. NO. 16293
Exp. Date
26/01/2025

 भारतीय विशिष्ट पहचान प्राधिकरण
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कोल्हापूर महानगरपालिका, कोल्हापूर





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Rainfall At Kolhapur Rain Gauge Station
Year 2018-2024

Annexure - II

Date/Year	2018	2019	2020	2021	2022	2023	2024
1-Jun	0	0	35	0	0	6	0
2-Jun	2	0	37	0	0	0	0
3-Jun	0	0	13	0	58	0	0
4-Jun	0	0	25	31	0	0	0
5-Jun	27	0	12	4	0	0	0
6-Jun	0	0	16	3	0	0	8
7-Jun	2	0	0	0	0	0	3
8-Jun	0	5	0	0	0	0	7
9-Jun	0	0	0	0	0	0	9
10-Jun	21	1	7	0	0	0	0
11-Jun	28	1	0	2	0	0	0
12-Jun	0	2	0	3	14	2	0
13-Jun	0	10	26	2	4	0	0
14-Jun	0	28	5	1	2	0	4
15-Jun	0	0	4	0	0	0	1
16-Jun	0	1	18	23	0	0	6
17-Jun	8	0	52	92	0	0	2
18-Jun	2	0	24	27	0	0	0
19-Jun	10	2	21	44	0	0	0
20-Jun	2	13	2	23	1	0	3
21-Jun	16	0	0	9	0	0	13
22-Jun	0	0	0	0	7	0	3
23-Jun	0	23	0	0	5	0	1
24-Jun	17	16	0	0	7	3	1
25-Jun	7	0	0	7	1	5	2
26-Jun	45	0	11	1	5	2	4
27-Jun	2	5	5	0	4	8	20
28-Jun	1	13	0	1	4	4	41
29-Jun	22	22	0	0	1	3	9
30-Jun	0	81	0	0	0	12	0
1-Jul	2	12	17	1	19	14	6
2-Jul	0	21	12	0	18	10	10
3-Jul	1	7	0	3	7	10	15
4-Jul	36	19	0	0	2	2	0
5-Jul	8	12	6	0	31	0	3
6-Jul	26	10	4	0	55	7	5
7-Jul	1	19	8	0	19	13	20
8-Jul	6	29	11	0	11	14	22
9-Jul	12	18	7	14	17	11	0
10-Jul	5	19	4	24	39	4	1

Rainfall At Kolhapur Raingauge Station

Year 2018-2024

Date/Year	2018	2019	2020	2021	2022	2023	2024
11-Jul	12	14	0	4	7	0	10
12-Jul	17	33	0	13	30	1	4
13-Jul	56	2	0	12	25	1	4
14-Jul	26	5	0	8	34	10	21
15-Jul	14	9	21	9	30	5	24
16-Jul	27	11	8	4	20	2	1
17-Jul	100	0	30	3	14	7	5
18-Jul	38	0	11	3	5	15	37
19-Jul	10	0	9	34	5	27	22
20-Jul	17	2	0	12	5	39	42
21-Jul	10	0	1	39	1	30	29
22-Jul	7	19	0	107	1	29	68
23-Jul	3	2	0	171	0	53	35
24-Jul	5	11	0	209	3	29	39
25-Jul	3	7	0	4	3	21	45
26-Jul	6	2	2	17	7	44	104
27-Jul	7	80	3	2	1	26	47
28-Jul	5	18	0	13	5	32	12
29-Jul	1	21	0	3	0	5	15
30-Jul	0	68	1	4	0	5	8
31-Jul	5	72	0	4	2	8	36
1-Aug	2	63	0	6	0	17	17
2-Aug	4	34	2	1	0	3	27
3-Aug	3	35	8	2	0	1	21
4-Aug	11	55	17	23	68	5	10
5-Aug	14	107	76	9	1	3	6
6-Aug	4	127	128	8	5	5	5
7-Aug	4	106	22	3	14	6	2
8-Aug	3	41	10	0	41	2	2
9-Aug	8	38	5	0	84	3	0
10-Aug	2	39	5	0	29	2	2
11-Aug	3	4	13	3	3	0	0
12-Aug	10	7	6	2	15	0	0
13-Aug	19	6	5	6	3	0	0
14-Aug	11	1	16	2	2	3	0
15-Aug	2	2	14	5	5	0	0
16-Aug	8	5	41	0	18	0	0
17-Aug	5	1	38	5	10	6	0
18-Aug	7	0	41	3	2	0	1
19-Aug	12	3	6	1	2	1	7
20-Aug	8	4	3	3	3	1	0
21-Aug	6	0	9	2	6	0	5
22-Aug	17	0	10	0	2	0	2
23-Aug	8	0	3	0	5	0	2
24-Aug	4	4	4	0	3	0	26
25-Aug	3	0	4	0	1	3	27
26-Aug	2	0	0	0	0	2	35
27-Aug	7	0	0	0	12	0	27
28-Aug	10	0	0	3	0	1	14

Rainfall At Kolhapur Raingauge Station

Year 2018-2024

Date/Year	2018	2019	2020	2021	2022	2023	2024
29-Aug	10	3	4	2	0	0	3
30-Aug	6	11	9	0	0	0	0
31-Aug	1	10	2	0	0	0	4
1-Sep	0	1	0	2	14	0	0
2-Sep	2	6	0	13	22	0	1
3-Sep	0	9	43	3	10	0	0
4-Sep	10	8	0	0	0	7	7
5-Sep	0	10	0	4	0	3	14
6-Sep	0	28	0	12	14	0	10
7-Sep	6	25	55	1	19	0	4
8-Sep	4	27	0	25	11	2	2
9-Sep	0	13	30	8	26	6	10
10-Sep	0	7	0	10	5	19	1
11-Sep	0	2	19	3	26	1	1
12-Sep	0	2	5	8	34	1	1
13-Sep	0	4	6	6	16	0	2
14-Sep	0	5	1	31	2	0	0
15-Sep	0	0	0	0	4	0	1
16-Sep	0	14	0	0	6	4	2
17-Sep	0	2	1	0	2	2	2
18-Sep	0	0	0	0	0	6	0
19-Sep	0	12	0	0	0	14	0
20-Sep	0	0	9	0	1	3	0
21-Sep	24	0	0	0	0	2	0
22-Sep	43	0	3	6	0	0	15
23-Sep	0	0	24	4	0	0	12
24-Sep	0	0	5	0	1	0	7
25-Sep	0	69	1	0	4	0	15
26-Sep	2	3	15	0	0	0	1
27-Sep	49	12	2	1	0	27	6
28-Sep	0	0	0	1	0	8	4
29-Sep	2	0	0	5	0	4	1
30-Sep	0	0	0	5	0	3	0
1-Oct	0	2	0	0	12	5	29
2-Oct	0	0	3	6	1	4	4
3-Oct	0	0	16	0	0	0	0
4-Oct	0	11	0	26	0	0	0
5-Oct	0	0	0	3	0	12	0
6-Oct	0	4	8	1	0	0	0
7-Oct	0	0	0	12	10	0	4
8-Oct	0	0	0	29	0	0	0
9-Oct	0	0	0	6	0	0	1
10-Oct	0	1	0	1	0	0	10
11-Oct	0	14	23	0	14	0	24
12-Oct	0	0	4	0	41	0	1
13-Oct	0	0	33	0	82	0	28
14-Oct	0	0	1	0	0	0	0
15-Oct	0	0	130	0	47	0	21
16-Oct	0	0	25	0	1	2	15

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Year 2018-2024

Date/Year	2018	2019	2020	2021	2022	2023	2024
17-Oct	6	4	0	0	0	0	20
18-Oct	0	0	0	0	57	0	12
19-Oct	9	17	0	0	3	0	21
20-Oct	0	44	1	0	0	0	0
21-Oct	0	43	16	0	0	0	0
22-Oct	0	29	0	0	0	0	0
23-Oct	0	0	0	0	0	0	10
24-Oct	0	10	7	0	0	0	0
25-Oct	1	8	0	0	0	0	0
26-Oct	0	8	0	0	0	0	0
27-Oct	0	0	0	0	0	0	0
28-Oct	0	0	0	0	0	0	0
29-Oct	0	5	12	0	0	0	0
30-Oct	0	0	0	0	0	0	0
31-Oct	0	0	0	0	0	0	7
Av. 1025mm	1050	1930	1467	1311	1348	718	1398

Kolhapur
 Rain gauge station
 Kolhapur
 Maharashtra
 India

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Amol Kumar - 20



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"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.

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ANALYSIS REPORT

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/10662
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	26/10/2024
	LAB REFERENCE NO	HS/LAB/WA/0946
	DATE OF SAMPLING	21/10/2024
	START DATE OF ANALYSIS	22/10/2024
	END DATE OF ANALYSIS	26/10/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	7.09
02	Total Suspended Solids	mg/L	7.00
03	Chemical Oxygen Demand	mg/L	6.80
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	2.50
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	BDL (< 0.1)
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	1.10
08	Nitrate as NO ₃	mg/L	0.50
09	Total Kjeldahl Nitrogen as TKN	mg/L	2.85
10	Total Coliform	MPN/100ml	24.00



For HORIZON SERVICES

M. N. A. G. D. K. A.

(LAB INCHARGE)



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ANALYSIS REPORT

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/10534
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	25/10/2024
	LAB REFERENCE NO	HS/LAB/WA/0937
	DATE OF SAMPLING	15/10/2024
	START DATE OF ANALYSIS	21/10/2024
	END DATE OF ANALYSIS	24/10/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	6.87
02	Total Suspended Solids	mg/L	9.00
03	Chemical Oxygen Demand	mg/L	29.50
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	8.20
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	BDL (< 0.1)
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	1.30
08	Nitrate as NO ₃	mg/L	0.62
09	Total Kjeldahl Nitrogen as TKN	mg/L	3.15
10	Total Coliform	MPN/100ml	27.00



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M. N. A. G. D. K. A. R.

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ANALYSIS REPORT

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/10041
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	15/10/2024
	LAB REFERENCE NO	HS/LAB/WA/0880
	DATE OF SAMPLING	07/10/2024
	START DATE OF ANALYSIS	09/10/2024
	END DATE OF ANALYSIS	14/10/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	6.76
02	Total Suspended Solids	mg/L	8.00
03	Chemical Oxygen Demand	mg/L	24.50
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	6.80
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	BDL (< 0.1)
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	1.15
08	Nitrate as NO ₃	mg/L	0.50
09	Total Kjeldahl Nitrogen as TKN	mg/L	2.95
10	Total Coliform	MPN/100ml	24.00



For HORIZON SERVICES

manoj kumar
(LAB INCHARGE)



17

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ANALYSIS REPORT

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/09479
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	08/10/2024
	LAB REFERENCE NO	HS/LAB/WA/0835
	DATE OF SAMPLING	30/09/2024
	START DATE OF ANALYSIS	03/10/2024
	END DATE OF ANALYSIS	07/10/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	6.79
02	Total Suspended Solids	mg/L	8.00
03	Chemical Oxygen Demand	mg/L	25.90
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	7.10
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	BDL (< 0.1)
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	1.00
08	Nitrate as NO ₃	mg/L	0.45
09	Total Kjeldahl Nitrogen as TKN	mg/L	2.80
10	Total Coliform	MPN/100ml	27.00



For HORIZON SERVICES

Murugan
(LAB INCHARGE)



16

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ANALYSIS REPORT

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/09042
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	30/09/2024
	LAB REFERENCE NO	HS/LAB/WA/0798
	DATE OF SAMPLING	23/09/2024
	START DATE OF ANALYSIS	25/09/2024
	END DATE OF ANALYSIS	30/09/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	6.65
02	Total Suspended Solids	mg/L	9.00
03	Chemical Oxygen Demand	mg/L	26.00
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	7.20
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	BDL (< 0.1)
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	1.05
08	Nitrate as NO ₃	mg/L	0.50
09	Total Kjeldahl Nitrogen as TKN	mg/L	2.95
10	Total Coliform	MPN/100ml	31.00



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M. A. G. G. G.

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ANALYSIS REPORT

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/08728
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	21/09/2024
	LAB REFERENCE NO	HS/LAB/WA/0773
	DATE OF SAMPLING	16/09/2024
	START DATE OF ANALYSIS	18/09/2024
	END DATE OF ANALYSIS	21/09/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	6.94
02	Total Suspended Solids	mg/L	8.00
03	Chemical Oxygen Demand	mg/L	22.00
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	6.10
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	BDL (< 0.1)
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	0.85
08	Nitrate as NO ₃	mg/L	0.35
09	Total Kjeldahl Nitrogen as TKN	mg/L	2.20
10	Total Coliform	MPN/100ml	24.00

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P. S. D. D.
F (LAB INCHARGE)



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ANALYSIS REPORT

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/08138
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	18/09/2024
	LAB REFERENCE NO	HS/LAB/WA/0730
	DATE OF SAMPLING	09/09/2024
	START DATE OF ANALYSIS	12/09/2024
	END DATE OF ANALYSIS	18/09/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	6.94
02	Total Suspended Solids	mg/L	5.00
03	Chemical Oxygen Demand	mg/L	6.50
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	2.40
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	BDL (< 0.1).
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	0.50
08	Nitrate as NO ₃	mg/L	0.25
09	Total Kjeldahl Nitrogen as TKN	mg/L	1.85
10	Total Coliform	MPN/100ml	18.00

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ANALYSIS REPORT

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/07793
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	09/09/2024
	LAB REFERENCE NO	HS/LAB/WA/0695
	DATE OF SAMPLING	02/09/2024
	START DATE OF ANALYSIS	04/09/2024
	END DATE OF ANALYSIS	09/09/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	7.12
02	Total Suspended Solids	mg/L	7.00
03	Chemical Oxygen Demand	mg/L	18.00
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	4.90
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	BDL (< 0.1)
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	0.75
08	Nitrate as NO ₃	mg/L	0.30
09	Total Kjeldahl Nitrogen as TKN	mg/L	2.05
10	Total Coliform	MPN/100ml	21.00



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M. N. G. ...

(LAB INCHARGE)



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ANALYSIS REPORT

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/07350
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	02/09/2024
	LAB REFERENCE NO	HS/LAB/WA/0657
	DATE OF SAMPLING	26/08/2024
	START DATE OF ANALYSIS	28/08/2024
	END DATE OF ANALYSIS	02/09/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	7.08
02	Total Suspended Solids	mg/L	9.00
03	Chemical Oxygen Demand	mg/L	19.20
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	5.20
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	BDL (< 0.1)
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	0.60
08	Nitrate as NO ₃	mg/L	0.25
09	Total Kjeldahl Nitrogen as TKN	mg/L	1.80
10	Total Coliform	MPN/100ml	24.00



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MKN a/ga/...
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ANALYSIS REPORT

HS/LAB/NABL/F7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/06954
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	24/08/2024
	LAB REFERENCE NO	HS/LAB/WA/0622
	DATE OF SAMPLING	19/08/2024
	START DATE OF ANALYSIS	20/08/2024
	END DATE OF ANALYSIS	24/08/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	7.02
02	Total Suspended Solids	mg/L	7.00
03	Chemical Oxygen Demand	mg/L	13.10
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	3.70
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	BDL (< 0.1)
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	0.45
08	Nitrate as NO ₃	mg/L	0.20
09	Total Kjeldahl Nitrogen as TKN	mg/L	1.65
10	Total Coliform	MPN/100ml	18.00

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manoj kumar
(LAB INCHARGE)



10

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ANALYSIS REPORT

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/06793
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	20/08/2024
	LAB REFERENCE NO	HS/LAB/WA/0601
	DATE OF SAMPLING	12/08/2024
	START DATE OF ANALYSIS	14/08/2024
	END DATE OF ANALYSIS	19/08/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	6.92
02	Total Suspended Solids	mg/L	8.00
03	Chemical Oxygen Demand	mg/L	25.60
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	7.10
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	BDL (< 0.1)
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	0.50
08	Nitrate as NO ₃	mg/L	0.20
09	Total Kjeldahl Nitrogen as TKN	mg/L	1.75
10	Total Coliform	MPN/100ml	18.00

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P. D. Dide
F (LAB INCHARGE)

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09

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ANALYSIS REPORT

HS/LAB/NABL/F7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/06453
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	13/08/2024
	LAB REFERENCE NO	HS/LAB/WA/0577
	DATE OF SAMPLING	06/08/2024
	START DATE OF ANALYSIS	08/08/2024
	END DATE OF ANALYSIS	13/08/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	6.92
02	Total Suspended Solids	mg/L	8.00
03	Chemical Oxygen Demand	mg/L	32.00
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	8.90
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	BDL (< 0.1)
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	0.55
08	Nitrate as NO ₃	mg/L	0.22
09	Total Kjeldahl Nitrogen as TKN	mg/L	1.90
10	Total Coliform	MPN/100ml	18.00

For HORIZON SERVICES



Manoj Kumar
(LAB INCHARGE)



08

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ANALYSIS REPORT

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/06112
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	05/08/2024
	LAB REFERENCE NO	HS/LAB/WA/0535
	DATE OF SAMPLING	30/07/2024
	START DATE OF ANALYSIS	31/07/2024
	END DATE OF ANALYSIS	05/08/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	6.94
02	Total Suspended Solids	mg/L	6.00
03	Chemical Oxygen Demand	mg/L	6.40
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	2.40
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	BDL (< 0.1)
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	0.35
08	Nitrate as NO ₃	mg/L	0.15
09	Total Kjeldahl Nitrogen as TKN	mg/L	1.50
10	Total Coliform	MPN/100ml	14.00

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07

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ANALYSIS REPORT

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/05782
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	29/07/2024
	LAB REFERENCE NO	HS/LAB/WA/0508
	DATE OF SAMPLING	23/07/2024
	START DATE OF ANALYSIS	24/07/2024
	END DATE OF ANALYSIS	28/07/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	7.07
02	Total Suspended Solids	mg/L	5.00
03	Chemical Oxygen Demand	mg/L	6.50
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	2.40
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	BDL (< 0.1)
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	0.38
08	Nitrate as NO ₃	mg/L	0.20
09	Total Kjeldahl Nitrogen as TKN	mg/L	1.65
10	Total Coliform	MPN/100ml	18.00

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Manoj Kumar
(LAB INCHARGE)

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06



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ANALYSIS REPORT

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/05459
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	22/07/2024
	LAB REFERENCE NO	HS/LAB/WA/0468
	DATE OF SAMPLING	15/07/2024
	START DATE OF ANALYSIS	17/07/2024
	END DATE OF ANALYSIS	22/07/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	7.08
02	Total Suspended Solids	mg/L	6.00
03	Chemical Oxygen Demand	mg/L	6.80
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	2.50
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	BDL (< 0.1)
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	0.45
08	Nitrate as NO ₃	mg/L	0.25
09	Total Kjeldahl Nitrogen as TKN	mg/L	1.90
10	Total Coliform	MPN/100ml	21.00

For HORIZON SERVICES



Manoj Kumar
(LAB INCHARGE)

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05

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ANALYSIS REPORT

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/05143
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	16/07/2024
	LAB REFERENCE NO	HS/LAB/WA/0434
	DATE OF SAMPLING	10/07/2024
	START DATE OF ANALYSIS	11/07/2024
	END DATE OF ANALYSIS	15/07/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	6.86
02	Total Suspended Solids	mg/L	7.00
03	Chemical Oxygen Demand	mg/L	30.40
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	8.90
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	BDL (< 0.1)
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	0.55
08	Nitrate as NO ₃	mg/L	0.30
09	Total Kjeldahl Nitrogen as TKN	mg/L	2.00
10	Total Coliform	MPN/100ml	24.00

For HORIZON SERVICES



Manoj Kumar
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04

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ANALYSIS REPORT

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/04788
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	06/07/2024
	LAB REFERENCE NO	HS/LAB/WA/0387
	DATE OF SAMPLING	01/07/2024
	START DATE OF ANALYSIS	02/07/2024
	END DATE OF ANALYSIS	06/07/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	6.97
02	Total Suspended Solids	mg/L	5.00
03	Chemical Oxygen Demand	mg/L	BDL (< 6.0)
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	BDL (< 2.0)
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	BDL (< 0.1)
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	0.35
08	Nitrate as NO ₃	mg/L	0.15
09	Total Kjeldahl Nitrogen as TKN	mg/L	1.50
10	Total Coliform	MPN/100ml	21.00

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[Handwritten Signature]
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ANALYSIS REPORT

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/04388
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	02/07/2024
	LAB REFERENCE NO	HS/LAB/WA/0359
	DATE OF SAMPLING	24/06/2024
	START DATE OF ANALYSIS	26/06/2024
	END DATE OF ANALYSIS	02/07/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	6.62
02	Total Suspended Solids	mg/L	6.00
03	Chemical Oxygen Demand	mg/L	6.70
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	2.40
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	0.05
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	0.40
08	Nitrate as NO ₃	mg/L	0.20
09	Total Kjeldahl Nitrogen as TKN	mg/L	1.65
10	Total Coliform	MPN/100ml	24.00

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ANALYSIS REPORT

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/NABL/F/7.8.2.1
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	HS/LAB/WA/00392
	LAB REFERENCE NO	08/04/2024
	DATE OF SAMPLING	HS/LAB/WA/0017
	START DATE OF ANALYSIS	02/04/2024
	END DATE OF ANALYSIS	03/04/2024
		08/04/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	6.96
02	Total Suspended Solids	mg/L	7.00
03	Chemical Oxygen Demand	mg/L	6.00
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	1.70
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	0.14
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	0.38
08	Nitrate as NO ₃	mg/L	0.14
09	Total Kjeldahl Nitrogen as TKN	mg/L	1.18
10	Total Coliform	MPN/100ml	24.00



For HORIZON SERVICES

Mentalgadka

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ANALYSIS REPORT

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/00806
Laxmi Civil Engineering Services Pvt. Ltd. Dudhali, Kolhapur- 416012.	DATED	16/04/2024
	LAB REFERENCE NO	HS/LAB/WA/0054
	DATE OF SAMPLING	10/04/2024
	START DATE OF ANALYSIS	11/04/2024
	END DATE OF ANALYSIS	16/04/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	Weather Conditions	NATURE	LOCATION
Treated Sewage Water	Kolhapur Municipal Corporation	Normal	Outlet of STP	17 MLD STP Dudhali, Kolhapur (CCT)

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT
01	pH	---	6.51
02	Total Suspended Solids	mg/L	9.00
03	Chemical Oxygen Demand	mg/L	18.00
04	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	4.90
05	Oil and Grease	mg/L	NIL
06	Phosphorus as P	mg/L	0.20
07	Total Ammonical Nitrogen as NH ₃ -N	mg/L	0.45
08	Nitrate as NO ₃	mg/L	0.28
09	Total Kjeldahl Nitrogen as TKN	mg/L	1.50
10	Total Coliform	MPN/100ml	27.00



For HORIZON SERVICES

M. N. Angolkar

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ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	REPORT NO	HS/LAB/WA/03178A
	DATED	21/10/2024
	LAB REFERENCE NO	HS/LAB/WA/1280A
	DATE OF SAMPLING	16/10/2024
	DATE OF ANALYSIS	17/10/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	---	7.55	6.5-8.5
02	Temperature	°C	27.00	Not Specified
03	Total Suspended Solids	mg/lit	9.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	22.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	6.10	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.14	< 10.00
08	Phosphorus as P	mg/lit	0.20	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.05	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	3.80	< 10.00
11	Dissolved Oxygen	mg/lit	4.10	Not Specified
12	Fecal Coliform	Org/100ml	26.00	500MPN/100ml



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P. S. D.
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ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	REPORT NO	HS/LAB/WA/03068A
	DATED	07/10/2024
	LAB REFERENCE NO	HS/LAB/WA/1240A
	DATE OF SAMPLING	02/10/2024
	DATE OF ANALYSIS	03/10/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	---	7.22	6.5-8.5
02	Temperature	°C	27.00	Not Specified
03	Total Suspended Solids	mg/lit	8.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	20.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	5.50	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.14	< 10.00
08	Phosphorus as P	mg/lit	0.18	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.50	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	3.40	< 10.00
11	Dissolved Oxygen	mg/lit	4.00	Not Specified
12	Fecal Coliform	Org/100ml	34.00	500MPN/100ml



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ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	REPORT NO	HS/LAB/WA/15840A
	DATED	23/01/2024
	LAB REFERENCE NO	HS/LAB/WA/1260A
	DATE OF SAMPLING	17/01/2024
	DATE OF ANALYSIS	18/01/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	—	7.80	6.5-8.5
02	Temperature	°C	27.00	Not Specified
03	Total Suspended Solids	mg/lit	9.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	24.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	6.70	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	4.00	< 10.00
08	Phosphorus as P	mg/lit	0.18	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.14	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.20	< 10.00
11	Dissolved Oxygen	mg/lit	5.22	Not Specified
12	Fecal Coliform	Org/100ml	30.00	500MPN/100ml

For HORIZON SERVICE

3/4



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DISCLAIMER

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ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	REPORT NO	HS/LAB/WA/15840A
	DATED	23/01/2024
	LAB REFERENCE NO	HS/LAB/WA/1260A
	DATE OF SAMPLING	17/01/2024
	DATE OF ANALYSIS	18/01/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	—	7.80	6.5-8.5
02	Temperature	°C	27.00	Not Specified
03	Total Suspended Solids	mg/lit	9.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	24.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	6.70	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	4.00	< 10.00
08	Phosphorus as P	mg/lit	0.18	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.14	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.20	< 10.00
11	Dissolved Oxygen	mg/lit	5.22	Not Specified
12	Fecal Coliform	Org/100ml	30.00	500MPN/100ml

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3/4



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ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	REPORT NO	HS/LAB/WA/15840A
	DATED	23/01/2024
	LAB REFERENCE NO	HS/LAB/WA/1260A
	DATE OF SAMPLING	17/01/2024
	DATE OF ANALYSIS	18/01/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	---	7.80	6.5-8.5
02	Temperature	°C	27.00	Not Specified
03	Total Suspended Solids	mg/lit	9.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	24.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	6.70	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	4.00	< 10.00
08	Phosphorus as P	mg/lit	0.18	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.14	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.20	< 10.00
11	Dissolved Oxygen	mg/lit	5.22	Not Specified
12	Fecal Coliform	Org/100ml	30.00	500MPN/100ml

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3/4



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ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	REPORT NO	HS/LAB/WA/15840A
	DATED	23/01/2024
	LAB REFERENCE NO	HS/LAB/WA/1260A
	DATE OF SAMPLING	17/01/2024
	DATE OF ANALYSIS	18/01/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	—	7.80	6.5-8.5
02	Temperature	°C	27.00	Not Specified
03	Total Suspended Solids	mg/lit	9.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	24.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	6.70	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	4.00	< 10.00
08	Phosphorus as P	mg/lit	0.18	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.14	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.20	< 10.00
11	Dissolved Oxygen	mg/lit	5.22	Not Specified
12	Fecal Coliform	Org/100ml	30.00	500MPN/100ml

For HORIZON SERVICE



Manoj Kumar
(LAB INCHARGE)

3/4

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ANALYSIS REPORT

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	REPORT NO	F/LAB/04/01/17.12.2012
	DATED	HS/LAB/WA/17775A
	LAB REFERENCE NO	26/02/2024
	DATE OF SAMPLING	HS/LAB/WA/1438A
	DATE OF ANALYSIS	21/02/2024
		22/02/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	—	7.10	6.5-8.5
02	Temperature	°C	27.00	Not Specified
03	Total Suspended Solids	mg/lit	8.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	28.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	7.80	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	4.00	< 10.00
08	Phosphorus as P	mg/lit	0.24	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.50	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.80	< 10.00
11	Dissolved Oxygen	mg/lit	5.00	Not Specified
12	Fecal Coliform	Org/100ml	32.00	500MPN/100ml

For HORIZON SERVICES



M. Nagaraja
(LAB INCHARGE)

MOEFCC & NABL 17025 Certification renewal is under process.

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ANALYSIS REPORT

CLIENT'S NAME & ADDRESS	REPORT NO	F/LAB/04/01/17.12.2012
M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	DATED	12/02/2024
	LAB REFERENCE NO	HS/LAB/WA/1385A
	DATE OF SAMPLING	07/02/2024
	DATE OF ANALYSIS	08/02/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	—	7.50	6.5-8.5
02	Temperature	°C	26.00	Not Specified
03	Total Suspended Solids	mg/lit	8.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	32.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	8.80	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.80	< 10.00
08	Phosphorus as P	mg/lit	0.18	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.20	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.00	< 10.00
11	Dissolved Oxygen	mg/lit	5.00	Not Specified
12	Fecal Coliform	Org/100ml	30.00	500MPN/100ml

For HORIZON SERVICES



M. N. G. G. G.
(LAB INCHARGE)

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ANALYSIS REPORT

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructuro Pvt. Ltd. Kolhapur.	REPORT NO	F/LAB/04/01/17.12.2012
	DATED	12/02/2024
	LAB REFERENCE NO	HS/LAB/WA/1385A
	DATE OF SAMPLING	07/02/2024
	DATE OF ANALYSIS	08/02/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	—	7.50	6.5-8.5
02	Temperature	°C	26.00	Not Specified
03	Total Suspended Solids	mg/lit	8.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	32.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	8.80	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.80	< 10.00
08	Phosphorus as P	mg/lit	0.18	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.20	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.00	< 10.00
11	Dissolved Oxygen	mg/lit	5.00	Not Specified
12	Fecal Coliform	Org/100ml	30.00	500MPN/100ml

For HORIZON SERVICES

M. Nagaraja
 (LAB INCHARGE)

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ANALYSIS REPORT

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	REPORT NO	F/LAB/04/01/17.12.2012
	DATED	HS/LAB/WA/19020A
	LAB REFERENCE NO	25/03/2024
	DATE OF SAMPLING	HS/LAB/WA/1558A
	DATE OF ANALYSIS	20/03/2024
		21/03/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	—	7.32	6.5-8.5
02	Temperature	°C	26.00	Not Specified
03	Total Suspended Solids	mg/lit	6.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	30.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	8.30	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.22	< 10.00
08	Phosphorus as P	mg/lit	0.30	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.00	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.00	< 10.00
11	Dissolved Oxygen	mg/lit	5.08	Not Specified
12	Fecal Coliform	Org/100ml	22.00	500MPN/100ml

For HORIZON SERVICES



Manoj Kumar
 (LAB INCHARGE)

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ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructuro Pvt. Ltd. Kolhapur.	REPORT NO	HS/LAB/WA/18370A
	DATED	11/03/2024
	LAB REFERENCE NO	HS/LAB/WA/1489A
	DATE OF SAMPLING	06/03/2024
	DATE OF ANALYSIS	07/03/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	---	7.32	6.5-8.5
02	Temperature	°C	28.00	Not Specified
03	Total Suspended Solids	mg/lit	9.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	26.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	7.20	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.14	< 10.00
08	Phosphorus as P	mg/lit	0.24	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.80	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.50	< 10.00
11	Dissolved Oxygen	mg/lit	4.80	Not Specified
12	Fecal Coliform	Org/100ml	34.00	500MPN/100ml

For HORIZON SERVICES



M. A. G. G.
(LAB INCHARGE)

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ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	REPORT NO	HS/LAB/WA/00308A
	DATED	22/04/2024
	LAB REFERENCE NO	HS/LAB/WA/0112A
	DATE OF SAMPLING	17/04/2024
	DATE OF ANALYSIS	18/04/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	---	7.50	6.5-8.5
02	Temperature	°C	29.00	Not Specified
03	Total Suspended Solids	mg/lit	7.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	30.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	8.30	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.88	< 10.00
08	Phosphorus as P	mg/lit	0.34	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.50	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.10	< 10.00
11	Dissolved Oxygen	mg/lit	4.10	Not Specified
12	Fecal Coliform	Org/100ml	28.00	500MPN/100ml

For HORIZON SERVICES



Manoj Kumar
(LAB INCHARGE)



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ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	REPORT NO	HS/LAB/WA/00075A
	DATED	08/04/2024
	LAB REFERENCE NO	HS/LAB/WA/0011A
	DATE OF SAMPLING	03/04/2024
	DATE OF ANALYSIS	04/04/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	---	7.50	6.5-8.5
02	Temperature	°C	29.00	Not Specified
03	Total Suspended Solids	mg/lit	6.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	22.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	6.10	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.80	< 10.00
08	Phosphorus as P	mg/lit	0.32	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.14	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	5.20	< 10.00
11	Dissolved Oxygen	mg/lit	4.00	Not Specified
12	Fecal Coliform	Org/100ml	30.00	500MPN/100ml

For HORIZON SERVICES



M. N. Argal
(LAB INCHARGE)

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ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/00075A
M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	DATED	08/04/2024
	LAB REFERENCE NO	HS/LAB/WA/0011A
	DATE OF SAMPLING	03/04/2024
	DATE OF ANALYSIS	04/04/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	—	7.50	6.5-8.5
02	Temperature	°C	29.00	Not Specified
03	Total Suspended Solids	mg/lit	6.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	22.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	6.10	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.80	< 10.00
08	Phosphorus as P	mg/lit	0.32	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.14	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	5.20	< 10.00
11	Dissolved Oxygen	mg/lit	4.00	Not Specified
12	Fecal Coliform	Org/100ml	30.00	500MPN/100ml

For HORIZON SERVICES

M. N. A. G. D. K.
(LAB INCHARGE)

375



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ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/00747A
M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	DATED	21/05/2024
	LAB REFERENCE NO	HS/LAB/WA/0287A
	DATE OF SAMPLING	15/05/2024
	DATE OF ANALYSIS	16/05/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	---	7.86	6.5-8.5
02	Temperature	°C	29.00	Not Specified
03	Total Suspended Solids	mg/lit	9.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	32.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	8.90	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.80	< 10.00
08	Phosphorus as P	mg/lit	0.34	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.60	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.90	< 10.00
11	Dissolved Oxygen	mg/lit	4.50	Not Specified
12	Fecal Coliform	Org/100ml	34.00	500MPN/100ml

For HORIZON SERVICES



M. N. Algaekar
(LAB INCHARGE)



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ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	REPORT NO	HS/LAB/WA/00637A
	DATED	07/05/2024
	LAB REFERENCE NO	HS/LAB/WA/0248A
	DATE OF SAMPLING	01/05/2024
	DATE OF ANALYSIS	02/05/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	--	7.50	6.5-8.5
02	Temperature	°C	28.00	Not Specified
03	Total Suspended Solids	mg/lit	8.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	22.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	6.10	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.50	< 10.00
08	Phosphorus as P	mg/lit	0.32	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.80	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.20	< 10.00
11	Dissolved Oxygen	mg/lit	4.60	Not Specified
12	Fecal Coliform	Org/100ml	28.00	500MPN/100ml

For HORIZON SERVICES



M. N. A. Q.
(LAB INCHARGE)



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ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/01317A
M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	DATED	25/06/2024
	LAB REFERENCE NO	HS/LAB/WA/0521A
	DATE OF SAMPLING	19/06/2024
	DATE OF ANALYSIS	20/06/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	---	6.80	6.5-8.5
02	Temperature	°C	26.00	Not Specified
03	Total Suspended Solids	mg/lit	9.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	34.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	9.50	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.80	< 10.00
08	Phosphorus as P	mg/lit	0.34	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.60	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	3.00	< 10.00
11	Dissolved Oxygen	mg/lit	4.10	Not Specified
12	Fecal Coliform	Org/100ml	30.00	500MPN/100ml

For HORIZON SERVICES



P. S. D.
F (LAB INCHARGE)

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ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/01317A
M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	DATED	25/06/2024
	LAB REFERENCE NO	HS/LAB/WA/0521A
	DATE OF SAMPLING	19/06/2024
	DATE OF ANALYSIS	20/06/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

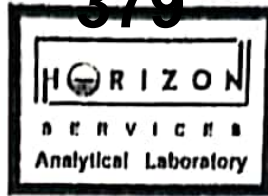
SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	---	6.80	6.5-8.5
02	Temperature	°C	26.00	Not Specified
03	Total Suspended Solids	mg/lit	9.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	34.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	9.50	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.80	< 10.00
08	Phosphorus as P	mg/lit	0.34	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.60	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	3.00	< 10.00
11	Dissolved Oxygen	mg/lit	4.10	Not Specified
12	Fecal Coliform	Org/100ml	30.00	500MPN/100ml

For HORIZON SERVICES

F (LAB INCHARGE)



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ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructuro Pvt. Ltd. Kolhapur.	REPORT NO	HS/LAB/WA/01000A
	DATED	11/06/2024
	LAB REFERENCE NO	HS/LAB/WA/0400A
	DATE OF SAMPLING	05/06/2024
	DATE OF ANALYSIS	06/08/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	---	7.20	6.5-8.5
02	Temperature	°C	28.00	Not Specified
03	Total Suspended Solids	mg/lit	7.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	32.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	8.90	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.00	< 10.00
08	Phosphorus as P	mg/lit	0.22	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.20	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	3.50	< 10.00
11	Dissolved Oxygen	mg/lit	4.20	Not Specified
12	Fecai Coliform	Org/100ml	28.00	500MPN/100ml

For HORIZON SERVICES



P. S. D. S.
F (LAB INCHARGE)

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ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructuro Pvt. Ltd. Kolhapur.	REPORT NO	HS/LAB/WA/01798A
	DATED	22/07/2024
	LAB REFERENCE NO	HS/LAB/WA/0703A
	DATE OF SAMPLING	17/07/2024
	DATE OF ANALYSIS	18/07/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	---	7.24	6.5-8.5
02	Temperature	°C	26.00	Not Specified
03	Total Suspended Solids	mg/lit	8.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	22.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	6.10	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.20	< 10.00
08	Phosphorus as P	mg/lit	0.36	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.50	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.22	< 10.00
11	Dissolved Oxygen	mg/lit	4.40	Not Specified
12	Fecal Coliform	Org/100ml	34.00	500MPN/100ml

For HORIZON SERVICES


F (LAB INCHARGE)

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Lab Approved by MoEF, New Delhi. (Valid till 06/03/2026)

"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangoshkar Hospital, Pune 411 004.

• Mobile : 7249867318, 8378018710 • Tel. : 020 - 25460202 • Email : kmn@hospl.co.in / md@hospl.co.in • www.hospl.co.in

ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	REPORT NO	HS/LAB/WA/01519A
	DATED	08/07/2024
	LAB REFERENCE NO	HS/LAB/WA/0598A
	DATE OF SAMPLING	03/07/2024
	DATE OF ANALYSIS	04/07/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	—	7.10	6.5-8.5
02	Temperature	°C	24.00	Not Specified
03	Total Suspended Solids	mg/lit	9.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	25.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	6.90	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.10	< 10.00
08	Phosphorus as P	mg/lit	0.32	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.50	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.60	< 10.00
11	Dissolved Oxygen	mg/lit	4.00	Not Specified
12	Fecal Coliform	Org/100ml	22.00	500MPN/100ml

For HORIZON SERVICES

F (LAB INCHARGE)



Lab Approved by MoEF, New Delhi. (Valid till 06/03/2026)

"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.
• Mobile : 7249867318, 8378018710 • Tel. : 020 - 25460202 • Email : kmn@hespl.co.in / md@hespl.co.in • www.hespl.co.in

ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	REPORT NO	HS/LAB/WA/02377A
	DATED	26/08/2024
	LAB REFERENCE NO	HS/LAB/WA/0950A
	DATE OF SAMPLING	21/08/2024
	DATE OF ANALYSIS	22/08/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	---	7.60	6.5-8.5
02	Temperature	°C	28.00	Not Specified
03	Total Suspended Solids	mg/lit	7.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	28.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	7.80	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.50	< 10.00
08	Phosphorus as P	mg/lit	0.40	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.54	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.60	< 10.00
11	Dissolved Oxygen	mg/lit	4.40	Not Specified
12	Fecal Coliform	Org/100ml	28.00	500MPN/100ml

For HORIZON SERVICES

M. A. G. G.
(LAB INCHARGE)



Lab Approved



Lab Approved by MoEF, New Delhi. (Valid till 06/03/2026)

"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.

• Mobile : 7249867318, 8378018710 • Tel. : 020 - 25460202 • Email : kmn@hespl.co.in / md@hespl.co.in • www.hespl.co.in

ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	REPORT NO	HS/LAB/WA/02073A
	DATED	12/08/2024
	LAB REFERENCE NO	HS/LAB/WA/0823A
	DATE OF SAMPLING	07/08/2024
	DATE OF ANALYSIS	08/08/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	--	7.20	6.5-8.5
02	Temperature	°C	24.00	Not Specified
03	Total Suspended Solids	mg/lit	6.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	20.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	5.60	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.20	< 10.00
08	Phosphorus as P	mg/lit	0.34	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.50	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.22	< 10.00
11	Dissolved Oxygen	mg/lit	4.00	Not Specified
12	Fecal Coliform	Org/100ml	22.30	500MPN/100ml

For HORIZON SERVICES

M. N. G. O. U. L.
(LAB INCHARGE)





Lab Approved by MoEF, New Delhi. (Valid till 00/03/2026)

"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.
• Mobile : 7249867318, 8378018710 • Tel. : 020 - 25460202 • Email : kmn@hospl.co.in / md@hospl.co.in • www.hospl.co.in

ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	REPORT NO	HS/LAB/WA/02920A
	DATED	30/09/2024
	LAB REFERENCE NO	HS/LAB/WA/1190A
	DATE OF SAMPLING	25/09/2024
	DATE OF ANALYSIS	28/09/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	---	7.84	6.5-8.5
02	Temperature	°C	25.00	Not Specified
03	Total Suspended Solids	mg/lit	6.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	20.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	5.60	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.50	< 10.00
08	Phosphorus as P	mg/lit	0.30	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.50	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.84	< 10.00
11	Dissolved Oxygen	mg/lit	4.00	Not Specified
12	Fecal Coliform	Org/100ml	28.00	500MPN/100ml

For HORIZON SERVICES



P. A. D. D.
F (LAB INCHARGE)



Lab Approved by MoEF, New Delhi. (Valid till 06/03/2026)

"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.

• Mobile : 7249857318, 8378018710 • Tel. : 020 - 25460202 • Email : kmn@hespl.co.in / md@hespl.co.in • www.hespl.co.in

ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS M/s. Vishwa Infrastructure Pvt. Ltd. Kolhapur.	REPORT NO	HS/LAB/WA/02806A
	DATED	16/09/2024
	LAB REFERENCE NO	HS/LAB/WA/1056A
	DATE OF SAMPLING	11/09/2024
	DATE OF ANALYSIS	12/09/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Sewage Water sample	The Client	Treated	76 MLD STP

RESULTS OF ANALYSIS

SR. NO.	DESCRIPTION OF PARAMETERS	UNIT	RESULT	DISCHARGE STANDARD
01	pH	—	7.50	6.5-8.5
02	Temperature	°C	25.00	Not Specified
03	Total Suspended Solids	mg/lit	6.00	< 10.00
04	Chemical Oxygen Demand	mg/lit	20.00	< 100.00
05	Biochemical Oxygen Demand (27°C for 3 days)	mg/lit	5.60	< 10.00
06	Oil and Grease	mg/lit	NIL	< 10.00
07	Total Kjeldhal Nitrogen as TKN	mg/lit	3.50	< 10.00
08	Phosphorus as P	mg/lit	0.30	< 1.00
09	Ammonia Nitrogen (NH ₃ - N)	mg/lit	1.50	< 2.00
10	Nitrate Nitrogen (NO ₃ - N)	mg/lit	4.60	< 10.00
11	Dissolved Oxygen	mg/lit	4.20	Not Specified
12	Fecal Coliform	Org/100ml	28.00	500MPN/100ml

For HORIZON SERVICES



R. S. Dide
F(LAB INCHARGE)

386**LAXMI CIVIL ENGINEERING INFRASTRUCTURE PVT. LTD.**

CORPORATE OFFICE : C. S. No. 1031/K2, E WARD, 3RD FLOOR, STERLING TOWER,
 CAVAT MANDAI, KOLHAPUR - 416 001 (MAHARASHTRA) 11/04/2024
 LCEPL/Dudhali/037/2023-24
 PHONE NO.: 0231-2529199, 2686910-911, FAX : 0231-2668199
 To, Email : laxmikopdudhall@gmail.com CIN NO.: U45400PN2013PTC148380

No. The Environment Officer,
 Kolhapur Municipal Corporation,
 Kolhapur.

Date :

o/c

Subject: - Analysis report for Laxtitrth Nallha and Jamdar club.

Reference: - Your letter no.90/2022 dated on 23/09/2022.

Dear Sir,

In accordance to your letter in reference above, we submitted the test report of raw sewage collected at - Sandhya Math, Tambat Kaman, and Rankala Tower.

Analysis Report

Date Of Sampling	19/03/2024	Date Of Report	24/03/2024
Date Of Analysis	24/03/2024	Sample Locations: -Laxtitrth Nallha and Jamdar Club	
Sample Description	After Sampling		

Sr. No.	Parameter	Unit	Before Sampling		After Sampling	
			Laxtitrth Nallah	Jamdar Club	Laxtitrth Nallah	Jamdar Club
1	pH	-	7.62	7.74	7.59	7.72
2	Dissolved Oxygen	Mg/l	1.6	1.8	1.8	1.9
3	Total Suspended Solids(TSS)	Mg/l	78	96	75	92
4	Chemical Oxygen Demand(COD)	Mg/l	108	124	102	114
5	BOD	Mg/l	39	43	34.80	39

Thanking You.

Koush

Yours Faithfully,


 (Lab In-charge)

17 MLD STP, Dudhali,
 Kolhapur.

Copies for information submitted to-

The Project Manager, NJSEIP, Kolhapur.

LAXMI CIVIL ENGINEERING INFRASTRUCTURE PVT. LTD.

CORPORATE OFFICE : C. S. No. 1031/K2, E WARD, 3RD FLOOR, STERLING TOWER,
GAVAT MANDAI, KOLHAPUR - 416 001 (MAHARASHTRA) 11/04/2024
LCEPL/Dudhali/037/2023/24
PHONE NO.: 0231-2529199, 2686910-911, FAX : 0231-2668199
Email : laxmikopdudhali@gmail.com CIN NO.: U45400PN2013PTC148380

No. The Environment Officer,
Kolhapur Municipal Corporation,
Kolhapur.

Date :

O/C

Subject: - Analysis report for Laxtirth Nallha and Jamdar club.

Reference: - Your letter no.90/2022 dated on 23/09/2022.

Dear Sir,

In accordance to your letter in reference above, we submitted the test report of raw sewage collected at - Sandhya Math, Tambat Kaman, and Rankala Tower.

Analysis Report

Date Of Sampling	04/04/2024	Date Of Report	09/04/2024
Date Of Analysis	09/04/2024	Sample Locations: -Laxtirth Nallha and Jamdar Club	
Sample Description	After Sampling		

Sr. No.	Parameter	Unit	Before Sampling		After Sampling	
			Laxtirth Nallah	Jamdar Club	Laxtirth Nallah	Jamdar Club
1	pH	-	7.69	7.92	7.62	7.86
2	Dissolved Oxygen	Mg/l	1.8	1.5	1.9	1.7
3	Total Suspended Solids(TSS)	Mg/l	74	86	70	83
4	Chemical Oxygen Demand(COD)	Mg/l	92	118	88	112
5	BOD	Mg/l	42	48	39	45

Thanking You.

K. S. S.

Yours Faithfully,

Rehmat
24/04/24
(Lab In-charge)

17 MLD STP, Dudhali,
Kolhapur.

Copies for information submitted to-

The Project Manager, NJSEIP, Kolhapur.

LAXMI CIVIL ENGINEERING INFRASTRUCTURE PVT. LTD.

CORPORATE OFFICE : C. S. No. 1031/K2, E WARD, 3RD FLOOR, STERLING TOWER,LCEPL/Dudhali/GAVAT MANDAL, KOLHAPUR - 416 001 (MAHARASHTRA)
PHONE NO.: 0231-2529199, 2686910-911, FAX : 0231-2668199

29/04/2024

To, Email : laxmikopdudhali@gmail.com CIN NO.: U45400PN2013PTC148380

No. The Environment Officer,
Kolhapur Municipal Corporation,
Kolhapur.

Date :

o/c.

Subject: - Analysis report for Laxtirth Nallha and Jamdar club.

Reference: - Your letter no.90/2022 dated on 23/09/2022.

Dear Sir,

In accordance to your letter in reference above, we submitted the test report of raw sewage collected at - Sandhya Math, Tambat Kaman, and Rankala Tower.

Analysis Report

Date Of Sampling	19/04/2024	Date Of Report	24/04/2024
Date Of Analysis	24/04/2024	Sample Locations: -Laxtirth Nallha and Jamdar Club	
Sample Description	After Sampling		

Sr. No.	Parameter	Unit	Before Sampling		After Sampling	
			Laxtirth Nallah	Jamdar Club	Laxtirth Nallah	Jamdar Club
1	pH	-	7.69	7.79	7.43	7.39
2	Dissolved Oxygen	Mg/l	1.8	1.7	1.9	1.8
3	Total Suspended Solids(TSS)	Mg/l	78	96	74	.92
4	Chemical Oxygen Demand(COD)	Mg/l	102	118	96	114
5	BOD	Mg/l	39	45	36	42

Thanking You.



Yours Faithfully,


29/04/24.
(Lab In-charge)

17 MLD STP, Dudhali,
Kolhapur.

Copies for Information submitted to-

The Project Manager, NJSEIP, Kolhapur.

LAXMI CIVIL ENGINEERING INFRASTRUCTURE PVT. LTD.

CORPORATE OFFICE : C. S. No. 1031/K2, E WARD, 3RD FLOOR, STERLING TOWER,
GAVAT MANDAI, KOLHAPUR - 416 001 (MAHARASHTRA)
LCEPL/Dudhalli/037/2023/24-2529199, 2686910-911, FAX : 0231-2668199 20/05/2024
Email : laxmikopdudhall@gmail.com CIN NO.: U45400PN2013PTC148380

No. The Environment Officer,
Kolhapur Municipal Corporation,
Kolhapur.

Date :

o/c

Subject: - Analysis report for Laxtitrth Nallah and Jamdar club.

Reference: - Your letter no.90/2022 dated on 23/09/2022.

Dear Sir,

In accordance to your letter in reference above, we submitted the test report of raw sewage collected at - Sandhya Math, Tambat Kaman, and Rankala Tower.

Analysis Report

Date Of Sampling	08/05/2024	Date Of Report	13/05/2024
Date Of Analysis	13/05/2024	Sample Locations: -Laxtitrth Nallah and Jamdar Club	
Sample Description	After Sampling		

Sr. No.	Parameter	Unit	Before Sampling		After Sampling	
			Laxtitrth Nallah	Jamdar Club	Laxtitrth Nallah	Jamdar Club
1	pH	-	7.82	7.90	7.78	7.84
2	Dissolved Oxygen	Mg/l	1.4	1.7	1.6	1.9
3	Total Suspended Solids(TSS)	Mg/l	74	80	72	78
4	Chemical Oxygen Demand(COD)	Mg/l	84	106	80	100
5	BOD	Mg/l	45	48	39	42

Thanking You.

K. S. Chavan

Yours Faithfully,

R. Parth
(Lab In-charge) 20/05/24.

17 MLD STP, Dudhalli,
Kolhapur.

Copies for Information submitted to-

The Project Manager, NJSEIP, Kolhapur.

LAXMI CIVIL ENGINEERING INFRASTRUCTURE PVT. LTD.

CORPORATE OFFICE : C. S. No. 1031/K2, E WARD, 3RD FLOOR, STERLING TOWER,
GAVAT MANDAI, KOLHAPUR - 416 001 (MAHARASHTRA)
PHONE NO.: 0231-2529199, 2686910-911, FAX : 0231-2668199
Email : laxmikopdudhali@gmail.com CIN NO.: U45400PN2013PTC148380

No. LCEPL/Dudhali/037/2023-24

Date : 04/06/2024

To,
The Environment Officer,
Kolhapur Municipal Corporation,
Kolhapur.

o/c.

Subject: - Analysis report for Laxtirth Nallah and Jamdar club.

Reference: - Your letter no.90/2022 dated on 23/09/2022.

Dear Sir,

In accordance to your letter in reference above, we submitted the test report of raw sewage collected at - Sandhya Math, Tambat Kaman, and Rankala Tower.

Analysis Report

Date Of Sampling	29/05/2024	Date Of Report	03/06/2024
Date Of Analysis	03/06/2024	Sample Locations: -	
Sample Description	After Sampling	Laxtirth Nallah and Jamdar Club	

Sr. No.	Parameter	Unit	Before Sampling		After Sampling	
			Laxtirth Nallah	Jamdar Club	Laxtirth Nallah	Jamdar Club
1	pH	-	7.68	7.76	7.62	7.73
2	Dissolved Oxygen	Mg/l	1.7	1.9	1.6	1.7
3	Total Suspended Solids(TSS)	Mg/l	79	92	83	88
4	Chemical Oxygen Demand(COD)	Mg/l	106	114	98	108
5	BOD	Mg/l	36	42	33	39

Thanking You.

Yours Faithfully,

R. Bhatte
04/06/24
(Lab In-charge)

17 MLD STP, Dudhali,
Kolhapur.

D. Shukla
11/06/24

Copies for information submitted to-

The Project Manager, NJSEIP, Kolhapur.

391

LAXMI CIVIL ENGINEERING INFRASTRUCTURE PVT. LTD.

CORPORATE OFFICE : C. S. No. 1031/K2, E WARD, 3RD FLOOR, STERLING TOWER,
GAVAT MANDAI, KOLHAPUR - 416 001 (MAHARASHTRA)
PHONE NO.: 0231-2529199, 2686910-911, FAX : 0231-2668199
Email : laxmikopdudhall@gmail.com CIN NO.: U45400PN2013PTC148380

No. LCEPL/Dudhali/038/2023-24

Date : 19/06/2024

To,

The Environment Officer,

Kolhapur Municipal Corporation,

Kolhapur.

O/C

Subject: - Analysis report for Laxtirth Nallah and Jamdar club.

Reference: - Your letter no.90/2022 dated on 23/09/2022.

Dear Sir,

In accordance to your letter in reference above, we submitted the test report of raw sewage collected at - Sandhya Math, Tambat Kaman, and Rankala Tower.

Analysis Report

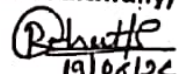
Date Of Sampling	13/06/2024	Date Of Report	18/06/2024
Date Of Analysis	18/06/2024	Sample Locations: -	
Sample Description	After Sampling	Laxtirth Nallah and Jamdar Club	

Sr. No.	Parameter	Unit	Before Sampling		After Sampling	
			Laxtirth Nallah	Jamdar Club	Laxtirth Nallah	Jamdar Club
1	pH	-	7.84	7.92	7.82	7.89
2	Dissolved Oxygen	Mg/l	1.9	1.8	1.8	1.8
3	Total Suspended Solids(TSS)	Mg/l	84	94	83	92
4	Chemical Oxygen Demand(COD)	Mg/l	80	92	76	88
5	BOD	Mg/l	39	36	36	36

Thanking You.




Yours Faithfully,


(Lab In-charge)

17 MLD STP, Dudhall,
Kolhapur.

Copies for information submitted to-

The Project Manager, NJSEIP, Kolhapur.

	Vishwa Infrastructures and Services Pvt. Ltd.	
	Regd. & Corp. Office: 1-11-256/C/24, Plot No.24, Gagan Vihar Colony, Begum Pet, Hyderabad - 500016	

ANALYSIS REPORT

CLIENT'S NAME & ADDRESS	REPORT NO	
M/s. Kolhapur Municipal Corporation. Kolhapur	DATED	03/10/2024
	DATE OF SAMPLING	03/10/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	LOCATION
Untreated water	VISPL	Ramanmala & Veet Bhatti nala


RESULTS OF ANALYSIS

SR. NO	DESCRIPTION	Raman mala		Veet bhatti	
		BEFORE	AFTER	BEFORE	AFTER
01	pH	7.69	7.62	7.58	7.45
02	Biochemical Oxygen Demand (20 °C for 5 days)	48 mg/l	45 mg/l	45 mg/l	43 mg/l
03	Chemical Oxygen Demand	123 mg/l	115 mg/l	124 mg/l	118 mg/l
04	Total Suspended Solids (TSS)	84 mg/l	80 mg/l	76 mg/l	71 mg/l
05	DO	2.38	2.25	2.28	2.24
06	Oil & Grease	33.00	29.00	30.00	27.00

For Vishwa Infrastructure & Services Pvt.Ltd.
76MLD STP, Kolhapur.

Mr. Hemant S. Kashid
(DY.manager)



	Vishwa Infrastructures and Services Pvt. Ltd.	
	Regd. & Corp. Office: 1-11-256/C/24, Plot No.24, Gagan Vihar Colony, Begum Pet, Hyderabad – 500016	

ANALYSIS REPORT

CLIENT'S NAME & ADDRESS M/s. Kolhapur Municipal Corporation. Kolhapur	REPORT NO	
	DATED	13/06/2024
	DATE OF SAMPLING	13/06/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	LOCATION
Untreated water	VISPL	Ramanmala & Veet Bhatti nala

RESULTS OF ANALYSIS

SR. NO	DESCRIPTION	Raman mala		Veet bhatti	
		BEFORE	AFTER	BEFORE	AFTER
01	pH	7.71	7.67	7.58	7.53
02	Biochemical Oxygen Demand (20 °C for 5 days)	51mg/l	49 mg/l	42mg/l	49 mg/l
03	Chemical Oxygen Demand	132 mg/l	128 mg/l	136 mg/l	124 mg/l
04	Total Suspended Solids (TSS)	78 mg/l	72 mg/l	68 mg/l	62 mg/l
05	DO	2.22	2.15	2.27	2.18
06	Oil & Grease	30.00	27.00	32.00	28.00

For Vishwa Infrastructure & Services Pvt.Ltd.
76MLD STP, Kolhapur.

Mr. Hemant S. Kashid
(DY. manager) Kolhapur



	Vishwa Infrastructures and Services Pvt. Ltd.	
	Regd. & Corp. Office: 1-11-256/C/24, Plot No.24, Gagan Vihar Colony, Begum Pet, Hyderabad – 500016	

ANALYSIS REPORT

CLIENT'S NAME & ADDRESS	REPORT NO	
M/s. Kolhapur Municipal Corporation. Kolhapur	DATED	29/05/2024
	DATE OF SAMPLING	29/05/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	LOCATION
Untreated water	VISPL	Ramanmala & Veet Bhatti nala

RESULTS OF ANALYSIS

SR. NO	DESCRIPTION	Raman mala		Veet bhatti	
		BEFORE	AFTER	BEFORE	AFTER
01	pH	7.63	7.50	7.67	7.53
02	Biochemical Oxygen Demand (20 °C for 5 days)	57 mg/l	52 mg/l	45 mg/l	42 mg/l
03	Chemical Oxygen Demand	128 mg/l	122 mg/l	118 mg/l	112 mg/l
04	Total Suspended Solids (TSS)	82 mg/l	78 mg/l	73 mg/l	68 mg/l
05	DO	2.18	2.08	2.20	2.12
06	Oil & Grease	30.00	27.00	32.00	29.00

For Vishwa Infrastructure & Services Pvt.Ltd.
76MLD STP, Kolhapur.


 Mr. Hemant S. Kashid
 (DY.manager)



	Vishwa Infrastructures and Services Pvt. Ltd.	
	Regd. & Corp. Office: 1-11-256/C/24, Plot No.24, Gagan Vihar Colony, Begum Pet, Hyderabad - 500016	

ANALYSIS REPORT

CLIENT'S NAME & ADDRESS	REPORT NO	
M/s. Kolhapur Municipal Corporation. Kolhapur	DATED	08/05/2024
	DATE OF SAMPLING	08/05/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	LOCATION
Untreated water	VISPL	Ramanmala & Veet Bhatti nala

RESULTS OF ANALYSIS

SR. NO	DESCRIPTION	Raman mala		Veet bhatti	
		BEFORE	AFTER	BEFORE	AFTER
01	pH	7.69	7.62	7.58	7.45
02	Biochemical Oxygen Demand (20 °C for 5 days)	48 mg/l	45 mg/l	45 mg/l	43 mg/l
03	Chemical Oxygen Demand	123 mg/l	115 mg/l	124 mg/l	118 mg/l
04	Total Suspended Solids (TSS)	84 mg/l	80 mg/l	76 mg/l	71 mg/l
05	DO	2.38	2.25	2.28	2.24
06	Oil & Grease	33.00	29.00	30.00	27.00

For Vishwa Infrastructure & Services Pvt.Ltd.
76MLD STP, Kolhapur.

Mr. Hemant S. Kashid
(DY.manager)



	Vishwa Infrastructures and Services Pvt. Ltd.	
	Regd. & Corp. Office: 1-11-256/C/24, Plot No.24, Gagan Vihar Colony, Begum Pet, Hyderabad – 500016	

ANALYSIS REPORT

CLIENT'S NAME & ADDRESS	REPORT NO	
M/s. Kolhapur Municipal Corporation. Kolhapur	DATED	19/04/2024
	DATE OF SAMPLING	19/04/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	LOCATION
Untreated water	VISPL	Ramanmala & Veet Bhatti nala

RESULTS OF ANALYSIS

SR. NO	DESCRIPTION	Raman mala		Veet bhatti	
		BEFORE	AFTER	BEFORE	AFTER
01	pH	7.76	7.68	7.78	7.70
02	Biochemical Oxygen Demand (20 °C for 5 days)	48 mg/l	45 mg/l	47.50 mg/l	45.20 mg/l
03	Chemical Oxygen Demand	128 mg/l	123 mg/l	118 mg/l	115 mg/l
04	Total Suspended Solids (TSS)	80 mg/l	77 mg/l	92 mg/l	88 mg/l
05	DO	2.32	2.25	2.28	2.24
06	Oil & Grease	27.00	25.00	32.00	28.00

For Vishwa Infrastructure & Services Pvt.Ltd.
76MLD STP, Kolhapur.


 Mr. Hemant S. Kashid
 (DY.manager)



 Engineering Solutions	Vishwa Infrastructures and Services Pvt. Ltd. Regd. & Corp. Office: 1-11-256/C/24, Plot No.24, Gagan Vihar Colony, Begum Pet, Hyderabad – 500016
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ANALYSIS REPORT

CLIENT'S NAME & ADDRESS	REPORT NO	
M/s. Kolhapur Municipal Corporation. Kolhapur	DATED	04/04/2024
	DATE OF SAMPLING	04/04/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	LOCATION
Untreated water	VISPL	Ramanmala & Veet Bhatti nala

RESULTS OF ANALYSIS

SR. NO	DESCRIPTION	Raman mala		Veet bhatti	
		BEFORE	AFTER	BEFORE	AFTER
01	pH	7.69	7.62	7.58	7.45
02	Biochemical Oxygen Demand (20 °C for 5 days)	48 mg/l	45 mg/l	45 mg/l	43 mg/l
03	Chemical Oxygen Demand	123 mg/l	115 mg/l	124 mg/l	118 mg/l
04	Total Suspended Solids (TSS)	84 mg/l	80 mg/l	76 mg/l	71 mg/l
05	DO	2.38	2.25	2.28	2.24
06	Oil & Grease	33.00	29.00	30.00	27.00

For Vishwa Infrastructure & Services Pvt.Ltd.
76MLD STP, Kolhapur.

Mr. Hemant S. Kashid
(DY.manager)



	Vishwa Infrastructures and Services Pvt. Ltd.	
	Regd. & Corp. Office: 1-11-256/C/24, Plot No.24, Gagan Vihar Colony, Begum Pet, Hyderabad - 500016	

ANALYSIS REPORT

CLIENT'S NAME & ADDRESS	REPORT NO	
M/s. Kolhapur Municipal Corporation. Kolhapur	DATED	19/03/2024
	DATE OF SAMPLING	19/03/2024

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	LOCATION
Untreated water	VISPL	Ramanmala & Veet Bhatti nala

RESULTS OF ANALYSIS

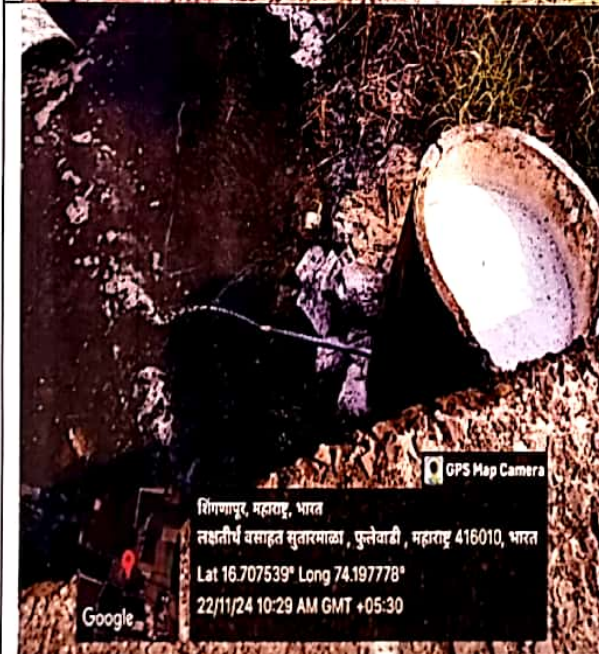
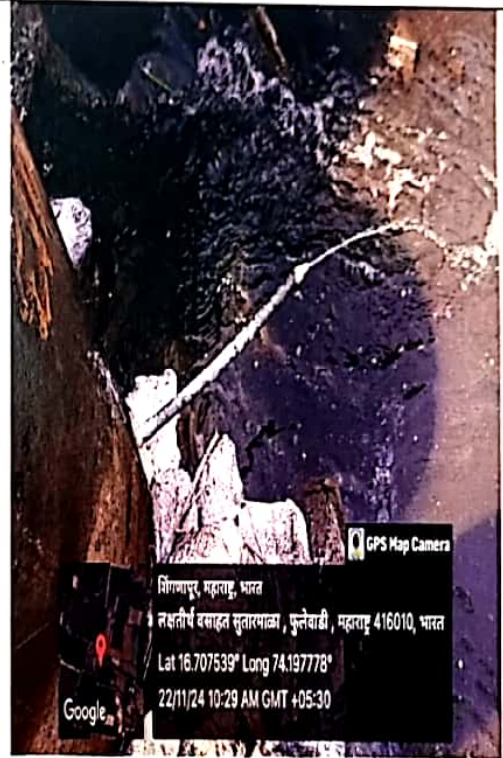
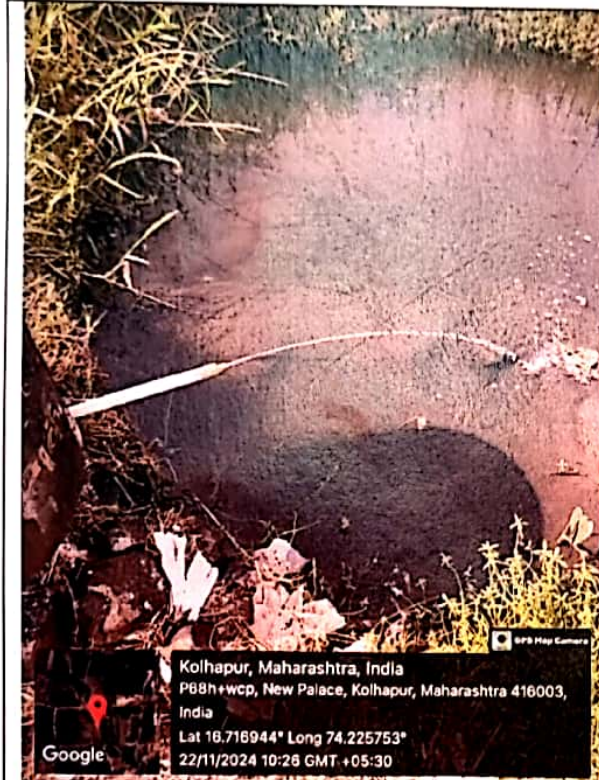
SR. NO	DESCRIPTION	Raman mala		Veet bhatti	
		BEFORE	AFTER	BEFORE	AFTER
01	pH	7.63	7.50	7.67	7.53
02	Biochemical Oxygen Demand (20 °C for 5 days)	57 mg/l	52 mg/l	45 mg/l	42 mg/l
03	Chemical Oxygen Demand	128 mg/l	122 mg/l	118 mg/l	112 mg/l
04	Total Suspended Solids (TSS)	82 mg/l	78 mg/l	73 mg/l	68 mg/l
05	DO	2.18	2.08	2.20	2.12
06	Oil & Grease	30.00	27.00	32.00	29.00

For Vishwa Infrastructure & Services Pvt.Ltd.
76MLD STP, Kolhapur.

Mr. Hemant S. Kashid
(DY. manager)



BLEACHING



PHYTOREMEDIATION



Table- 13.1: Water Quality of Tributaries - Panchaganga and Bhima (2020)

Station Code	Name of the Monitoring Location	State Name	Temperature (°C)		Dissolved Oxygen (mg/L)		pH		Conductivity (µmho/cm)		Bio-chemical Oxygen Demand (mg/L)		Nitrate (mg/L)		Fecal Coliform (MPN/100 mL)		Total Coliform (MPN/100 mL)		Fecal Streptococci (MPN/100 mL)		
			MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
	Primary Water Quality Criteria (PWQC) notified by MoEF & CC under E (P) Rules, 1986																				
1311	PANCHAGANGA AT ICHALKARANJI, SHIRADWAD, HATKANANGALE, KOLHAPUR	MAHARASHTRA	33	33	5.4	7.3	7.1	8.1	126	587	1.8	2.2	-	-	4.5	17	21	79	1.8	1.8	1.8
2163	PANCHAGANGA RIVER AT SHIROL NEAR SHIROL INTAKE WELL, KOLHAPUR	MAHARASHTRA	32	32	5.8	7.4	6.9	8.2	140	719	1.6	2	-	-	4.5	13	22	94	1.8	1.8	1.8
1904	PANCHAGANGA U/S OF KOLHAPUR TOWN, BAUNGA, KARVIR, KOLHAPUR	MAHARASHTRA	31	31	6.2	7.4	6.5	8.2	74	376	1.6	2	-	-	4.5	11	17	84	1.8	1.8	1.8
1905	PANCHAGANGA D/S OF KOLHAPUR TOWN, UCHEGAON, KOLHAPUR	MAHARASHTRA	30	30	6	7.6	6.8	8.1	123	479	1.8	2	-	-	5.6	21	24	130	1.8	1.8	4
1189	BHIMA AT PUNE U/S VITHALWADI, HAWELI, PUNE	MAHARASHTRA	29	29	2.8	5.9	6.7	8.2	244	593	5.2	25	-	-	50	550	550	1800	4	14	14
2655	BHIMA RIVER AT KOREGAON NEAR KOREGAON BRIDGE, SHIRUR, PUNE	MAHARASHTRA	28	28	5	6.8	7.24	8.6	186.2	1363	3	9	-	-	8	350	350	1600	2	14	14
1190	BHIMA AT PUNE, D/S OF BUNDGARDEN, YERWADA, HAWELI, PUNE	MAHARASHTRA	29	29	4.5	6.2	6.72	8.3	229.6	767.8	6	20	-	-	250	1600	1800	1800	9	45	45
1191	BHIMA AT PARGAON (AFTER CONFL WITH MULA MUTHA), PARGAON, DAUND, PUNE	MAHARASHTRA	30	30	3.5	6.8	6.85	8.6	443	932	3	14	-	-	4	120	225	900	1.8	7	7
1192	BHIMA AFTER CONFL WITH DAUND, DAUND, PUNE	MAHARASHTRA	29	29	3.3	6.7	6.92	8.5	178	1512	3.8	10	-	-	12	140	350	900	2	24	24
1188	BHIMA AT NARSINGPUR, (D/S AF CONFL WITH R. NIRA), NARSINGPUR, MALSHIRO, SOLAPUR	MAHARASHTRA	35	35	5.1	6.8	7.6	8.6	458	1592	3.6	11.5	-	-	7	12	200	350	2	8	8
28	BHIMA AT TAKLI, SOUTH SOLAPUR, SOLAPUR	MAHARASHTRA	35	35	5.5	6.5	7.1	8.4	455	1780	3	10	BDL	6.3	4	80	350	550	1.8	6	6
30057	BHIMA AT GANGAPUR (BANGALORE)	INTER-STATE	29	29	6.8	7.4	8	8.5	882	1407	2	3	-	-	630	1100	2800	3500	-	-	-
1183	BHIMA AT D/S OF ROAD BRIDGE AT GANGAPUR VILLAGE,	KARNATAKA	25	31	6.8	7.4	7.5	8.5	782	1660	2	3	BDL	2.17	460	1100	2200	3500	-	-	-
1184	BHIMA AT FERAZABAD VILLAGE (D/S),	KARNATAKA	26	31	6.4	7.8	7.8	8.7	640	1554	2	3.5	BDL	1.31	220	700	920	3500	-	-	-
1167	BHIMA AT D/S OF BDG. NEAR YADGIR,	KARNATAKA	32	32	6.8	7.6	7.5	8.3	390	1326	2.5	3	-	-	170	1100	920	4300	-	-	-
1888	BHIMA RIVER AT CONFLUENCE OF JEWARGI TOWN SEWAGE DISPOSAL POINT	KARNATAKA	31	31	6.8	7.7	7.6	8.5	712	1355	2.5	3	-	-	330	1200	1700	5400	-	-	-
2656	BHIMA RIVER-BACKWATER OF UJANI DAM NEAR RAW WATER PUMP HOUSE, KUMBARGAON, INDAPUR, PUNE	MAHARASHTRA	29	29	5.6	6.8	7	8.5	635	920	3.4	8	-	-	2	40	170	900	1.8	2	2

TABLE- 13.1: WATER QUALITY OF TRIBUTARY STREAMS- PANCHAGANGA, BHIMA, GHOD, PAWANA, VEL, VENNA, URMODI AND INDRAYANI (2021)

STATION CODE	NAME OF MONITORING LOCATION	STATE NAME	TEMPERATURE (°C)		DISSOLVED OXYGEN (mg/L)		pH		CONDUCTIVITY (µmhos/cm)		BIO-CHEMICAL OXYGEN DEMAND (mg/L)		NITRATE (mg/L)		FECAL COLIFORM (MPN/100 ML)		TOTAL COLIFORM (MPN/100 ML)		FECAL STREPTOCOCCI (MPN/100ML)		
			MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
PRIMARY WATER QUALITY CRITERIA NOTIFIED UNDER E(P) RULES, 1986																					
RIVER PANCHAGANGA AT																					
1311	ICHALKARANI, SHIRADWAD, HATKANANGALE, K OHLAPUR	MAHARASHTRA	25.0	38.0	5.9	7.1	6.8	8.2	128	380	1.5	2.2	0.30	3.60	4	6	14	39	2	2	
2163	RIVER PANCHAGANGA AT SHIROL NEAR SHIROL INTAKE WELL, KOLHAPUR	MAHARASHTRA	25.0	34.0	5.8	7.3	6.8	8.2	88	766	1.4	2.4	0.30	3.71	6	8	12	40	2	2	
1904	RIVER PANCHAGANGA U/S OF KOLHAPUR TOWN, BALINGA, KARVIR, KOLHAPUR	MAHARASHTRA	24.0	36.0	5.9	7.4	7.0	7.8	87	244	1.4	1.8	0.30	4.00	4	7	13	38	2	2	
1905	RIVER PANCHAGANGA D/S OF KOLHAPUR TOWN, UCHEGAON, KOLHAPUR	MAHARASHTRA	24.0	37.0	5.6	7.3	6.9	7.8	128	381	1.6	2.4	0.30	3.63	6	8	14	32	2	2	
1189	RIVER BHIMA AT PUNE U/S VITHALWADI, HAWELI, PUNE	MAHARASHTRA	21.0	28.0	4.5	5.9	7.0	8.4	146	598	4.0	10.5	0.30	4.90	20	225	425	1800	6	20	
2655	RIVER BHIMA AT KOREGAON NEAR KOREGAON BRIDGE, SHIRUR, PUNE	MAHARASHTRA	22.0	28.0	5.1	6.3	7.6	8.3	254	1924	2.5	6.4	0.70	8.22	17	45	140	1600	5	12	
1190	RIVER BHIMA AT PUNE, D/S OF BUNDGARDEN, YERWADA, HAWELI, PUNE	MAHARASHTRA	22.5	29.5	4.1	6.1	7.0	8.1	298	845	4.0	13.5	0.30	9.80	20	550	425	1800	9	35	
1191	RIVER BHIMA AT PARGAON (AFTER CONFL WITH MULA MUTHA), PARGAON, DAUND, PUNE	MAHARASHTRA	23.0	29.0	4.7	6.4	7.2	8.4	372	852	2.5	7.8	1.12	8.40	8	30	70	1600	2	12	
1188	RIVER BHIMA AT NARSINGPUR, (D/S AF. CONFL WITH R. NIRA), NARSINGPUR, MALSHIROES, SOLAPUR	MAHARASHTRA	27.0	36.0	5.0	6.3	7.6	8.8	340	9745	4.0	7.6	0.50	4.57	8	35	35	1600	2	14	
28	RIVER BHIMA AT TAKLI, SOUTH SOLAPUR, SOLAPUR	MAHARASHTRA	25.0	36.0	5.2	6.8	7.2	8.7	636	2106	2.5	7.6	0.80	4.37	6	40	20	1600	2	8	
30057	RIVER BHIMA AT GANGAPUR (BANGALORE)	KARNATAKA	29.0	29.0	7.4	7.4	8.3	8.3	1420	1420	3.0	3.0	0.32	0.32	700	700	3500	3500	-	-	