NWMP Report- Year-2012 RO – Bilaspur

River Mahanadi at Kharod - U/s of Kharod.

(NWMP Code No 1100)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	19.5	26.0	30.0	33.0	28.0	28.0	29.0	29.0	29.0	29.5		20.0
2.	Appearance	-	Clear	Clear	Clear	Clear	Clear	Clear	H. T.	S. Turbid	S. Turbid	Clear		Clear
3.	Odour		OL	OL	OL	O.L.	O.L.	OL	OL	OL	OL	OL		OL
4.	pH	pH Units	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5		7.5
5.	Turbidity	NTU/JTU	16.5	7.9	7.6	6.0	6.7	6.8	119.0	117.0	86.0	4.5		07.5
6.	Specific Conductivity	µS/cm	477.0	225.0	228.0	312.0	334.0	318.0	196.0	196.0	196.0	196.0		294.0
7.	Total Solids	Mg/L	391.0	186.0	194.0	263.0	303.0	292.0	254.0	250.0	210.0	228.0		226.0
8.	Dissolved Solids	Mg/L	365.0	140.0	146.0	245.0	250.0	248.0	136.0	134.0	134.0	206.0		204.0
9.	Suspended Solids	Mg/L	26.0	46.0	48.0	18.0	53.0	44.0	118.0	116.0	76.0	22.0		22.0
10.	Fixed Diss.Solids	Mg/L	80.0	80.0	82.0	72.0	70.0	120.0	86.0	88.0	68.0	82.0		84.0
11.	Ammonical Nitrogen	Mg/L	0.80	0.82	0.82	0.86	0.84	0.82	1.05	1.05	1.05	1.02		1.00
12.	Nitrate Nitrogen	Mg/L	1.14	1.15	1.18	1.17	1.15	1.17	1.46	1.36	1.36	1.42		1.42
13.	Nitrite Nitrogen	Mg/L	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.04	0.04	0.08		0.09
14.	Phosphate	Mg/L	1.44	1.44	1.46	1.56	1.57	1.50	1.28	1.38	1.33	1.79		1.78
15.	Chloride	Mg/L	130.0	38.0	36.0	34.0	23.0	24.0	33.0	32.0	32.0	28.0		22.0
16.	Sulphate(as SO_4^{--})	Mg/L	48.0	47.0	49.0	48.0	47.0	50.0	48.0	118.0	36.0	32.0		30.0
17.	Coliform	MPN/100ml	24.0	22.0	22.0	22.0	20.0	48.0	120.0	-	118.0	14.0		14.0
18.	Dissolved Oxygen	Mg/L	7.50	7.5	6.4	6.0	6.3	6.6	6.5	7.0	6.8	7.0		6.8
19.	B.O.D.(3 day 27°C)	Mg/L	*	*	*	*	*	*	*	*	*	*		*
20.	C.O.D.	Mg/L	28.0	**	**	**	**	40.0	43.6	44.0	54.0	30.0		28.0
21.	Total Alkalinity	Mg/L	96.0	180.0	156.0	154.0	100.0	108.0	114.0	112.0	112.0	90.0		92.0
22.	Total Hardness	Mg/L	100.0	174.0	160.0	160.0	116.0	120.0	74.0	74.0	72.0	88.0		86.0

23.	Calcium Hardness	Mg/L	72.0	95.0	86.0	84.0	68.0	80.0	58.0	58.0	56.0	68.0		62.0
24.	Magnesium Hardness	Mg/L	28.0	79.0	74.0	76.0	48.0	40.0	16.0	16.0	16.0	20.0		24.0
25.	Calcium	Mg/L	28.8	38.1	34.4	33.6	27.2	32.0	23.2	23.2	22.4	27.2		24.8
26.	Magnesium	Mg/L	6.82	19.2	18.04	18.53	11.7	9.75	3.90	3.90	3.90	4.87		5.85
27.	Fluoride	Mg/L	1.78	0.36	0.36	0.34	0.34	0.36	0.07	0.06	0.06	0.18		0.18

River Hasdeo at Champa - U/s at Champa Year – 2012

(NWMP Code No 1106)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	24.0	27.0	29.0	33.0	30.0	29.0	29.0	29.0	29.0	28.0		23.0
2.	Appearance	-	Clear	Clear	Clear	Clear	Clear	S.T.	H.T.	S. Turbid	Clear	Clear		Clear
3.	Odour		OL	OL	OL	OL	OL	OL	OL	OL	OL	OL		OL
4.	pH	pH Units	7.0	8.0	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5		7.5
5.	Turbidity	NTU/JTU	17.1	9.6	8.5	5.0	10.3	12.0	191.0	180.0	70.0	4.0		09.8
6.	Specific Conductivity	µS/cm	382.0	178.0	271.0	263.0	316.0	320.0	237.0	237.0	230.0	218.0		218.0
7.	Total Solids	Mg/L	254.0	137.0	226.0	210.0	256.0	238.0	258.0	225.0	227.0	108.0		112.0
8.	Dissolved Solids	Mg/L	209.0	115.0	213.0	188.0	239.0	210.0	156.0	186.0	186.0	95.0		96.0
9.	Suspended Solids	Mg/L	45.0	22.0	13.0	22.0	17.0	28.0	102.0	39.0	28.0	13.0		16.0
10.	Fixed Diss.Solids	Mg/L	80.0	70.0	46.0	76.0	74.0	100.0	88.0	80.0	82.0	46.0		46.0
11.	Ammonical Nitrogen	Mg/L	1.14	1.12	1.18	1.11	1.16	1.12	1.18	1.51	1.31	1.02		1.02
12.	Nitrate Nitrogen	Mg/L	1.58	1.50	1.40	1.94	1.41	1.46	1.46	0.02	1.8	1.31		1.30
13.	Nitrite Nitrogen	Mg/L	0.09	0.09	0.09	0.06	0.09	0.09	0.09	0.01	0.09	0.09		0.09
14.	Phosphate	Mg/L	0.74	1.20	1.62	1.30	1.60	1.58	1.60	0.26	0.66	0.58		0.05
15.	Chloride	Mg/L	18.0	17.0	25.0	22.0	24.0	28.0	38.0	43.0	32.0	22.0		20.0
16.	Sulphate(as SO_4^{--})	Mg/L	34.0	32.0	34.0	32.0	33.0	34.0	40.0	7.06	28.0	28.0		27.0
17.	Coliform	MPN/100ml	15.0	12.0	14.0	8.0	12.0	58.0	118.0	112.0	108.0	12.0		12.0

18.	Dissolved Oxygen	Mg/L	8.0	7.2	7.6	7.5	6.5	7.0	6.5	7.8	6.5	7.2		6.8
19.	B.O.D.(3 day 27°C)	Mg/L	*	*	*	*	*	*	*	*	*	*		*
20.	C.O.D.	Mg/L	24.0	**	**	**	**	32.0	40.0	18.8	22.0	32.0		18.56
21.	Total Alkalinity	Mg/L	76.0	106.0	40.0	130.0	90.0	94.0	106.0	84.0	84.0	86.0		76.0
22.	Total Hardness	Mg/L	78.0	108.0	90.0	128.0	96.0	100.0	70.0	54.0	54.0	82.0		68.0
23.	Calcium Hardness	Mg/L	56.0	64.0	64.0	68.0	58.0	60.0	42.0	38.0	38.0	62.0		44.0
24.	Magnesium Hardness	Mg/L	22.0	44.0	26.0	60.0	38.0	40.0	28.0	16.0	16.0	20.0		24.0
25.	Calcium	Mg/L	22.4	25.7	25.6	27.2	23.2	24.0	16.8	12.2	15.2	24.8		17.6
26.	Magnesium	Mg/L	5.36	10.6	6.34	14.63	9.2	9.75	6.8	3.90	3.90	4.87		5.85
27.	Fluoride	Mg/L	0.01	0.77	0.76	0.09	0.08	0.08	0.16	0.19	0.14	0.18		0.18

River Mahanadi at Sheorinarayan D/s Near Road Bridge

(NWMP Code No 1282)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	20.0			30.0			30.0			29.5		
2.	Appearance	-	Clear			Clear			H.T.			Clear		
3.	Odour		OL			O.L.			OL			OL		
4.	pH	pH Units	7.5			7.5			7.5			7.5		
5.	Turbidity	NTU/JTU	17.0			7.8			169.0			7.0		
6.	Specific Conductivity	µS/cm	470.0			312.0			205.0			316.0		
7.	Total Solids	Mg/L	425.0			280.0			287.0			192.0		
8.	Dissolved Solids	Mg/L	386.0			248.0			147.0			164.0		
9.	Suspended Solids	Mg/L	39.0			32.0			140.0			28.0		
10.	Fixed Diss.Solids	Mg/L	78.0			70.0			96.0			86.0		
11.	Ammonical Nitrogen	Mg/L	0.03			1.13			1.08			1.29		
12.	Nitrate Nitrogen	Mg/L	1.16			2.26			1.30			1.46		

13.	Nitrite Nitrogen	Mg/L	0.04			0.04			0.06			0.09		
14.	Phosphate	Mg/L	1.40			1.38			1.32			1.88		
15.	Chloride	Mg/L	30.0			26.0			36.0			42.0		
16.	Sulphate(as SO_4^{--})	Mg/L	36.0			48.0			58.0			36.0		
17.	Coliform	MPN/100ml	20.0			22.0			122.0			28.0		
18.	Dissolved Oxygen	Mg/L	6.5			5.6			5.8			6.2		
19.	B.O.D.(3 day 27°C)	Mg/L	*			*			*			*		
20.	C.O.D.	Mg/L	32.0			**			53.0			35.0		
21.	Total Alkalinity	Mg/L	100.0			146.0			118.0			102.0		
22.	Total Hardness	Mg/L	98.0			142.0			82.0			82.0		
23.	Calcium Hardness	Mg/L	76.0			74.0			32.0			60.0		
24.	Magnesium Hardness	Mg/L	22.0			68.0			50.0			22.0		
25.	Calcium	Mg/L	30.4			27.2			12.8			24.0		
26.	Magnesium	Mg/L	5.36			18.0			12.19			5.36		
27.	Fluoride	Mg/L	1.85			0.07			0.08			0.19		

River Mahanadi at Balpur Village. A/c of Mand River

(NWMP Code No 1467)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	25.0	27.0	30.0	32.0	30.0	28.0	30.0	29.0	29.0	29.0		20.0
2.	Appearance	-	Clear	Clear	Clear	Clear	Clear	Clear	H.T.	S. Turbid	S. Turbid	Clear		Clear
3.	Odour		OL	OL	OL	O.L.	O.L.	OL	OL	OL	OL	OL		OL
4.	pH	pH Units	7.2	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5		7.5
5.	Turbidity	NTU/JTU	12.0	7.8	7.1	8.0	7.6	8.0	190.0	183.0	73.0	4.2		05.0
6.	Specific Conductivity	µS/cm	372.0	206.0	203.0	288.0	333.0	340.0	235.0	230.0	232.0	216.0		214.0
7.	Total Solids	Mg/L	251.0	145.0	145.0	187.0	269.0	284.0	300.0	286.0	226.0	222.0		218.0

8.	Dissolved Solids	Mg/L	221.0	132.0	130.0	168.0	251.0	246.0	160.0	160.0	160.0	201.0	198.0
9.	Suspended Solids	Mg/L	30.0	13.0	15.0	19.0	18.0	38.0	140.0	126.0	66.0	21.0	20.0
10.	Fixed Diss.Solids	Mg/L	90.0	80.0	84.0	66.0	64.0	118.0	86.0	84.0	62.0	57.0	57.0
11.	Ammonical Nitrogen	Mg/L	0.98	0.78	0.76	0.75	0.75	0.74	0.98	0.91	0.91	1.02	1.01
12.	Nitrate Nitrogen	Mg/L	1.18	1.10	1.00	1.10	1.11	1.13	1.48	0.03	1.6	1.01	1.50
13.	Nitrite Nitrogen	Mg/L	0.10	0.07	0.07	0.07	0.07	0.07	0.05	0.05	0.05	0.06	0.07
14.	Phosphate	Mg/L	0.88	1.13	1.16	1.15	1.13	1.18	1.26	1.23	1.23	1.10	1.11
15.	Chloride	Mg/L	34.0	19.0	28.0	26.0	25.0	30.0	30.0	36.0	32.0	30.0	28.0
16.	Sulphate(as SO_4^{--})	Mg/L	38.0	35.0	32.0	36.0	34.0	44.0	48.0	42.0	40.0	32.0	30.0
17.	Coliform	MPN/100ml	18.0	15.0	18.0	20.0	19.0	56.0	129.0	126.0	118.0	18.0	18.0
18.	Dissolved Oxygen	Mg/L	7.5	7.3	7.6	7.0	6.3	6.8	6.4	7.8	6.9	7.3	6.8
19.	B.O.D.(3 day 27°C)	Mg/L	*	*	*	*	*	*	*	*	*	*	*
20.	C.O.D.	Mg/L	30.0	**	**	**	**	30.0	40.0	28.0	48.0	30.0	28.0
21.	Total Alkalinity	Mg/L	110.0	110.0	108.0	118.0	114.0	118.0	108.0	110.0	108.0	96.0	98.0
22.	Total Hardness	Mg/L	100.0	118.3	130.0	132.0	120.0	121.0	68.0	68.0	68.0	86.0	86.0
23.	Calcium Hardness	Mg/L	86.0	76.8	74.0	78.0	66.0	56.0	36.0	34.0	32.0	62.0	64.0
24.	Magnesium Hardness	Mg/L	14.0	41.5	56.0	54.0	54.0	65.0	32.0	34.0	36.0	24.0	22.0
25.	Calcium	Mg/L	34.4	30.7	29.6	31.2	26.4	22.4	14.4	13.6	12.8	24.8	25.6
26.	Magnesium	Mg/L	3.41	10.1	13.65	13.1	13.1	15.8	7.8	8.29	8.78	5.85	5.36
27.	Fluoride	Mg/L	0.01	0.37	0.36	0.05	0.05	0.05	0.08	0.07	0.07	0.18	0.18

River Mahanadi at Balpur Village. A/c of Mand River

(NWMP Code No 1467)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	25.0			32.0			30.0			29.0		
2.	Appearance	-	Clear			Clear			H.T.			Clear		

3.	Odour		OL			O.L.			OL			OL		
4.	pH	pH Units	7.2			7.5			7.5			7.5		
5.	Turbidity	NTU/JTU	12.0			8.0			190.0			4.2		
6.	Specific Conductivity	µS/cm	372.0			288.0			235.0			216.0		
7.	Total Solids	Mg/L	251.0			187.0			300.0			222.0		
8.	Dissolved Solids	Mg/L	221.0			168.0			160.0			201.0		
9.	Suspended Solids	Mg/L	30.0			19.0			140.0			21.0		
10.	Fixed Diss.Solids	Mg/L	90.0			66.0			86.0			57.0		
11.	Ammonical Nitrogen	Mg/L	0.98			0.75			0.98			1.02		
12.	Nitrate Nitrogen	Mg/L	1.18			1.10			1.48			1.01		
13.	Nitrite Nitrogen	Mg/L	0.10			0.07			0.05			0.06		
14.	Phosphate	Mg/L	0.88			1.15			1.26			1.10		
15.	Chloride	Mg/L	34.0			26.0			30.0			30.0		
16.	Sulphate(as SO_4^{--})	Mg/L	38.0			36.0			48.0			32.0		
17.	Coliform	MPN/100ml	18.0			20.0			129.0			18.0		
18.	Dissolved Oxygen	Mg/L	7.5			7.0			6.4			7.3		
19.	B.O.D.(3 day 27°C)	Mg/L	*			*			*			*		
20.	C.O.D.	Mg/L	30.0			**			40.0			30.0		
21.	Total Alkalinity	Mg/L	110.0			118.0			108.0			96.0		
22.	Total Hardness	Mg/L	100.0			132.0			68.0			86.0		
23.	Calcium Hardness	Mg/L	86.0			78.0			36.0			62.0		
24.	Magnesium Hardness	Mg/L	14.0			54.0			32.0			24.0		
25.	Calcium	Mg/L	34.4			31.2			14.4			24.8		
26.	Magnesium	Mg/L	3.41			13.1			7.8			5.85		
27.	Fluoride	Mg/L	0.01			0.05			0.08			0.18		

Borewell water near Bannak Chowk I/A Sirgitti,Bilaspur Year - 2012

(NWMP Code No 1623)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C				30.0						29.8		
2.	Appearance	-				Clear						Clear		
3.	Odour					OL						OL		
4.	pH	pH Units				7.5						7.5		
5.	Turbidity	NTU/JTU				3.1						03.9		
6.	Specific Conductivity	µS/cm				1887.0						1687.0		
7.	Total Solids	Mg/L				1500.0						594.0		
8.	Dissolved Solids	Mg/L				1482.0						584.0		
9.	Suspended Solids	Mg/L				18.0						10.0		
10.	Fixed Diss.Solids	Mg/L				712.0						570.0		
11.	Ammonical Nitrogen	Mg/L				1.66						1.66		
12.	Nitrate Nitrogen	Mg/L				3.61						3.61		
13.	Nitrite Nitrogen	Mg/L				0.09						0.09		
14.	Phosphate	Mg/L				3.6						3.4		
15.	Chloride	Mg/L				276.0						221.0		
16.	Sulphate (as SO_4^{--})	Mg/L				88.0						55.43		
17.	Coliform	MPN/100ml				Nil						6.0		
18.	Dissolved Oxygen	Mg/L				3.2						2.1		
19.	B.O.D.(3 day 27°C)	Mg/L				*						*		
20.	C.O.D.	Mg/L				**						25.0		
21.	Total Alkalinity	Mg/L				162.0						342.0		
22.	Total Hardness	Mg/L				656.0						532.0		
23.	Calcium Hardness	Mg/L				436.0						152.0		

24.	Magnesium Hardness	Mg/L				174.4						380.0		
25.	Calcium	Mg/L				220.0						60.8		
26.	Magnesium	Mg/L				53.65						92.68		
27.	Fluoride	Mg/L				1.24						0.86		

Bore well near I/A Tifra Bilaspur - Bore well water Year – 2012

(NWMP Code No 1622)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C				29.0						29.5		
2.	Appearance	-				Clear						Clear		
3.	Odour					OL						OL		
4.	pH	pH Units				7.5						7.5		
5.	Turbidity	NTU/JTU				4.1						04.2		
6.	Specific Conductivity	µS/cm				712.0						668.0		
7.	Total Solids	Mg/L				436.0						428.0		
8.	Dissolved Solids	Mg/L				424.0						418.0		
9.	Suspended Solids	Mg/L				12.0						10.0		
10.	Fixed Diss.Solids	Mg/L				352.0						82.0		
11.	Ammonical Nitrogen	Mg/L				2.42						2.41		
12.	Nitrate Nitrogen	Mg/L				2.11						2.12		
13.	Nitrite Nitrogen	Mg/L				0.06						0.06		
14.	Phosphate	Mg/L				2.46						2.42		
15.	Chloride	Mg/L				36.0						33.0		
16.	Sulphate(as SO_4^{--})	Mg/L				64.0						42.0		
17.	Coliform	MPN/100ml				Nil						6.0		
18.	Dissolved Oxygen	Mg/L				2.4						2.4		
19.	B.O.D.(3 day 27°C)	Mg/L				*						*		

20.	C.O.D.	Mg/L				**						18.0		
21.	Total Alkalinity	Mg/L				180.0						340.0		
22.	Total Hardness	Mg/L				314.0						272.0		
23.	Calcium Hardness	Mg/L				222.0						62.0		
24.	Magnesium Hardness	Mg/L				92.0						210.0		
25.	Calcium	Mg/L				88.8						24.8		
26.	Magnesium	Mg/L				22.43						51.2		
27.	Fluoride	Mg/L				0.06						0.06		

Sheonath River at Dagori Village. Near Satighat, Dagori
(NWMP Code No New)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C				32.0						30.0		
2.	Appearance	-				Clear						Clear		
3.	Odour	-				OL						OL		
4.	pH	pH Units				7.5						7.5		
5.	Turbidity	NTU/JTU				5.0						05.4		
6.	Specific Conductivity	µS/cm				582.0						582.0		
7.	Total Solids	Mg/L				467.0						362.0		
8.	Dissolved Solids	Mg/L				449.0						349.0		
9.	Suspended Solids	Mg/L				18.0						13.0		
10.	Fixed Dissolved Solids	Mg/L				72.0						102.0		
11.	Ammonical Nitrogen	Mg/L				1.34						1.24		
12.	Nitrate Nitrogen	Mg/L				1.52						1.42		
13.	Nitrite Nitrogen	Mg/L				0.07						0.07		
14.	Phosphate	Mg/L				1.24						1.28		

15.	Chloride	Mg/L				23.0						25.0		
16.	Sulphate(as SO_4^{--})	Mg/L				42.0						12.34		
17.	Coliform	MPN/100ml				9.0						14.0		
18.	Dissolved Oxygen	Mg/L				7.6						7.3		
19.	B.O.D.(3 day 27°C)	Mg/L				*						*		
20.	C.O.D.	Mg/L				**						30.0		
21.	Total Alkalinity	Mg/L				130.0						166.0		
22.	Total Hardness	Mg/L				122.0						134.0		
23.	Calcium Hardness	Mg/L				80.0						88.0		
24.	Magnesium Hardness	Mg/L				30.0						46.0		
25.	Calcium	Mg/L				32.0						35.2		
26.	Magnesium	Mg/L				7.31						11.2		
27.	Fluoride	Mg/L				0.16						0.10		

River Arpa at Bilaspur

D/s of Bilaspur city at check dam outlet near deorikhurd Bilaspur.

(NWMP Code No. 1848)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	Temperature	°C										29.0		
2	Appearance	-										Clear		
3	Odour	-										OL		
4	pH	pH Units										8.0		
5	Turbidity	NTU/JTU										66.0		
6	Specific Conductivity	µS/cm										208.0		
7	Total Solids	Mg/L										338.0		
8	Dissolved Solids	Mg/L										284.0		
9	Suspended Solids	Mg/L										54.0		

10	Fixed Dissolved Solids	Mg/L										84.0		
11	Ammonical Nitrogen	Mg/L										1.09		
12	Nitrate Nitrogen	Mg/L										1.14		
13	Nitrite Nitrogen	Mg/L										0.08		
14	Phosphate	Mg/L										1.10		
15	Chloride	Mg/L										46.0		
16	Sulphate (as SO_4^{--})	Mg/L										4.57		
17	Coliform	MPN/100ml										2400.0		
18	Dissolved Oxygen	Mg/L										6.4		
19	B.O.D.(3 day 27°C)	Mg/L										*		
20	C.O.D.	Mg/L										84.0		
21	Total Alkalinity	Mg/L										132.0		
22	Total Hardness	Mg/L										78.0		
23	Calcium Hardness	Mg/L										60.0		
24	Magnesium Hardness	Mg/L										18.0		
25	Calcium	Mg/L										24.0		
26	Magnesium	Mg/L										4.39		
27	Fluoride	Mg/L										0.18		

Natural Water Analysis Report- Year-2012 RO – Durg-Bhilai

Sheonath River at Rajnandgaon Near water supply intake well.
(NWMP Code No 1107)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	19	28	29	31	33	31	24	24	24	26	27.0	25.0
2.	pH	pH Units	7.5	7.5	7.3	7.3	7.7	7.4	7.6	7.6	7.5	7.4	7.5	7.29
3.	Specific Conductivity	Micro Mhos	321.0	321.0	324.0	329.0	331.0	331.0	330.0	-	-	-	-	210.0
4.	Coliform	MPN/100ml	150.0	150	120	120.0	120.0	150.0	2400.0	240.0	240.0	460.0	240.0	210.0
5.	Dissolved Solids	Mg/L	200.0	180	230.0	220.0	250.0	270.0	270.0	270.0	260.0	320.0	220.0	268.0
6.	Suspended Solids	Mg/L	30.0	30.	40.0	30.0	40.0	50.0	70.0	70.0	50.0	50.0	40.0	70.0
7.	Total Solids	Mg/L	-	-	-	-	-	-	-	-	-	-	260.0	338.0
8.	Dissolved Oxygen	Mg/L	7.2	7.0	6.9	6.9	7.1	7.1	7.8	8.0	7.8	7.7	7.3	7.4
9.	B.O.D.(3 day 27°C)	Mg/L	-	-	-	-	1.4	1.3	1.8	2.2	1.8	1.3	1.9	1.3
10.	C O D	Mg/L	19.76	19.2	29.4	19.36	38.08	28.56	28.56	29.4	19.36	28.8	19.36	19.20
11.	Chloride	Mg/L	21.0	20.0	25.0	27.0	43.0	39.0	28.0	30.0	27.0	29.0	20.0	31.99
12.	Total Alkalinity	Mg/L	100.0	106.0	106.0	110.0	104.0	104.0	108.0	118.0	112.0	110.0	98.0	152.0
13.	Total Hardness	Mg/L	72.0	78.0	78.0	84.0	98.0	98.0	106.0	108.0	84.0	94.0	72.0	100.0
14.	Calcium Hardness	Mg/L	42.0	18.0	17.6	-	-	-	-	58.0	48.0	52.0	40.0	52.0
15.	Magnesium Hardness	Mg/L	30.0	7.80	8.2	-	-	-	-	50.0	36.0	42.0	32.0	48.0
16.	Ammonical Nitrogen	Mg/L	0.40	0.35	0.35	0.40	0.45	0.65	0.55	0.04	0.55	0.50	0.50	0.40
17.	Nitrate Nitrogen	Mg/L	0.30	0.26	0.27	0.32	0.32	0.32	0.53	0.55	0.50	0.45	0.42	0.37
18.	Nitrite Nitrogen	Mg/L	0.40	0.01	0.02	0.02	0.02	0.01	0.03	0.50	0.02	0.01	0.02	0.02
19.	Phosphate	Mg/L	0.9	9.0	11.0	12.0	9.0	10.0	13.0	16.0	14.0	18.0	1.0	1.0
20.	Sulphate(as SO_4^{--})	Mg/L	-	-	-	19.2	98.0	24.8	22.4	23.2	19.2	20.8	10.0	11.0
21.	Calcium	Mg/L	-	-	-	8.78	24.8	8.78	12.19	12.19	8.78	10.24	16.0	20.8
22.	Magnesium	Mg/L	-	-	-	-	-	-	-	-	-	-	7.80	11.7

River Sheonath at Durg Near W/s intake well.

(NWPM Code No 1845)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	20	-	-	30	-	30		-	24	-		24.0
2.	Appearance	NTU	Clear	Clear	Clear	clear	clear	clear		-	-	-		-
3.	Odour	Threshold No.	OL	OL	OL	OL	OL	OL		-	-	-		-
4.	pH	pH Units	7.4	7.5	7.3	7.4	7.5	7.5		7.4	7.6	7.5		7.4
5.	Specific Conductivity	Micro Mhos	331.0	-	-	316.0	-	328.0		-	-	-		-
6.	Coliform	MPN/100ml	210.0	150.0	120.0	120.0	120.0	150.0		240.0	240.0	360.0		120.0
7.	Total Solid	Mg/L	250.0	220.0	210.0	230.0	250.0	260.0		350.0	330.0	410.0		346.0
8.	Dissolved Solids	Mg/L	220.0	190.0	180.0	200.0	220.0	220.0		280.0	260.0	350.0		80.0
9.	Suspended Solids	Mg/L	30.0	30.0	30.0	30.0	30.0	40.0		70.0	70.0	60.0		266.0
10.	Dissolved Oxygen	Mg/L	7.2	6.9	6.8	6.8	6.6	6.7		7.8	7.6	7.5		7.3
11.	B.O.D.(3 day 27°C)	Mg/L	-	-	-	-	1.5	1.4		2.1	1.8	1.5		1.0
12.	C O D	Mg/L	29.64	28.8	29.4	29.04	28.8	28.56		39.2	29.04	28.8		19.20
13.	Chloride	Mg/L	25	22.0	20.0	23.0	27.0	28.0		37.0	34.0	31.0		59.98
14.	Total Alkalinity	Mg/L	106.0	102.0	108.0	112.0	118.0	122.0		122.0	118.0	126.0		155.0
15.	Total Hardness	Mg/L	76.0	72.0	68.0	74.0	84.0	90.0		104.0	98.0	118.0		102.0
16.	Calcium Hardness	Mg/L	32.0	28.0	24.0	-	34.0	-		54.0	46.0	58.0		44.0
17.	Magnesium Hardness	Mg/L	44.0	44.0	44.0	-	50.0	-		50.0	52.0	60.0		58.0
18.	Ammonical Nitrogen	Mg/L	0.30	0.30	0.25	0.30	0.35	0.45		0.45	0.40	0.55		0.40
19.	Nitrate Nitrogen	Mg/L	0.25	0.25	0.25	0.26	0.30	0.32		0.40	0.35	0.50		0.32
20.	Nitrite Nitrogen	Mg/L	0.02	0.02	0.01	0.01	0.01	0.02		0.03	0.02	0.01		0.02
21.	Phosphate	Mg/L	0.9	0.8	0.9	1.1	1.0	1.1		1.6	1.4	1.0		0.9
22.	Sulphate (as SO_4^{--})	Mg/L	10.0	9.0	9.0	10.0	9.0	12.0		15.0	13.0	15.0		12.0
23.	Calcium	Mg/L	12.8	11.2	9.6	11.2	13.6	15.2		21.6	18.4	23.20		17.6
24.	Magnesium	Mg/L	10.73	10.73	10.73	11.21	12.19	12.68		12.19	12.68	14.63		14.14

River Kharoon at Kumhari, Durg After confluence of Khapri nalla
(NWMP Code No 1846)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	20	-	-	31	-	30		-	24	-		23.0
2.	Appearance	NTU	Clear	clear	clear	-	clear	clear		-	-	-		-
3.	Odour	Threshold No.	OL	OL	OL	-	OL	OL		-	-	-		-
4.	pH	pH Units	7.4	7.5	7.4	7.4	7.4	7.3		7.6	7.6	7.5		7.4
5.	Specific Conductivity	Micro Mhos	338.0	-	-	328.0	-	330.0		-	-	-		-
6.	Coliform	MPN/100ml	240.0	210.0	150.0	150.0	150.0	210.0		240.0	240.0	460.0		240.0
7.	Total Solid	Mg/L	290.0	270.0	270.0	-	280.0	310.0		410.0	390.0	390.0		402.0
8.	Dissolved Solids	Mg/L	240.0	220.0	220.0	210.0	230.0	250.0		340.0	320.0	310.0		302.0
9.	Suspended Solids	Mg/L	50.0	50..0	50.0	50.0	50.0	60.0		70.0	70.0	80.0		100.0
10.	Dissolved Oxygen	Mg/L	7.4	7.0	6.9	6.8	6.6	6.7		7.8	7.7	7.4		6.8
11.	B.O.D.(3 day 27°C)	Mg/L	-	-	-	-	1.8	2.0		2.2	2.0	1.9		1.9
12.	C O D	Mg/L	39.52	38.4	39.2	38.72	38.4	38.08		49.0	38.72	48.0		38.08
13.	Chloride	Mg/L	27.0	25.0	24.0	23.0	27.0	32.0		43.0	41.0	47.0		64.97
14.	Total Alkalinity	Mg/L	114.0	110.0	108.0	110.0	118.0	126.0		138.0	130.0	152.0		150.0
15.	Total Hardness	Mg/L	96.0	98.0	98.0	100.0	104.0	108.0		122.0	116.0	128.0		104.0
16.	Calcium Hardness	Mg/L	54.0	58.0	50.0	-	58.0	-		76.0	70.0	66.0		50.0
17.	Magnesium Hardness	Mg/L	42.0	40.0	48.0	-	46.0	-		46.0	46.0	62.0		52.0
18.	Ammonical Nitrogen	Mg/L	0.45	0.40	0.35	0.40	0.45	0.55		0.65	0.60	0.65		0.45
19.	Nitrate Nitrogen	Mg/L	0.40	0.35	0.30	0.37	0.40	0.37		0.60	0.55	0.65		0.42
20.	Nitrite Nitrogen	Mg/L	0.03	0.02	0.02	0.02	0.02	0.03		0.04	0.04	0.02		0.02
21.	Phosphate	Mg/L	1.2	1.2	1.3	1.3	1.4	1.6		1.8	1.7	1.9		1.1
22.	Sulphate(as SO_4^{--})	Mg/L	15.0	14.0	12.0	12.0	14.0	17.0		21.0	19.0	21.0		15.0
23.	Calcium	Mg/L	21.6	23.2	20.0	20.8	23.2	28.8		30.4	28.0	26.4		20.0
24.	Magnesium	Mg/L	10.24	9.75	11.70	11.70	11.21	8.78		11.21	11.21	15.12		13.17

River Kharoon at Kumhari, Durg Before confluence of Khapri nalla
Near Durg – Raipur Road Bridge_
(NWMP Code No 1847)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	20	-	-	31	-	30		24	24	-		23.0
2.	Appearance	NTU	Clear	clear	clear	-	Clear	clear		-	-	-		-
3.	Odour	Threshold No.	OL	OL	OL	-	OL	OL		-	-	-		-
4.	pH	pH Units	7.4	7.4	7.3	7.3	7.3	7.2		7.5	7.5	-		7.4
5.	Specific Conductivity	Micro Mhos	332	-	-	325	-	325.0		-	-	-		-
6.	Coliform	MPN/100ml	210.0	150.0	120.0	120.0	120.0	150.0		2400.0	2400.0	-		240.0
7.	Total Solid	Mg/L	280.0	250.0	230.0	-	260.0	280.0		-	-	-		384.0
8.	Dissolved Solids	Mg/L	240.0	210.0	190.0	200.0	220.0	230.0		300.0	300.0	-		304.0
9.	Suspended Solids	Mg/L	40.0	40.0	40.0	40.0	40.0	50.0		60.0	60.0	-		80.0
10.	Dissolved Oxygen	Mg/L	7.4	7.2	7.1	7.0	6.8	6.9		7.9	7.9	-		6.8
11.	B.O.D.(3 day 27°C)	Mg/L	-	-	-	-	1.6	1.7		1.8	1.8	-		1.6
12.	C O D	Mg/L	29.64	28.8	29.4	29.04	28.8	28.56		29.04	29.04	-		28.56
13.	Chloride	Mg/L	25.0	23.0	20.0	22.0	24.0	27.0		39.0	39.0	-		49.98
14.	Total Alkalinity	Mg/L	112.0	106.0	102.0	106.0	114.0	118.0		126.0	126.0	-		165.0
15.	Total Hardness	Mg/L	90.0	94.0	90.0	94.0	98.0	102.0		108.0	108.0	-		100.0
16.	Calcium Hardness	Mg/L	46.0	52.0	46.0	-	54.0	-		62.0	62.0	-		44.0
17.	Magnesium Hardness	Mg/L	44.0	42.0	44.0	-	44.0	-		46.0	46.0	-		56.0
18.	Ammonical Nitrogen	Mg/L	0.40	0.35	0.30	0.35	0.40	0.45		0.50	0.50	-		0.40
19.	Nitrate Nitrogen	Mg/L	0.30	0.30	0.25	0.32	0.35	0.32		0.48	0.48	-		0.22
20.	Nitrite Nitrogen	Mg/L	0.02	0.02	0.02	0.02	0.02	0.02		0.03	0.03	-		0.02
21.	Phosphate	Mg/L	1.1	1.1	1.0	1.2	1.3	1.4		1.5	1.5	-		1.0
22.	Sulphate (as SO_4^{--})	Mg/L	13.0	12.0	10.0	11.0	13.0	15.0		16.0	16.0	-		15.0
23.	Calcium	Mg/L	18.4	-	18.4	20.0	21.6	25.6		24.0	24.8	-		17.6
24.	Magnesium	Mg/L	10.73	-	10.73	10.73	10.73	9.68		11.21	11.21	-		13.6

Sheonath River at Rajnandgaon – D/s at Mohad Village

(NWMP Code No 3167)

S. No.	Characteristics	Unit	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
1.	Temperature	°C		28	29	31	33	30	24	25	24	26	27.0	25.0	
2.	pH	pH Units		7.4	7.3	7.4	7.5	7.5	7.6	7.6	7.5	7.5	7.6	7.3	
3.	Specific Conductivity	Micro Mhos		323	327	332	335	335	332	-	-	-	-	-	
4.	Nitrate Nitrogen	Mg/L		0.32	0.32	0.37	0.32	0.32	0.53	0.65	0.50	0.46	0.42	0.37	
5.	Nitrite Nitrogen	Mg/L		0.02	0.02	0.02	0.02	0.02	0.03	0.05	0.02	0.01	0.02	0.02	
6.	Dissolved Oxygen	Mg/L		6.8	6.8	6.8	6.9	6.9	7.6	8.1	7.6	7.8	7.4	6.5	
7.	B.O.D.(3 day 27°C)	Mg/L		-	-	-	1.6	1.5	1.8	2.3	1.9	1.4	2.2	1.4	
8.	Ammonical Nitrogen	Mg/L		0.04	0.03	0.04	0.05	0.07	0.06	0.04	0.55	0.50	0.50	0.40	
9.	Coliform	MPN/100ml		210	150	150	150	210	2400	2400	2400	460.0	240.0	240.0	
10.	Total Solid	Mg/L		-	-	-	-	-	-	-	-	370.0	260.0	352.0	
11.	Dissolved Solid	Mg/L		210.0	6.8	230.0	260.0	280.0	270.0	280.0	250.0	320.0	220.0	272.0	
12.	Suspended Solid	Mg/L		40.0	50.0	40.0	50.0	60.0	70.0	70.0	50.0	50.0	40.0	80.0	
13.	C O D	Mg/L		28.8	39.2	29.04	38.08	38.08	29.04	29.4	19.36	28.8	19.36	28.8	
14.	Chloride	Mg/L		23.0	27.0	31.0	45.0	41.0	25.0	31.0	26.0	30.0	21.0	33.98	
15.	Total Alkalinity	Mg/L		110.0	110.0	114.0	110.0	114.0	108.0	120.0	110.0	110.0	100.0	152.0	
16.	Total Hardness	Mg/L		82.0	82.0	86.0	104.0	104.0	106.0	110.0	82.0	94.0	72.0	102.0	
17.	Calcium Hardness	Mg/L		-	-	-	-	-	-	58.0	46.0	52.0	40.0	52.0	
18.	Magnesium Hardness	Mg/L		-	-	-	-	-	-	52.0	36.0	42.0	32.0	48.0	
19.	Calcium	Mg/L		20.0	48.0	19.2	28.8	14.0	22.4	23.2	18.4	20.8	16.0	20.8	
20.	Magnesium	Mg/L		7.8	34.0	9.26	7.80	8.7	12.19	12.68	8.78	10.24	7.80	11.7	
21.	Phosphate	Mg/L		1.2	1.1	1.3	1.0	0.9	1.4	1.4	1.2	1.6	1.0	1.0	
22.	Sulphate(as SO_4^{--})	Mg/L		11.0	12.0	14.0	11.0	11.0	12.0	16.0	14.0	18.0	11.0	11.0	

River Sheonath at Jhinghri Village A/C of Samoda Nalla

(NWMP Code No 3166)

S. No.	Characteristics	Unit	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
1.	Temperature	°C		28	30	31	33	30	25	25	24	26	26.0	23.0	
2.	pH	pH Units		7.5	7.4	7.4	7.3	7.4	7.6	7.5	7.4	7.5	7.5	7.5	
3.	Specific Conductivity	Micro Mhos		327.0	329.0	334.0	332.0	328.0	334.0		-	-	-	-	
4.	Nitrate Nitrogen	Mg/L		0.43	0.38	0.43	0.43	0.46	0.59	0.59	0.54	0.58	0.42	0.43	
5.	Nitrite Nitrogen	Mg/L		0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.03	0.02	0.03	
6.	Dissolved Oxygen	Mg/L		7.0	7.0	6.8	6.6	7.2	7.8	8.0	7.8	7.5	7.4	7.4	
7.	B.O.D.(3 day 27°C)	Mg/L		-	-	-	2.4	2.3	2.2	2.5	2.3	1.8	1.8	1.8	
8.	Ammonical Nitrogen	Mg/L		0.45	0.40	0.45	0.45	0.55	0.65	0.60	0.55	0.65	0.45	0.45	
9.	Coliform	MPN/100ml		240	150	150	150	240.0	2400	2400	2400	460.0	240.0	240.0	
10.	Total Solid	Mg/L		-	-	-	-	-	-	-	-	400.0	320.0	422.0	
11.	Dissolved Solids	Mg/L		250.0	230.0	240.0	260.0	280.0	290.0	300.0	290.0	330.0	270.0	312.0	
12.	Suspended Solids	Mg/L		50.0	50.0	50.0	50.0	60.0	80.0	70.0	60.0	70.0	50.0	110.0	
13.	C O D	Mg/L		38.4	39.2	38.72	38.4	38.08	47.6	49.0	38.72	38.4	38.4	38.08	
14.	Chloride	Mg/L		29.0	27.0	29.0	31.0	36.0	43.0	44.0	41.0	42.0	36.0	47.98	
15.	Total Alkalinity	Mg/L		134.0	130.0	130.0	134.0	138.0	144.0	144.0	140.0	148.0	130.0	136.0	
16.	Total Hardness	Mg/L		116.0	112.0	118.0	122.0	124.0	126.0	128.0	124.0	130.0	118.0	112.0	
17.	Calcium Hardness	Mg/L		-	-	-	-	-	-	74.0	68.0	64.0	54.0	50.0	
18.	Magnesium Hardness	Mg/L		-	-	-	-	-	-	54.0	56.0	66.0	64.0	62.0	
19.	Calcium	Mg/L		20.8	20.0	20.0	21.6	22.4	27.2	29.6	27.2	25.6	21.6	20.0	
20.	Magnesium	Mg/L		15.6	15.12	16.56	16.58	16.58	14.14	13.17	13.65	16.09	15.60	15.12	
21.	Phosphate	Mg/L		1.3	1.2	1.2	1.2	1.7	1.8	1.8	1.6	1.6	1.3	1.2	
22.	Sulphate(as SO_4^{--})	Mg/L		14.0	13.0	15.0	13.0	16.0	18.0	17.0	15.0	18.0	17.0	16.0	

Nehru Nagar Talab, Bhilai Talab Water

(NWMP Code No 3164)

S. No.	Characteristics	Unit	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Avg
1.	Temperature	°C		28	-	31	31	29	25	29	25	28	26.0	27.0	
2.	pH	pH Units		7.4	7.4	7.4	6.6	6.4	6.5	6.7	6.5	7.4	7.4	7.4	
3.	Specific Conductivity	Micro Mhos		345.0	349.0	354	357	357.0	358.0	-	-	-	-	-	
1.	Nitrate Nitrogen	Mg/L		1.23	1.54	1.59	0.69	0.69	0.59	0.59	0.54	0.63	1.23	0.37	
2.	Nitrite Nitrogen	Mg/L		0.03	0.04	0.04	0.04	0.05	0.04	0.04	0.04	0.03	0.03	0.02	
3.	Dissolved Oxygen	Mg/L		6.7	6.3	6.4	6.2	6.1	6.4	6.2	6.2	6.7	6.7	6.7	
4.	B.O.D.(3 day 27°C)	Mg/L		-	-	-	20.0	24.0	22.0	21.0	18.0	16.0	20.0	20.0	
5.	Ammonical Nitrogen	Mg/L		1.9	1.9	2.1	2.3	2.4	0.60	0.60	0.55	0.45	1.90	0.45	
6.	Coliform	MPN/100ml		460.0	460.0	460.0	460.0	460.0	460.0	460.0	460.0	460.0	360.0	460.0	
7.	Total Solid	Mg/L		-	-	-	-	-	-	-	-	380.0	410.0	410.0	
8.	Dissolved Solids	Mg/L		310.0	310.0	310.0	320.0	330.0	320.0	340.0	350.0	290.0	310.0	320.0	
9.	Suspended Solids	Mg/L		100.0	110.0	100.0	110.0	120.0	100.0	90.0	80.0	90.0	100.0	90.0	
10.	C O D	Mg/L		201.6	196.0	212.96	230.4	199.92	211.2	205.0	212.96	201.6	30.16	201.6	
11.	Chloride	Mg/L		71.0	74.0	71.0	73.0	75.0	72.0	71.0	68.0	71.0	71.0	70.0	
12.	Total Alkalinity	Mg/L		174.0	178.0	170.0	174.0	180.0	152.0	170.0	168.0	174.0	174.0	176.0	
13.	Total Hardness	Mg/L		130.0	138.0	144.0	150.0	170.0	148.0	146.0	142.0	130.0	130.0	132.0	
14.	Calcium Hardness	Mg/L		-	-	-	-	-	-	94.0	90.0	86.0	86.0	86.0	
15.	Magnesium Hardness	Mg/L		-	-	-	-	-	-	52.0	52.0	44.0	44.0	42.0	
4.	Calcium	Mg/L		34.4	36.0	34.0	38.4	40.8	36.0	37.6	36.0	34.4	2.0	1.6	
5.	Magnesium	Mg/L		10.73	11.70	14.14	13.17	16.58	14.14	12.68	12.68	10.73	28.0	28.0	
6.	Phosphate	Mg/L		2.0	2.4	2.9	2.2	2.4	2.0	2.0	1.8	1.8	34.4	34.4	
7.	Sulphate(as SO_4^{--})	Mg/L		28.0	25.0	28.0	25.0	27.0	24.0	22.0	21.0	28.0	10.73	10.24	

Hitkasa Tailing Dam, of M/s Rajhara Iron Ore Mines
Hitkasa Tailing Reservoir

(NWMP Code No 3163)

S. No.	Characteristics	Unit	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
1.	Temperature	°C		28		30	32	30	25	25	25	27	27.0	22.0	
2.	pH	pH Units		7.5		7.6	7.4	7.6	7.5	7.4	7.5	7.5	7.4	7.4	
3.	Specific Conductivity	Micro Mhos		329.0		331	334	336	338	-	-	-	-	-	
4.	Nitrate Nitrogen	Mg/L		0.42		0.53	0.63	0.63	0.58	0.48	0.47	0.42	0.42	0.42	
5.	Nitrite Nitrogen	Mg/L		0.02		0.03	0.03	0.04	0.03	0.03	0.02	0.02	0.02	0.02	
6.	Dissolved Oxygen	Mg/L		6.1		6.3	6.2	6.3	6.2	6.2	6.2	6.0	6.0	6.0	
7.	B.O.D.(3 day 27°C)	Mg/L		-		-	6.7	6.9	6.4	9.0	8.0	7.8	7.6	7.8	
8.	Ammonical Nitrogen	Mg/L		0.55		0.55	0.65	0.80	0.60	0.50	0.55	0.50	0.50	0.50	
9.	Coliform	MPN/100ml		460.0		460.0	460.0	460.0	2400	460.0	460.0	260.0	260.0	260.0	
10.	Total Solid	Mg/L		-	-	-	-	-	-	-	-	340.0	310.0	380.0	
11.	Dissolved Solids	Mg/L		290.0		260.0	270.0	390.0	380.0	320.0	320.0	270.0	260.0	290.0	
12.	Suspended Solids	Mg/L		70.0		60.0	70.0	80.0	110.0	70.0	70.0	70.0	50.0	90.0	
13.	C O D	Mg/L		57.6		58.08	57.6	76.16	127.4	117.6	125.84	125.84	125.84	125.64	
14.	Chloride	Mg/L		49.0		53.0	58.0	61.0	62.0	51.0	52.0	64.0	57.0	56.0	
15.	Total Alkalinity	Mg/L		126.0		118.0	124.0	128.0	128.0	118.0	120.0	122.0	122.0	124.0	
16.	Total Hardness	Mg/L		118.0		110.0	116.0	122.0	112.0	110.0	98.0	96.0	94.0	96.0	
17.	Calcium Hardness	Mg/L		-	-	-	-	-	-	62.0	62.0	52.0	60.0	60.0	
18.	Magnesium Hardness	Mg/L		-	-	-	-	-	-	42.0	42.0	44.0	42.0	42.0	
19.	Calcium	Mg/L		28.0		25.6	27.2	29.6	24.0	24.0	24.0	20.8	24.0	24.0	
20.	Magnesium	Mg/L		11.70		11.21	11.70	11.70	12.68	10.20	10.20	10.73	10.16	10.18	
21.	Phosphate	Mg/L		1.7		1.8	1.7	1.9	1.8	1.6	1.6	1.6	1.6	1.6	
22.	Sulphate(as SO_4^{--})	Mg/L		21.0		19.0	18.0	22.0	16.0	16.0	16.0	14.0	14.0	14.0	

Hand Pump Water, 17/10 Nepali Mohalla,
Shankar Nagar, HIA, Bhilai, Distt.-Durg (NWMP Code No 3171)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C												27
2.	Appearance	NTU												Clear
3.	Odour	Threshold No.												OL
4.	pH	pH Units												7.5
5.	Turbidity	NTU/JTU												-
6.	Specific Conductivity	Micro Mhos												-
7.	Coliform	MPN/100ml												06
8.	Total Solid	Mg/L												140.0
9.	Dissolved Solids	Mg/L												110.0
10.	Suspended Solids	Mg/L												30.0
11.	Dissolved Oxygen	Mg/L												6.2
12.	B.O.D.(3 day 27°C)	Mg/L												0.8
13.	C O D	Mg/L												29.04
14.	Chloride	Mg/L												23.0
15.	Total Alkalinity	Mg/L												104.0
16.	Total Hardness	Mg/L												88.0
17.	Calcium Hardness	Mg/L												52.0
18.	Magnesium Hardness	Mg/L												36.0
19.	Ammonical Nitrogen	Mg/L												0.25
20.	Nitrate Nitrogen	Mg/L												0.20
21.	Nitrite Nitrogen	Mg/L												0.01
22.	Phosphate	Mg/L												BDL
23.	Sulphate(as SO_4^{--})	Mg/L												8.0
24.	Calcium	Mg/L												20.8
25.	Magnesium	Mg/L												8.78
26.	Any Other Test	Mg/L												-

Location of National Water Monitoring Programme (NWMP) of Chhattisgarh- Year -2012
Regional Office - Jagdalpur

1. Comparative Statement of Indravati River at Nelasnar Dantewada . After confluence of Dantewada River. (NWMP Code No. 1854)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	19			27			24			23		
2.	Appearance	-	Clear			Clear			Muddy			Clear		
3.	Odour	Threshold No.	OL			OL			OL			OL		
4.	pH	pH Units	7.8			7.5			7.4			7.7		
5.	Total Solids	Mg/L	206.0			207.0			871.0			281.0		
6.	Dissolved Solids	Mg/L	168.0			163.0			664.0			217.0		
7.	Suspended Solids	Mg/L	38.0			44.0			207.0			64.0		
8.	Chloride (as CI)	Mg/L	24.0			28.0			52.0			36.0		
9.	Total Alkalinity		38.0			32.0			58.0			42.0		
10.	Total Hardness	Mg/L	42.0			46.0			64.0			44.0		
11.	Calcium Hardness	Mg/L	24.0			28.0			38.0			24.0		
12.	Magnesium Hardness	Mg/L	18.0			18.0			26.0			20.0		
13.	D. O	Mg/L	7.6			7.4			7.7			7.7		
14.	B.O.D.(3 day 27°C)	Mg/L	0.8			0.9			1.6			1.4		
15.	C.O.D.	Mg/L	44.0			40.0			52.0			52.0		
16.	Coliform	MPN/100ml	4			4.0			12.0			6.0		
17.	Calcium	Mg/L	9.6			11.2			15.2			9.6		
18.	Magnesium	Mg/L	4.39			4.39			6.34			4.87		

2. Comparative Statement of Dantewada River/ Shankni River A/C of Dankni River at Dantewada (NWMP Code No. 1856)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	20			28			24			23		
2.	Appearance	-	Clear			Clear			Muddy			Clear		
3.	Odour	Threshold No.	OL			OL			OL			OL		
4.	pH	pH Units	7.5			7.5			7.6			7.6		
5.	Total Solids	Mg/L	236.0			227.0			917.0			374.0		
6.	Dissolved Solids	Mg/L	188.0			171.0			689.0			278.0		
7.	Suspended Solids	Mg/L	48.0			56.0			228.0			96.0		
8.	Chloride (as CI)	Mg/L	28.0			34.0			56.0			46.0		
9.	Total Alkalinity		46.0			44.0			68.0			66.0		
10.	Total Hardness	Mg/L	54.0			48.0			72.0			72.0		
11.	Calcium Hardness	Mg/L	34.0			32.0			44.0			44.0		
12.	Magnesium Hardness	Mg/L	20.0			16.0			28.0			28.0		
13.	D. O	Mg/L	7.6			7.2			7.5			7.7		
14.	B.O.D.(3 day 27°C)	Mg/L	1.0			1.0			1.8			1.5		
15.	C.O.D.	Mg/L	40.0			44.0			52.0			56.0		
16.	Coliform	MPN/100ml	6.0			4.0			14.0			8.0		
17.	Calcium	Mg/L	13.6			12.8			17.6			17.6		
18.	Magnesium	Mg/L	4.87			3.90			6.82			6.82		

Year-2012 Regional Office – Korba

Comparative Statement of Hasdeo River Korba

U/S of Hasdeo Bango Hydel Power Station, Machadoli, Korba (NWMP Code No. 1105)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec.	Avg
1.	Temperature	^{O}C	25.0	26.8	27.0	27.0	27.5	26.1	25.1	26.0	27.0	27.0	26.6	26.1	
2.	Appearance	-	Clear	Clear	Clear	Clear	Clear	ST	ST	Turbid	Turbid	Clear	Clear	Clear	
3.	Odour	Threshold	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	
4.	pH	pH unit	7.21	7.26	7.28	7.27	7.31	7.24	7.22	7.19	7.20	7.18	7.22	7.20	
5.	Dissolved Solids	Mg/L	251.0	254.0	252.0	256	257.0	265.0	352.0	372.0	324.0	264.0	282.0	284.0	
6.	Suspended Solids	Mg/L	40.0	42.0	38.0	36	38.0	41.0	74.0	116.0	92.0	58.0	46.0	48.0	
7.	Ammonical Nitrogen	Mg/L	1.5	1.3	1.2	1.3	1.1	1.2	1.1	1.3	1.2	1.4	1.0	1.1	
8.	Nitrate Nitrogen	Mg/L	1.4	1.1	1.0	1.1	1.0	1.0	1.0	1.1	1.0	1.3	0.9	1.0	
9.	Nitrite Nitrogen	Mg/L	0.08	0.06	0.07	0.08	0.06	0.08	0.09	0.1	0.8	0.05	0.06	0.08	
10.	Phosphate	Mg/L	0.9	1.0	1.1	1.0	0.9	0.8	0.6	0.8	0.6	0.8	0.7	0.6	
11.	Chloride	Mg/L	19.99	17.99	18.99	16.99	18.99	20.99	22.99	20.99	18.99	16.99	15.99	18.99	
12.	Sulphate	Mg/L	22.0	20.0	16.0	18.0	20.0	18.0	16.0	18.0	16.0	18.0	14.0	16.0	
13.	Dissolved Oxy.	Mg/L	6.8	6.9	6.8	6.9	7.2	6.6	5.4	3.8	4.2	6.8	6.6	6.8	
14.	BOD (3 days 27^{0} C)	Mg/L	1.1	0.8	0.6	0.8	1.1	1.2	1.6	2.4	2.2	1.8	1.2	1.0	
15.	COD	Mg/L	20.0	12.0	14.0	18.0	14.0	16.0	18.0	22.0	20.0	16.0	18.0	14.0	
16.	Total Hardness	Mg/L	46.0	44.0	42.0	44	46.0	48.0	52.0	50.0	48.0	46.0	50.0	46.0	
17.	Coliform	MPN/ 100ml	80.0	60.0	40.0	60	40.0	60.0	70.0	90.0	70.0	60.0	50.0	50.0	

100 Meter D/s after confluence of Dengurnallah near CSEB (E) Guest House, Korba.

(NWMP Code No. 3165)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
1.	Temperature	°C	25.0	27.1	27.1	27.2	27.7	25.7	25.4	26.1	27.4	26.8	26.6	26.1	
2.	Appearance	-	S.T.	S.T.	Turbid	Turbid	ST	Turbid	Turbid	Turbid	Turbid	S.T.	S.T.	ST	
3.	Odour	Threshold No.	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	
4.	pH	pH Units	7.26	7.24	7.16	7.20	7.19	7.15	7.22	7.16	7.15	7.11	7.12	7.16	
5.	Total Solids	Mg/L	342.0	309.0	348.0	328.0	-	-	-	-	-	-	-	-	
6.	Dissolved Solids	Mg/L	282.0	253.0	266.0	268.0	288.0	314.0	294.0	313.0	315.0	320.0	322.0	323.0	
7.	Suspended Solids	Mg/L	60.0	56.0	82.0	60.0	46.0	52.0	118.0	198.0	77.0	74.0	67.0	61.0	
8.	Ammonical Nitrogen	Mg/L	1.3	1.2	1.1	1.2	1.3	1.4	1.4	1.7	1.6	1.3	1.2	1.1	
9.	Nitrate Nitrogen	Mg/L	1.1	1.0	0.9	1.0	1.2	1.3	1.3	1.5	1.5	1.2	1.1	1.0	
10.	Nitrite Nitrogen	Mg/L	0.08	0.09	0.08	0.07	0.08	0.07	0.07	0.08	0.06	0.05	0.06	0.08	
11.	Phosphate	Mg/L	1.1	1.2	1.2	1.1	1.1	0.6	0.6	0.8	0.6	0.5	0.6	0.8	
12.	Chloride	Mg/L	18.99	20.99	18.99	20.99	20.99	22.99	18.99	20.99	18.99	15.99	16.99	18.99	
13.	Sulphate(as SO_4^{--})	Mg/L	24.0	18.0	18.0	16.0	14.0	12.0	12.0	14.0	12.0	14.0	10.0	12.0	
14.	Dissolved Oxygen	Mg/L	6.1	6.0	5.4	5.2	5.1	5.0	4.9	4.0	4.3	4.5	5.8	5.4	
15.	B.O.D.(3 day 27°C)	Mg/L	1.4	1.5	1.8	2.0	1.9	1.8	2.4	3.2	2.6	2.4	2.0	2.2	
16.	C.O.D.	Mg/L	22.0	20.0	22.0	20.0	18.0	20.0	26.0	30.0	22.0	20.0	18.0	20.0	
17.	Total Alkalinity	Mg/L	46.0	44.0	46.0	44.0	-	-	-	-	-	-	-	-	
18.	Total Hardness	Mg/L	38.0	40.0	42.0	40.0	60.0	62.0	44.0	460.0	42.0	44.0	46.0	48.0	
19.	Calcium Hardness	Mg/L	20.0	24.0	22.0	19.0	-	-	-	-	-	-	-	-	
20.	Magnesium Hardness	Mg/L	18.0	16.0	20.0	21.0	-	-	-	-	-	-	-	-	
21.	Coliform	MPN/100ml	-	-	-	-	60.0	70.0	80.0	120.0	80.0	70.0	80.0	60.0	

D/s near of Hosdev River Near Urga Village-Korba (NWMP Code No. 3168)

S. No.	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
1.	Temperature	°C	25.0	27.1	27.1	27.	27.7	25.7	25.3	26.3	27.5	26.7	26.6	26.1	
2.	Appearance	-	S.T.	S.T.	Turbid	S.T.	ST	Turbid	Turbid	Turbid	Turbid	S.T.	S.T.	ST	
3.	Odour	Threshold No.	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	
4.	pH	pH Units	7.38	7.31	7.42	7.40	7.32	7.26	7.32	7.23	7.22	7.16	7.23	7.22	
5.	Total Solids	Mg/L	356.0	327.0	360.0	342.0	-	-	-	-	-	-	-	-	
6.	Dissolved Solids	Mg/L	298.0	265.0	268.0	277.0	296.0	322.0	297.0	294.0	322.0	312.0	319.0	328.0	
7.	Suspended Solids	Mg/L	67.0	62.0	92.0	65.0	50.0	60.0	142.0	290.0	86.0	90.0	82.0	70.0	
8.	Ammonical Nitrogen	Mg/L	1.4	1.3	1.4	1.4	1.4	1.6	1.7	1.7	1.8	1.4	1.3	1.2	
9.	Nitrate Nitrogen	Mg/L	1.3	1.2	1.0	1.2	1.2	1.4	1.5	1.6	1.7	1.3	1.2	1.1	
10.	Nitrite Nitrogen	Mg/L	0.1	0.09	0.08	0.09	0.09	0.08	0.09	0.1	0.08	0.06	0.08	0.1	
11.	Phosphate	Mg/L	1.4	1.3	1.3	1.2	1.2	0.8	0.9	1.0	0.6	0.7	0.9	0.9	
12.	Chloride	Mg/L	24.99	23.99	22.99	24.99	22.99	24.99	24.99	23.99	20.99	19.99	18.99	20.99	
13.	Sulphate(as SO_4^{--})	Mg/L	26.0	22.0	22.0	20.0	16.0	14.0	14.0	18.0	14.0	16.0	12.0	14.0	
14.	Dissolved Oxygen	Mg/L	5.5	5.2	5.0	4.9	5.0	4.8	4.6	3.8	4.0	4.2	5.4	5.2	
15.	B.O.D.(3 day 27°C)	Mg/L	2.5	2.4	2.6	2.8	2.0	2.2	3.4	3.6	3.0	2.8	2.4	2.6	
16.	C.O.D.	Mg/L	26.0	26.0	30.0	28.0	22.0	24.0	32.0	32.0	32.0	26.0	22.0	24.0	
17.	Total Alkalinity	Mg/L	52.0	50.0	52.0	50.0	-	-	-	-	-	-	-	-	
18.	Total Hardness	Mg/L	42.0	44.0	42.0	42.0	62.0	52.0	52.0	56.0	48.0	42.0	50.0	46.0	
19.	Calcium Hardness	Mg/L	22.0	24.0	22.0	22.0	-	-	-	-	-	-	-	-	
20.	Magnesium Hardness	Mg/L	20.0	20.0	20.0	20.0	-	-	-	-	-	-	-	-	
21.	Coliform	MPN/100ml	-	-	-	-	70.0	80.0	110.0	160.0	110.0	90.0	90.0	80.0	

Year -2012

Location of National Water Monitoring Programme (NWMP) of Chhattisgarh- Regional Office – Raigarh

1. Comparative Statement Of Mahanadi River at Surajgarh Village Distt.- Raigarh, Inter State Boundary, Near Surajgarh Village (NWMP Code No. -1101)

S. No	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	^{O}C	25	25	25	29	30	29	23	22	30	28	23	22
2.	pH	pH unit	7.5	7.5	7.5	7.58	7.5	7.6	7.5	7.4	7.5	7.5	7.4	7.5
3.	Specific Conductivity	Micro Mhos	262	263	265.0	287.0	283.0	292.0	316	311	306	301	302	303
4.	Dissolved Oxygen	Mg/L	7.2	7.3	7.4	7.3	7.4	7.3	7.1	7.2	7.0	6.9	7.0	7.1
5.	BOD (3 days 27^{0} C)	Mg/L	*	*	*	1.0	*	*	*	*	*	*	*	*
6.	Nitrate nitrogen	Mg/L	1.16	1.16	1.16	1.18	1.16	1.2	1.24	1.22	1.2	1.16	1.14	1.12
7.	Nitrite nitrogen	Mg/L	0.02	0.02	0.2	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
8.	Ammonical nitrogen	Mg/L	1.23	1.25	1.28	1.31	1.29	1.34	1.39	1.36	1.32	1.26	1.24	1.24
9.	Coliform	MPN/ 100ml	75	64	43	39	43	150	460	460	240	210	120	93

2. Comparative Statement Of Kelo River at Raigarh Up Stream of Raigarh City (NWMP Code No. -1849)

S. No	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	^{O}C	25	25	26	29	30	29	23	22	30	29	23	22
2.	pH	pH unit	7.5	7.5	7.6	7.62	7.6	7.6	7.6	7.5	7.5	7.4	7.4	7.5
3.	Specific Conductivity	Micro Mhos	257	254	257.0	292.0	290.0	303.0	310	308	302	294	291	290
4.	Dissolved Oxygen	Mg/L	7.2	7.2	7.3	7.2	7.2	7.3	7.1	7.2	7.0	6.9	7.0	7.0
5.	BOD (3 days 27^{0} C)	Mg/L	*	*	*	1.1	*	*	*	*	*	*	*	*
6.	Nitrate nitrogen	Mg/L	1.16	1.18	1.14	1.2	1.18	1.16	1.22	1.22	1.22	1.18	1.14	1.14
7.	Nitrite nitrogen	Mg/L	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
8.	Ammonical nitrogen	Mg/L	1.23	1.28	1.30	1.34	1.31	1.29	1.36	1.36	1.34	1.29	1.26	1.26
9.	Coliform	MPN/ 100ml	93	75	64	75	75	210	460	460	240	210	150	120

3. Comparative Statement Of Kelo River at Raigarh Down Stream of Raigarh City (NWMP Code No. -1850)

S. No	Characteristics	Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	^{O}C	25	25	26	29	30	29	23	22	30	29	23	22
2.	pH	pH unit	7.7	7.6	7.7	7.75	7.7	7.7	7.7	7.6	7.6	7.6	7.6	7.6
3.	Specific Conductivity	Micro Mhos	256	252	254.0	346.0	331.0	342.0	325	314	308	297	296	295
4.	Dissolved Oxygen	Mg/L	7.1	7.1	7.2	7.0	7.1	7.2	7.0	7.1	6.9	6.8	6.9	6.9
5.	BOD (3 days 27^{0} C)	Mg/L	*	*	*	2.4	*	*	*	*	*	*	*	*
6.	Nitrate nitrogen	Mg/L	1.18	1.22	1.20	1.24	1.22	1.2	1.26	1.24	1.24	1.2	1.16	1.16
7.	Nitrite nitrogen	Mg/L	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
8.	Ammonical nitrogen	Mg/L	1.25	1.33	1.33	1.39	1.36	1.34	1.41	1.39	1.37	1.31	1.29	1.29
9.	Coliform	MPN/ 100ml	150	150	120	150	150	240	460	460	460	240	240	210

Location of National Water Monitoring Programme (NWMP) of Year -2012

Regional Office – Raipur

(1) Comparative Statement of Rivers Mahanadi at Rajim, D/S , Near Nawapara Rajim Road Bridge

(NWMP Code No. 1099)

S. No.	Characteristics	Unit	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	22	29		38	34	34	30	27	23	24	22	20
2.	Appearance	-	S.T.	Clear		Clear	Clear	Clear	Turbid	Turbid	Clear	Clear	Clear	Clear
3.	Odour	Threshold No.	OL	OL		OL	OL	OL	OL	OL	OL	OL	OL	OL
4.	pH	pH Units	7.68	7.60		7.56	7.54	7.62	7.5	7.5	7.7	7.43	7.38	7.43
5.	Specific Conductivity	Micro Mhos	286.0	354.0		235.0	305.0	195.0	390.0	337.0	210.0	210.0	180.0	166.5
6.	Turbidity	NTU/JTU	18.0	18.0		29.0	34.0	23.0	188.0	53.0	14.0	21.0	16.0	20.0
7.	Total Solids	Mg/L	230.0	296.0		230.0	258.0	-	550.0	290.0	160.0	170.0	105.0	92.0
8.	Dissolved Solids	Mg/L	186.0	262.0		190.0	204.0	125.0	290.0	214.0	140.0	140.0	85.0	74.0
9.	Suspended Solids	Mg/L	44.0	34.0		40.0	54.0	41.0	260.0	76.0	20.0	30.0	20.0	18.0
10.	Fixed Diss.Solids	Mg/L	138.0	178.0		134.0	174.0	92.0	220.0	165.0	120.0	108.0	65.0	61.0
11.	Nitrite Nitrogen	Mg/L	1.4	1.2		1.1	1.1	1.0	2.3	1.1	1.4	2.1	1.5	1.1
12.	Nitrate Nitrogen	Mg/L	-	-		-	-	-	-	1.3	1.5	-	-	-
13.	Dissolved Oxygen	Mg/L	7.9	7.7		7.5	7.8	7.6	7.9	8.3	2.4	7.5	8.5	8.6
14.	B.O.D.(3 day 27°C)	Mg/L	-	-		2.2	2.0	2.2	3.8	1.9	7.4	2.0	1.7	1.6
15.	C.O.D.	Mg/L	19.2	19.2		28.56	15.84	28.56	38.2	19.2	2.2	24.0	16.0	14.0
16.	Total Alkalinity	Mg/L	78.0	86.0		82.0	86.0	-	110.0	86.0	18.8	106.0	98.0	78.0
17.	Total Hardness	Mg/L	94.0	110.0		84.0	92.0	-	96.0	90.0	76.0	64.0	60.0	58.0
18.	Calcium Hardness	Mg/L	68.0	78.0		50.0	68.0	-	52.0	60.0	64.0	48.0	38.0	34.0
19.	Magnesium Hardness	Mg/L	26.0	32.0		34.0	24.0	-	44.0	30.0	42.0	16.0	22.0	24.0
20.	Sulphate (as SO_4^{--})	Mg/L	16.0	14.0		16.0	12.76	-	19.0	24.0	22.0	17.0	14.0	14.0
21.	Fluoride	Mg/L	-	-		-	-	-	-	0.26	15.0	0.72	0.15	0.12
22.	Ammonical Nitrogen	Mg/L	0.10	0.16		0.25	0.11		0.15	1.5	0.16	-	-	-
23.	Phosphate	Mg/L	1.8	1.16		1.06	1.48	1.03	2.2	1.1	1.7	2.0	1.6	1.0

24.	Chloride	Mg/L	24.0	26.0		23.99	33.0	-	24.0	25.0	35.0	27.0	29.0	21.0
25.	Calcium	Mg/L	27.2	31.2		20.0	27.2	20.8	20.8	24.0	16.8	19.2	15.2	13.6
26.	Magnesium	Mg/L	6.34	7.8		8.29	5.85	8.85	10.73	7.31	5.36	3.9	5.36	5.83
27.	Sodium	Mg/L	12.0	11.0		13.0	8.0	11.0	13.0	12.0	15.0	9.0	9.0	8.0
28.	Potassium	Mg/L	5.0	6.0		6.0	4.0	5.0	2.0	4.0	2.5	5.0	3.0	3.0
29.	Coliform	MPN/100ml	26.0	33.0		90.0	50.0	34.0	900.0	500.0	11.0	60.0	60.	40

(2) Comparative Statement of Rivers Mahanadi at Rudri Dame , U/S of Dhamtari Reservoir (NWMP Code No. 1264)

S. No.	Characteristics	Unit	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	25			33			25			24		
2.	Appearance	-	Clear			Clear			Turbid			Clear		
3.	Odour	-	OL			OL			OL			OL		
4.	pH	pH Units	7.32			7.85			7.4			7.4		
5.	Specific Conductivity	µMicro/cm	206.0			190.0			497.0			210.0		
6.	Turbidity	NTU/JTU	14.0			16.0			189.0			22.0		
7.	Total Solids	Mg/L	226.0			175.0			570.0			170.0		
8.	Dissolved Solids	Mg/L	192.0			145.0			330.0			140.0		
9.	Suspended Solids	Mg/L	34.0			30.0			240.0			30.0		
10.	Fixed Diss.Solids	Mg/L	144.0			115.0			250.0			102.0		
11.	Nitrite Nitrogen	Mg/L	1.3			0.8			2.5			1.8		
12.	Dissolved Oxygen	Mg/L	7.6			8.0			8.1			8.6		
13.	B.O.D.(3 day 27°C)	Mg/L	-			1.0			3.5			2.6		
14.	C.O.D.	Mg/L	19.2			19.04			38.2			29.04		
15.	Total Alkalinity	Mg/L	78.0			86.0			120.0			106.0		
16.	Total Hardness	Mg/L	92.0			82.0			90.0			78.0		
17.	Calcium Hardness	Mg/L	64.0			58.0			58.0			60.0		
18.	Magnesium Hardness	Mg/L	28.0			24.0			32.0			18.0		
19.	Sulphate (as SO_4^{--})	Mg/L	14.0			15.78			21.0			19.0		

20.	Fluoride(as F^-)	Mg/L	0.10			0.24			0.19			0.4		
21.	Phosphate	Mg/L	1.5			1.07			2.4			1.7		
22.	Chloride	Mg/L	21.0			23.0			26.0			21.0		
23.	Calcium	Mg/L	25.6			23.2			23.2			24.0		
24.	Magnesium	Mg/L	6.82			5.85			7.80			4.39		
25.	Sodium	Mg/L	11.0			9.0			14.0			10.0		
26.	Potassium	Mg/L	6.0			2.0			3.0			5.0		
27.	Coliform	MPN/100ml	14.0			34.0			900.0			110.0		

(3) Comparative Statement of Rivers Kharun at Bhatagoan, U/S Near W/S Intakewell, (NWMP Code No. 1265)

S. No.	Characteristics	Unit	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	21			30			30			23.7		
2.	Appearance	-	Clear			Clear			Turbid			Clear		
3.	Odour	-	OL			OL			OL			OL		
4.	pH	pH Units	7.85			7.57			7.7			7.5		
5.	Specific Conductivity	µMicro/cm	335.0			260.0			470.0			190.0		
6.	Turbidity	NTU/JTU	17.0			22.0			112.0			20.0		
7.	Total Solids	Mg/L	248.0			202.0			442.0			156.0		
8.	Dissolved Solids	Mg/L	206.0			154.0			277.0			130.0		
9.	Suspended Solids	Mg/L	42.0			48.0			165.0			26.0		
10.	Fixed Diss.Solids	Mg/L	180.0			104.0			230.0			110.0		
11.	Nitrite Nitrogen	Mg/L	1.4			1.1			2.7			0.7		
12.	Dissolved Oxygen	Mg/L	7.8			8.7			7.8			7.4		
13.	B.O.D.(3 day 27°C)	Mg/L	-			1.6			3.4			1.0		
14.	C.O.D.	Mg/L	9.6			20.6			37.6			19.36		
15.	Total Alkalinity	Mg/L	74.0			106.0			126.0			104.0		
16.	Total Hardness	Mg/L	130.0			96.0			84.0			82.0		
17.	Calcium Hardness	Mg/L	98.0			68.0			52.0			64.0		

18.	Magnesium Hardness	Mg/L	32.0			28.0			32.0			18.0		
19.	Sulphate (as SO_4^{--})	Mg/L	13.0			15.30			28.0			24.0		
20.	Fluoride(as F^-)	Mg/L	0.10			0.2			0.29			0.78		
21.	Phosphate	Mg/L	1.6			1.01			2.8			1.0		
22.	Chloride	Mg/L	23.0			26.0			41.0			24.0		
23.	Calcium	Mg/L	39.2			27.2			20.8			25.6		
24.	Magnesium	Mg/L	7.8			6.82			7.8			4.39		
25.	Sodium	Mg/L	12.0			14.0			18.0			11.0		
26.	Potassium	Mg/L	7.0			5.0			5.0			4.0		
27.	Coliform	MPN/100ml	21.0			34.0			350.0			50.0		

(4) Comparative Statement of Rivers Shivnath at Simga, Near Simga Bemetara Road Bridge, (NWMP Code No. 1266)

S. No.	Characteristics	Unit	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	23			33			28			25		
2.	Appearance	-	Clear			Clear			Turbid			Clear		
3.	Odour	-	OL			OL			OL			OL		
4.	pH	pH Units	7.25			7.64			7.4			7.4		
5.	Specific Conductivity	µMicro/cm	375.0			216.0			515.0			375.0		
6.	Turbidity	NTU/JTU	19.0			25.0			148.0			61.0		
7.	Total Solids	Mg/L	294.0			210.0			490.0			340.0		
8.	Dissolved Solids	Mg/L	250.0			150.0			300.0			250.0		
9.	Suspended Solids	Mg/L	44.0			60.0			190.0			90.0		
10.	Fixed Diss.Solids	Mg/L	190.0			124.0			201.0			210.0		
11.	Nitrite Nitrogen	Mg/L	1.8			1.2			2.7			1.5		
12.	Dissolved Oxygen	Mg/L	8.0			7.4			8.1			7.7		
13.	B.O.D.(3 day 27°C)	Mg/L	-			2.6			3.9			2.9		
14.	C.O.D.	Mg/L	27.6			26.6			38.0			29.04		

15.	Total Alkalinity	Mg/L	92.0			62.0			116.0			110.0		
16.	Total Hardness	Mg/L	134.0			72.0			96.0			86.0		
17.	Calcium Hardness	Mg/L	94.0			46.0			54.0			50.0		
18.	Magnesium Hardness	Mg/L	40.0			26.0			42.0			36.0		
19.	Sulphate (as SO_4^{--})	Mg/L	18.0			17.26			29.0			32.0		
20.	Fluoride (as F^-)	Mg/L	0.26			0.10			0.15			0.82		
21.	Phosphate	Mg/L	1.09			1.64			2.7			1.7		
22.	Chloride	Mg/L	27.0			18.0			27.0			26.0		
23.	Calcium	Mg/L	37.6			18.4			21.6			20.0		
24.	Magnesium	Mg/L	9.75			6.34			10.24			8.78		
25.	Sodium	Mg/L	13.0			12.0			14.0			14.0		
26.	Potassium	Mg/L	8.0			6.0			8.0			8.0		
27.	Coliform	MPN/100ml	33.0			60.0			240.0			220.0		

(5) Comparative Statement of Rivers Kharun at Bendri Village , U/S Near CSIDC W/S Intekewell, (NWMP Code No. 1853

S. No.	Characteristics	Unit	Jan.	Feb	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov	Dec.
1.	Temperature	°C	26			36			28			24		
2.	Appearance	-	Clear			Clear			Turbid			Clear		
3.	Odour	-	OL			OL			OL			OL		
4.	pH	pH Units	7.46			7.76			7.9			7.48		
5.	Specific Conductivity	µMicro/cm	231.0			171.0			497.0			268.0		
6.	Turbidity	NTU/JTU	15.0			14.0			118.0			18.0		
7.	Total Solids	Mg/L	260.0			128.0			465.0			183.0		
8.	Dissolved Solids	Mg/L	212.0			106.0			280.0			148.0		
9.	Suspended Solids	Mg/L	48.0			22.0			185.0			35.0		
10.	Fixed Diss.Solids	Mg/L	138.0			90.0			200.0			104.0		
11.	Nitrite Nitrogen	Mg/L	1.1			1.7			2.8			1.1		

12.	Dissolved Oxygen	Mg/L	7.6			7.2			7.9			7.8		
13.	B.O.D.(3 day 27°C)	Mg/L	-			1.6			3.4			1.4		
14.	C.O.D.	Mg/L	19.6			28.56			37.6			19.6		
15.	Total Alkalinity	Mg/L	68.0			118.0			124.0			78.0		
16.	Total Hardness	Mg/L	120.0			68.0			80.0			90.0		
17.	Calcium Hardness	Mg/L	70.0			40.0			46.0			60.0		
18.	Magnesium Hardness	Mg/L	50.0			28.0			34.0			30.0		
19.	Sulphate (as SO_4^{--})	Mg/L	15.87			24.0			26.0			14.0		
20.	Fluoride (as F^-)	Mg/L	0.16			0.4			0.28			0.10		
21.	Phosphate	Mg/L	1.07			1.3			2.7			1.1		
22.	Chloride	Mg/L	24.0			38.0			39.0			28.0		
23.	Calcium	Mg/L	28.0			16.0			18.4			24.0		
24.	Magnesium	Mg/L	12.19			6.82			8.29			7.31		
25.	Sodium	Mg/L	10.0			14.0			17.0			11.0		
26.	Potassium	Mg/L	5.0			4.0			6.0			4.0		
27.	Coliform	MPN/100ml	27.0			22.0			300.0			110.0		

(6) Comparative Statement of Rivers Mahanadi at Sihawa Origin Point of River Mahandi (NWMP Code No. 1851)

S. No.	Characteristics	Unit	Jan.	Feb	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	22			34			27			23		
2.	Appearance	-	Clear			Clear			Turbid			Clear		
3.	Odour	-	OL			OL			OL			OL		
4.	pH	pH Units	7.56			7.74			7.5			7.5		
5.	Specific Conductivity	µMicro/cm	274.0			126.0			302.0			130.0		
6.	Turbidity	NTU/JTU	12.0			14.0			111.0			12.0		
7.	Total Solids	Mg/L	212.0			120.0			490.0			106.0		
8.	Dissolved Solids	Mg/L	178.0			93.0			340.0			86.0		

9.	Suspended Solids	Mg/L	34.0			27.0			150.0			20.0		
10.	Fixed Diss.Solids	Mg/L	152.0			70.0			280.0			71.0		
11.	Nitrite Nitrogen	Mg/L	0.4			0.6			2.7			1.0		
12.	Dissolved Oxygen	Mg/L	7.9			8.5			7.8			9.4		
13.	B.O.D.(3 day 27°C)	Mg/L	-			0.6			3.2			0.9		
14.	C.O.D.	Mg/L	9.6			11.76			37.6			14.0		
15.	Total Alkalinity	Mg/L	52.0			73.0			124.0			118.0		
16.	Total Hardness	Mg/L	72.0			60.0			98.0			58.0		
17.	Calcium Hardness	Mg/L	48.0			34.0			64.0			30.0		
18.	Magnesium Hardness	Mg/L	24.0			26.0			34.0			28.0		
19.	Sulphate (as SO_4^{--})	Mg/L	11.0			15.43			24.0			10.0		
20.	Fluoride (as F^-)	Mg/L	0.12			0.22			0.25			0.3		
21.	Phosphate	Mg/L	1.8			1.02			2.6			0.6		
22.	Chloride	Mg/L	19.0			22.0			31.0			33.0		
23.	Calcium	Mg/L	19.2			13.6			25.6			12.0		
24.	Magnesium	Mg/L	5.85			6.34			8.29			6.82		
25.	Sodium	Mg/L	9.0			11.0			16.0			8.0		
26.	Potassium	Mg/L	4.0			5.0			4.0			3.0		
27.	Coliform	MPN/100ml	17.0			11.0			350.0			22.0		

(7) Comparative Statement of Rivers Mahanadi at Arang Near Gandhi Setu NH No. 06 (NWMP Code No. 1852)

S. No.	Characteristics	Unit	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	21			32			29			24		
2.	Appearance	-	Clear			Clear			Turbid			S.T.		
3.	Odour	-	OL			OL			OL			OL		
4.	pH	pH Units	7.78			7.82			7.8			7.84		
5.	Specific Conductivity	µMicro/cm	246.0			235.0			434.0			295.0		

6.	Turbidity	NTU/JTU	18.0			28.0			134.0			62.0		
7.	Total Solids	Mg/L	274.0			216.0			478.0			270.0		
8.	Dissolved Solids	Mg/L	238.0			171.0			290.0			190.0		
9.	Suspended Solids	Mg/L	36.0			45.0			188.0			80.0		
10.	Fixed Diss.Solids	Mg/L	162.0			120.0			210.0			152.0		
11.	Nitrite Nitrogen	Mg/L	1.2			1.3			2.45			1.1		
12.	Dissolved Oxygen	Mg/L	7.4			8.4			7.9			7.2		
13.	B.O.D.(3 day 27°C)	Mg/L	-			2.2			3.8			1.6		
14.	C.O.D.	Mg/L	11.2			16.6			38.2			19.36		
15.	Total Alkalinity	Mg/L	56.0			78.0			108.0			88.0		
16.	Total Hardness	Mg/L	108.0			86.0			88.0			92.0		
17.	Calcium Hardness	Mg/L	70.0			58.0			60.0			50.0		
18.	Magnesium Hardness	Mg/L	38.0			28.0			28.0			42.0		
19.	Sulphate(as SO_4^{--})	Mg/L	14.0			15.0			27.0			19.0		
20.	Fluoride(as F^-)	Mg/L	0.11			0.23			0.2			0.4		
21.	Phosphate	Mg/L	1.5			1.6			2.8			1.2		
22.	Chloride	Mg/L	23.0			25.0			32.0			46.0		
23.	Calcium	Mg/L	28.0			23.2			24.0			20.0		
24.	Magnesium	Mg/L	9.26			6.82			6.82			10.24		
25.	Sodium	Mg/L	15.0			10.0			12.0			10.0		
26.	Potassium	Mg/L	8.0			4.0			5.0			4.0		
27.	Coliform	MPN/100ml	11.0			40.0			500.0			90.0		

(8) Comparative Statement of Bore well Water New H.I.G. 11, Tatibandh, Office Premises RO, CECB, Raipur (NWMP Code No. 1620)

S. No.	Characteristics	Unit	Jan.	Feb	Mar	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	Temperature	°C	22			33			26			23		
2	Appearance	-	Clear			Clear			Turbid			Clear		
3	Odour	-	OL			OL			OL			OL		
4	pH	pH Units	7.85			7.65			7.6			7.5		
5	Specific Conductivity	µMicro/cm	378.0			490.0			450.0			430.0		
6	Turbidity	NTU/JTU	9.0			6.0			13.0			11.0		
7	Total Solids	Mg/L	252.0			470.0			380.0			340.0		
8	Dissolved Solids	Mg/L	234.0			457.0			360.0			320.0		
9	Suspended Solids	Mg/L	18.0			13.0			20.0			20.0		
10	Fixed Diss.Solids	Mg/L	146.0			361.0			210.0			275.0		
11	Nitrite Nitrogen	Mg/L	1.2			1.4			1.1			0.9		
12	Dissolved Oxygen	Mg/L	3.5			2.6			5.1			3.0		
13	B.O.D.(3 day 27°C)	Mg/L	-			0.4			0.6			0.7		
14	C.O.D.	Mg/L	9.2			11.76			18.8			19.36		
15	Total Alkalinity	Mg/L	66.0			96.0			94.0			86.0		
16	Total Hardness	Mg/L	198.0			318.0			88.0			180.0		
17	Calcium Hardness	Mg/L	114.0			196.0			46.0			138.0		
18	Magnesium Hardness	Mg/L	84.0			122.0			42.0			42.0		
19	Sulphate (as SO_4^{--})	Mg/L	18.0			32.56			12.0			10.0		
20	Fluoride (as F^-)	Mg/L	0.11			0.1			0.35			0.92		
21	Phosphate	Mg/L	0.5			0.38			1.1			0.8		
22	Chloride	Mg/L	23.0			18.96			27.0			23.0		
23	Calcium	Mg/L	45.6			78.4			18.4			55.2		
24	Magnesium	Mg/L	20.48			29.75			10.24			10.24		
25	Sodium	Mg/L	24.0			24.0			9.0			7.0		
26	Potassium	Mg/L	6.0			8.0			3.0			3.0		
27	Coliform	MPN/100ml	6.0			4.0			9.0			2.0		

(9) Comparative Statement of Bore well M/s Prakriti Industries, Rawabhata, Raipur (NWMP Code No. 1621)

S. No.	Characteristics	Unit	Jan.	Feb	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1.	Temperature	°C	24			33			28			24		
2.	Appearance	-	Clear			Clear			Turbid			Clear		
3.	Odour	-	OL			OL			OL			OL		
4.	pH	pH Units	7.68			6.8			7.5			6.7		
5.	Specific Conductivity	µMicro/cm	465.0			464.0			510.0			460.0		
6.	Turbidity	NTU/JTU	11.0			8.0			14.0			14.0		
7.	Total Solids	Mg/L	304.0			390.0			390.0			410.0		
8.	Dissolved Solids	Mg/L	282.0			370.0			370.0			390.0		
9.	Suspended Solids	Mg/L	22.0			20.0			20.0			20.0		
10.	Fixed Diss.Solids	Mg/L	224.0			232.0			230.0			310.0		
11.	Nitrite Nitrogen	Mg/L	1.2			0.95			1.2			1.0		
12.	Dissolved Oxygen	Mg/L	2.1			6.2			1.2			2.8		
13.	B.O.D.(3 day 27°C)	Mg/L	-			0.9			1.4			1.2		
14.	C.O.D.	Mg/L	11.76			9.52			18.8			9.6		
15.	Total Alkalinity	Mg/L	86.0			88.0			98.0			82.0		
16.	Total Hardness	Mg/L	184.0			194.0			94.0			184.0		
17.	Calcium Hardness	Mg/L	114.0			142.0			52.0			136.0		
18.	Magnesium Hardness	Mg/L	70.0			52.0			42.0			48.0		
19.	Sulphate (as SO_4^{--})	Mg/L	31.03			17.0			13.0			21.0		
20.	Fluoride (as F^-)	Mg/L	0.4			0.8			0.35			0.6		
21.	Phosphate	Mg/L	0.36			0.8			1.2			1.3		
22.	Chloride	Mg/L	20.0			22.0			28.0			20.0		
23.	Calcium	Mg/L	45.0			56.8			20.8			54.4		
24.	Magnesium	Mg/L	17.07			12.68			10.24			11.70		
25.	Sodium	Mg/L	38.0			9.0			8.0			14.0		
26.	Potassium	Mg/L	11.0			2.0			2.0			8.0		
27.	Coliform	MPN/100ml	17.0			11.0			14.0			4.0		