

**REPORT OF THE JOINT COMMITTEE CONSTITUTED BY THE HON'BLE NATIONAL  
GREEN TRIBUNAL IN O.A. No.:108 OF 2020 (SZ) BASED ON THE INSPECTION  
MADE BY THE COMMITTEE ON 16.09.2020.**

**Background:**

A News Item was published on 09.07.2020, in the Vikatan E-Magazine , under the caption "Coonor Misery; Increasing Waste in River Water!- Elephants looking for Good Water". In the report,it was averred that the dumping of the Solid wastes, Chicken wastes and discharge of sewage and septage in to the Coonor River affects the quality of the water in River Coonor and thereby the elephants are not drinking the water in the river and coming to Runnimedu Railway Station for drinking water, and the same may lead to man-animal conflicts.

The Honourable National Green Tribunal (SZ) took Suo-Motucognizance of the matter and in their Interim Order dated 16.07.2020, constituted a Joint Committee, headed by District Collector, to inspect the area in question and ascertain the present status and if there is any violation or encroachment in the Forest Area, including pollution caused affecting the health of wild-life, trace out those violators and take action against them in accordance with Law including imposition of Environmental Compensation and submit a Status and Action Taken Report to the Tribunal within a period of Two months i.e., on or before 25.09.2020. The Superintending Engineer of Public Works Department and Water Resource Organization has been nominated as the Nodal officer, for Co-ordination and providing necessary logistics for this purpose.

In compliance with the orders of the Honourable National Green Tribunal(SZ), the Joint Committee undertook an Inspection on 16.09.2020, collected samples, wherever the Joint Committee considered appropriate, and based on the observations made submitted an Interim Report.

The Honourable National Green Tribunal(SZ) during its hearing on 29.09.2020, took the Interim Report filed by the Joint Committee into record, and issued the following directions:

1. The committee is directed to submit the report to this Tribunal on or before 19.11.2020 by e-filing along with necessary hard copies to be produced as per rules.
2. The Registry is directed to communicate this order to the members of the committee and also to the official respondents immediately by e-mail, so as to enable them to comply with the direction and also to file their independent response regarding the allegation in the paper report before the next hearing date.
3. For submitting independent response of the respondents regarding the manner in which sewage is treated in the Municipality and further action for improving the system and also consideration of report of the committee to be filed, posted on 19.11.2020".

**Joint Inspection and Samples Collected:**

The Superintending Engineer of PWD/WRD as the Nodal Officer, in consultation with the District Collector, The Nilgiris District and the other members of the Committee, undertook the Joint inspection on 16.09.2020, and collected water samples at five locations. As the values of Bio-chemical Oxygen Demand (BOD) and Dissolved Oxygen Levels of two samples could not be analyzed, in view of the presence of free residual chlorine, the District Environmental Engineer, Udthagamandalam collected samples again on those two location on 01.10.2020, and sent the samples for analysis. This Report is submitted based on the observations made by the Joint Committee during the inspection, results of the samples and the interaction made with the members of the Joint Committee and the concerned Departments. The details of officials participated in Joint inspection is presented as Appendix-1:

The Committee inspected the water sources that are entering in to Coonoor Town, flowing within the Coonoor Municipal Limits, leaving Coonoor Municipality and observed the status of the sewage generation and disposal by Coonoor Municipality, presence of solid wastes in the water bodies within the Municipal Limits, etc.

#### **Industrial Discharges:**

There is no industrial discharge entering in to the water courses which are inspected by the Joint Committee. However, it is ascertained from the District Environmental Engineer, Udthagamandalam, a member of the Joint Committee that M/s. Cordite Factory, Aruvankadu, which is located at about 5 kilometers up-stream of Coonoor, and is engaged in the manufacturing of Nitro-Glycerine based propellant, is discharging effluent to the tune of 1000 KLD in the stream, flowing adjacent to the factory, which is entering in to the Coonoor Town. The effluent discharged from the industry is mainly arising out of the neutralization of the acidic streams and as such contain mainly Total Dissolved Solids, Chlorides and Sulphates. The effluent from the Industry is generally meeting the standards prescribed, except that the level of Total Dissolved Solids is exceeding at times. The level of Total Dissolved Solids in the samples collected between January 2019 and July 2020 are ranging between 312 mg/l to 3250 mg/l. The impact of the occasional exceedance in Total Dissolved Solids is not felt in the downstream, due to the dilution occurring in the stream. The stream that is entering in to Coonoor Town, at the back-side of crematorium showed that the level of Total Dissolved Solids as 270 mg/l only. The industry has formulated proposals for providing Zero Liquid Discharge System, and submitted the Proposal to Ordinance factories Board, Ministry of Defence, Government of India, for approval.

#### **Initiatives by Coonoor Municipality:**

Coonoor town's history dates back to more than a hundred and fifty years. The unfavourable terrains and torrential monsoons make it prone to frequent landslides and flooding in the Coonoor River. Two feeder streams flowing from adjacent Town Panchayat

and Cantonment areas confluence below the Brindavanbridge and flow forward as the 'Coonoor River', into which two tributaries from the Gymkhana grounds and Tiger Hill area drain. The river and its tributaries course forward for about 2kms through the thickly populated areas of the town and leaves Coonoor municipal boundary at Law's falls. Hence it has always been a herculean task for Coonoor Municipality to maintain the free flow and quality of the Coonoor River as it flows forward.

However, the Municipality has initiated many measures for the protection of water bodies. Even though, those measures were listed in the Interim Report already filed before the Honourable Tribunal, considering the significance of the information, the same is again submitted shortly.

**Preventing Dumping of Garbage in to Water Bodies:**

1. Coonoor Municipality initiated protection of 'Coonoor River' at its most vulnerable stretch in April 2019 by erecting 'Chain link Fencing' to a length of 116 meters, through CSR activity from a private firm, following which an additional stretch of 398 meters was fenced, through another CSR activity facilitated by District Collector, Nilgiris in September 2019.
2. Coonoor Municipality is engaged in prevention of dumping by creating awareness through public address system, distribution of pamphlets and periodic cleaning of Coonoor River to ensure free flow. In addition, 10 animators are engaged in regular IEC activities in protecting the river and preserving the environment. Dumping of wastes has been reduced to a large extent. Moreover, the river is being closely monitored by the Municipal staff.

A proposal for Rs.1000 Lakhs has been sent for strengthening the side walls of the river which would also prevent dumping of wastes.

### **Improvement of water Quality of River:**

On the occasion of 'World Environment Day' on June 5<sup>th</sup> 2019, District Collector, Nilgiris, inaugurated a month long desilting activity of Coonoor River through 'Clean Coonoor', a Coonoor based NGO and about 8000 MT of Silt removed from the river and this helped to a great extent in the municipality's efforts to protect and preserve the river.

### **Proposals Under Pipe-Line:**

As advised by District Collector, Nilgiris, a proposal for providing pipeline for sewage water on either side of Krishnapuram stretch of Coonoor river and construction of a treatment plant to prevent pollution at Coonoor River at an estimated cost of Rs. 500.00 Lakhs was formulated and submitted to Government and the Administrative Sanction obtained on 26.02.2020. This work - Coonoor River (Krishnapuram Odai) to be commenced shortly, has been included under 'Nadanthai Vaazhi Cauvery' project through PWD (Commissioner of Municipal Administration vide order dated 19.05.2020) to conserve, rejuvenate and augment the water resources in Cauvery basin and to effectively curb sewerage pollutant discharged from 2088 households.

### **Report on Movement of Elephants:**

The Report of the Nilgiris Forest Division, on the movement of elephant was already submitted in the Interim Report itself. However, with relevance of subject matter, the same is again produced as follows:

On inspection it is found to the fact the elephants migrate towards Coonoor Uphill seasonally.

- The regular migrated path is Mettupalayam- Burliar – Kurumbadi – Valvewood Estate- Marappalam- Nandhagopal Bridge- 13-th bend -Nanjappachathiram – Kattery park - Runnimeedu Railway station.
- From Runnimeedu Railway station the elephant returns towards Mettupalayam along the same path. The movement of elephants is noticed majorly during the

month of June, July and August and are naturally attracted by ripened Jack fruits, trees during the season around the areas.

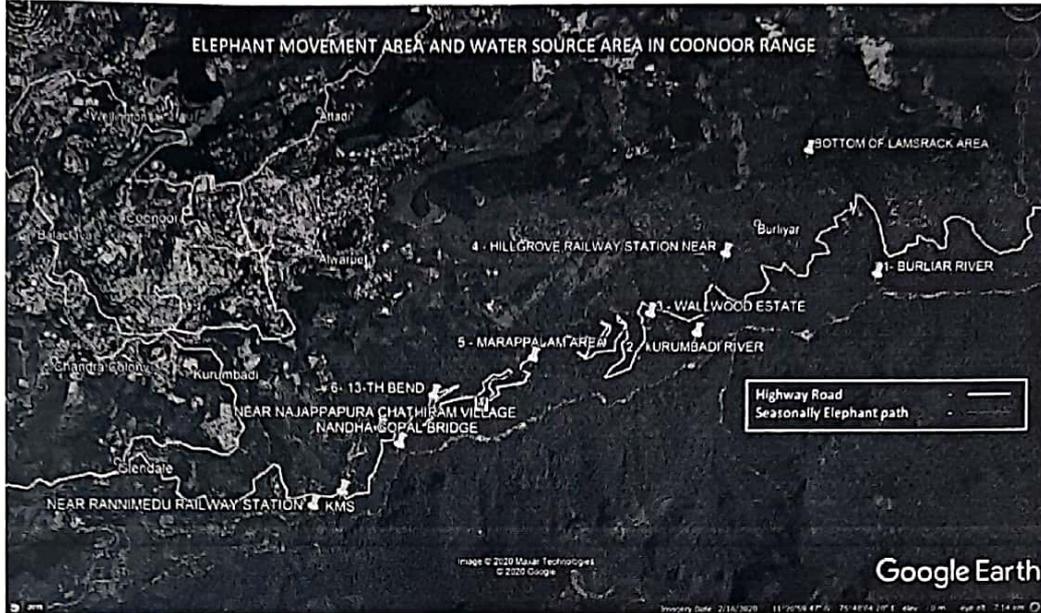
- The passage of elephants in this area is temporary and observed the animals drink water from freshwater streams rising from the adjacent shola forest and from Burliar river which is far away from Coonoor river.
- The elephants are mostly confined to Burliar, Valve wood Estate, Hill grove railway station and Marappalam area which is away from CoonoorRiver.

The map with GPS Coordinates depicting the regular migrating path is furnished below for kind perusal of the Honourable Green Tribunal (SZ).

**ELEPHANT MOVEMENT AND WATER SOURCE AREA IN COONOOR RANGE**

S.No	NAME OF AREA	GPS READING	
		NORTH	EAST
1	BOTTOM OF LAMBSROCK	11°20'54.86"N	76°50'45.38"E
2	BURLIAR RIVER	11°20'14.79"N	76°50'52.57"E
3	HILLGROVE RAILWAY STATION NEAR	11°20'28.38"N	76°50'12.73"E
4	KURUMBADI RIVER	11°20'7.64"N	76°49'58.91"E
5	WALLWOOD ESTATE	11°20'15.36"N	76°49'47.79"E
6	MARAPPALAM AREA	11°20'9.28"N	76°49'13.63"E
7	NEAR 13-TH BEND	11°20'4.24"N	76°48'45.57"E
8	NANDHA GOPAL BRIDGE	11°19'53.52"N	76°48'34.79"E
9	NEAR NAJAPPAPURA CHATHIRAM VILLAGE	11°19'58.41"N	76°48'30.32"E
10	KMS	11°19'44.41"N	76°48'18.80"E
11	NEAR RUNNIMEDU RAILWAY STATION	11°19'42.32"N	76°48'11.16"E

## ELEPHANT MOVEMENT AREA AND WATER SOURCE AREA IN COONOOR RANGE



### Applicable Reference Values for the Water Courses:

The Central Pollution Control Board (CPCB) has developed five designated Best Uses for Water bodies, and different standards have been prescribed for each usage. Moreover, the Bureau of Indian Standards, vide IS 2296:1992 published the Water Quality Standards for the five Class of Waters. The various designated best uses and their standards are submitted as Appendix-2. In the instant case, the water bodies are neither falling under Class-A (Drinking Water Source without Conventional Treatment; but after Disinfection) nor under Class-B (Organized outdoor bathing), and also not under Class –C (Drinking Water Source with Conventional Treatment and after Disinfection), but falls under Class-D (Propagation of Wildlife and Fisheries). Hence, the results of the samples collected are compared with Class-D and also with Class-C, in view of the reason no standard is prescribed under Class-D.

### Quality of the Water:

The quality of the water samples collected is described in the following Section, based on the observations made during the sample collection and the results of the samples analyzed at the Laboratories of Tamil Nadu Pollution Control Board.

**Appearance:** During the collection of the samples, all the samples were found to be clear and colourless. There is no standard prescribed for Colour in respect of Class-D water. However, it is found that all samples are found to be well within the colour units prescribed for Class-C Waters. The maximum observed value is 80 Hazen Units, as against the standard of 300 Hazen Units.

**Neutrality:** The pH values of the samples are ranging between 6.91 to 8.38, as against the range of 6.5 to 8.5 prescribed for Class -D Waters. The samples are meeting the norms prescribed for Class-C waters also.

**Mineral Parameters:** No standard is prescribed for the Class-D Waters, in respect of the parameters representing the mineral content, viz. Total Dissolved Solids, Chlorides, Sulphates, Fluorides, Alkalinity, Hardness, Calcium, and Magnesium. No standard prescribed for Class-C Waters also in respect of Alkalinity, Hardness, Calcium, and Magnesium. However, the values of Total Dissolved Solids, Chlorides, Sulphates, and Fluorides are meeting the standards prescribed for Class-C Waters.

**Biological Indicators:** One of the important indicators of the biological health of the water is Dissolved Oxygen, and a standard of 4 mg/l or more is prescribed for both Class-C and Class-D waters. The samples collected in all the five locations are having Dissolved Oxygen values ranging between 5.8 mg/l to 6.5 mg/l. In the case of Chemical Oxygen Demand, the values are ranging between 8 mg/l to 120 mg/l and for Nitrate Nitrogen the values are ranging between 0.39 mg/l to 2.38 mg/l. No standard is prescribed, for both Class-D and Class-C waters, in respect of these two parameters. In the case of Bio-chemical Oxygen Demand, the values are ranging between <2 mg/l to 6 mg/l. The prescribed standard for Class-D Water is 2 mg/l, and in the case of Class-C Waters, it is 3 mg/l. The level of 6 mg/l, reported at Coonoor River downstream of Coonoor Bus Stand is attributed to the mixing of untreated sewage from the Municipal Limits of Coonoor and also the discharge from the huts located adjacent to the point of sample collection. Even though no such disposal of sewage in the Stream within Gymkhana, this could be due to the decay of the grass in the Gymkhana, which is brought in to the stream.

**Metals:** In the case of metals, like Iron, Copper, Chromium, Zinc, Cadmium and Nickel, no standard is prescribed for Class-D waters. However, the parameters are within the limits prescribed for Class-C Waters.

**Bacteriological Health:** The values of Total Coliform are found to be ranging between 17 to 39 MPN/100 ml. No standard is prescribed for the Total Coliforms in respect of Class-D waters. However, these values are found to be far below the standard prescribed for Class-C Waters viz. 5000 MPN/100 ml. No standard is prescribed for Fecal coliforms.

The consolidated report of analysis of the samples collected and analyzed is submitted as Appendix-3.

**Inferences:**

Based on the observations made during the Joint Inspection, report furnished by the Forest Department and the results of the samples collected from the water bodies, the Joint Committee arrive at the following inferences:

1. It is noted that the quality of the water in Burliar River, at the back-yard of Runnimeedu Railway Station is found to be suitable for Wild-Life propagation, in respect of all parameters.
2. The quality of the water that is found at the further down-stream is likely to be more healthier because of the reason that there is no discharge of waste water of any sort and there is further dilution due to the mixing of spring water from estates are noticed.
3. There is no evidence to suggest that that the elephants have come to Runnimeedu Railway Station in search of good quality water, as the water source which they used to drink is contaminated.
4. The Joint Committee is of the considered view that the passage of elephants in this area (Runnimeedu Railway Station) is temporary and seasonal.
5. The Joint Committee is of the considered view that there is no violation or encroachment of Forest Land.

6. The Joint Committee is also of the considered view that there is no pollution of the water bodies that would affect the wild-life.
7. However, the discharge of the sewage directly or indirectly in to the water bodies, from the house-holds of Coonoor Municipality needs to be contained in order to further improve the quality of the Water Bodies.
8. Similarly, the dumping of solid waste into the water bodies should also be prevented.

**Measures to be Taken :**

In order to ensure that the sewage from the house-holds shall not be discharged in to the Coonoor River, and that the dumping of solid waste in to the River is completely prevented, the Joint Committee recommends the following measures:

1. The Coonoor Municipality shall undertake a survey of the house-holds which have not provided with Septic Tank and Soak Pit arrangements, and discharging sewage in to the River. This exercise shall be completed before 31.01.2021.
2. Those house-holds shall be made to provide septic tank and soak pit arrangements, wherever space is available, before 31.03.2021.
3. In the house-holds, where adequate space is not available for providing septic tank and soak pit arrangement, suitable common public land be identified, to provide common septic tank and soak pit arrangement or leach pits, with a view to ensure that untreated sewage entering the River is completely prevented. This exercise shall be completed before 30.06.2021.
4. Stringent penalties provisions in the by-laws be enacted for dumping of garbage in the water-bodies. This shall be completed before 31.12.2020.
5. Suspending of Trade Licenses of the commercial establishments dumping garbage in to water bodies shall also made as by-law and enforced.
6. Awareness programmes on preserving the water bodies shall be conducted periodically.
7. Signage boards, at the places which are vulnerable to dumping of garbage in to the water bodies be erected before 31.12.2020 by the Municipality.

8. Considering the much undulated and unfavourable terrain, which is a challenge to Coonoor Municipality, it is recommended that the Government may institute an expert technical team to study and suggest means for the management of sewage with a view to ensure that untreated sewage is not let in to the water courses.

**Prayer:**

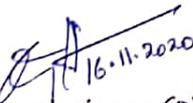
The Joint Committee expects that all the technical Departments would file their individual responses on the allegations levelled in the Paper Report. Further, the Joint Committee is of the considered opinion that this Report covers all aspects of the issue, and request the Honourable National Green Tribunal (SZ) to accept the Report in and to pass appropriate orders the Honourable National Green Tribunal (SZ), considers deem and fit on the facts and circumstances of the issue.



District Environmental Engineer,  
Tamil Nadu Pollution control Board  
Udhagamandalam - Member



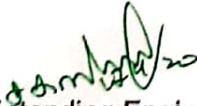
Assistant Conservator of Forests,  
Udhagamandalam – Representing  
District Forest officer,



Commissioner, (D)  
Coonoor Municipality,  
Coonoor - Member



Executive Engineer, PWD,WRD.,  
Bhavanisagar Dam Division,  
Bhavanisagar



Superintending Engineer, PWD,WRD.,  
Bhavani Basin Circle, Erode – Nodal  
officer



The District Collector,  
Nilgiris District,  
Udhagamandalam.

**APPENDIX-1**

**LIST OF OFFICIALS PARTICIPATED IN THE JOINT INSPECTION ON 16.09.2020**

S. No.	NAME AND DESIGNATION OF THE OFFICERS
1.	Thiru. Ranjith Singh, IAS, Sub Collector, Coonoor – Representing District Collector, The Nilgiris.
2.	Er. S. Kasilingam, B.E., Superintending Engineer, PWD, WRD., Bhavani Basin Circle, Erode – Nodal officer
3.	Er. P.S. Livingston, M.E., District Environmental Engineer, Tamil Nadu Pollution control Board Udhagamandalam - Member
4.	Thiru.K. Saravanakumar, Assistant Conservator of Forests, Udhagamandalam Representing District Forest officer, Udhagamandalam
5.	Thiru. K. Balu, Commissioner, Coonoor Municipality, Coonoor– Member
6.	Er. V. Rajendran, M.E., Executive Engineer, PWD, WRD., Bhavanisagar Dam Division, Bhavanisagar
7.	Er.S.Ramesh, B.E., Assistant Engineer, PWD., WRD., Irrigation Section, Coonoor
8.	Er.M. Ravi, B.E., Assistant Executive Engineer, PWD., WRD., (I/C) Irrigation Sub Division, Udhagamandalam.
9.	Er.V.Balamurugan, BE Municipal Engineer, Coonoor Municipality.
10.	Dr. J.Ragunathan, Municipal Health Officer i/c, Coonoor Municipality

**APPENDIX-2**

**Designated Best Uses of Water**

Designated Best Use	Class	Criteria
Drinking Water Source without conventional treatment but after disinfection	A	1. Total Coliforms Organism MPN/100ml shall be 50 or less 2. pH between 6.5 and 8.5 3. Dissolved Oxygen 6mg/l or more 4. Biochemical Oxygen Demand 5 days 20° C, 2mg/l or less
Outdoor bathing (Organised)	B	1. Total Coliforms Organism MPN/100ml shall be 500 or less 2. pH between 6.5 and 8.5 3. Dissolved Oxygen 5mg/l or more 4. Biochemical Oxygen Demand 5 days 20° C, 3mg/l or less
Drinking water source after conventional treatment and disinfection	C	1. Total Coliforms Organism MPN/100ml shall be 5000 or less 2. pH between 6 and 9 3. Dissolved Oxygen 4mg/l or more 4. Biochemical Oxygen Demand 5 days 20° C, 3mg/l or less
Propagation of Wild life and Fisheries	D	1. pH between 6.5 and 8.5 2. Dissolved Oxygen 4mg/l or more 3. Free Ammonia (as N) 1.2mg/l or less 4. Biochemical Oxygen Demand 5 days 20° C, 6mg/l or less
Irrigation, Industrial Cooling, Controlled Waste disposal	E	1. pH between 6.0 and 8.5 2. Electrical Conductivity at 25° C 2250 micro mhos/cm, maximum 3. Sodium absorption Ratio Max. 26 4. Boron Max. 2mg/l
	Below-E	Not meeting any of the A, B, C, D & E criteria

**Source: Central Pollution Control Board**

**Water Quality Standards in India (Source IS 2296:1992)**

Characteristics	Designated Best Use				
	A	B	C	D	E
Dissolved Oxygen (DO)mg/l, min	6	5	4	4	-
Biochemical Oxygen Demand (BOD)mg/l, max	2	3	3	-	-
Total coliform organisms MPN/100ml, max	50	500	5000	-	-
pH value	6.5-8.5	6.5-8.5	6.0-9.0	6.5-8.5	6.0-8.5
Colour, Hazen units, max.	10	300	300	-	-
Odour	Un-objectionable		-	-	-
Taste	Tasteless	-	-	-	-
Total dissolved solids, mg/l, max.	500	-	1500	-	2100
Total hardness (as CaCO <sub>3</sub> ), mg/l, max.	200	-	-	-	-
Calcium hardness (as CaCO <sub>3</sub> ), mg/l, max.	200	-	-	-	-
Magnesium hardness (as CaCO <sub>3</sub> ), mg/l, max.	200	-	-	-	-
Copper (as Cu), mg/l, max.	1.5	-	1.5	-	-
Iron (as Fe), mg/l, max.	0.3	-	0.5	-	-
Manganese (as Mn), mg/l, max.	0.5	-	-	-	-
Chlorides (as Cl), mg/l, max.	250	-	600	-	600
Sulphates (as SO <sub>4</sub> ), mg/l, max.	400	-	400	-	1000
Nitrates (as NO <sub>3</sub> ), mg/l, max.	20	-	50	-	-
Fluorides (as F), mg/l, max.	1.5	1.5	1.5	-	-
Phenolic compounds (as C <sub>2</sub> H <sub>5</sub> OH), mg/l, max	0.002	0.005	0.005	-	-
Mercury (as Hg), mg/l, max.	0.001	-	-	-	-
Cadmium (as Cd), mg/l, max.	0.01	-	0.01	-	-

Selenium (as Se), mg/l, max.	0.01	-	0.05	-	-
Arsenic (as As), mg/l, max.	0.05	0.2	0.2	-	-
Cyanide (as Pb), mg/l, max.	0.05	0.05	0.05	-	-
Lead (as Pb), mg/l, max.	0.1	-	0.1	-	-
Zinc (as Zn), mg/l, max.	15	-	15	-	-
Chromium (as Cr6+), mg/l, max	0.05	-	0.05	-	-
Anionic detergents (as MBAS), mg/l, max.	0.2	1	1	-	-
Barium (as Ba), mg/l, max.	1	-	-	-	-
Free Ammonia (as N), mg/l, max	-	-	-	1.2	-
Electrical conductivity, micromhos/cm, max	-	-	-	-	2250
Sodium absorption ratio, max	-	-	-	-	26
Boron, mg/l, max	-	-	-	-	2

APPENDIX-3

REPORT OF ANALYSIS OF THE SAMPLES COLLECTED

S. No.:	Parameter	Point of Sample Collection						Burliar River the back yard of Rannimedu Railway Station		Standards for Class-D as prescribed in IS 2292:1992	Standards for Class-C, as prescribed in IS 2292:1992
		Back yard of Rotary Crematorium	Stream within Gymkhana	Stream backside of Brookelands pumping Station	Coonoor River downstream of Coonoor Bus Stand	16.09.2020	01.10.2020	16.09.2020	01.10.2020		
	Date of Sample Collection	16.09.2020	16.09.2020	16.09.2020	16.09.2020	16.09.2020	01.10.2020	16.09.2020	01.10.2020		
1	Colour, Hazen units, max.	50	80	10	10	10	20	50	10	-	300
2	Turbidity, as NTU	26	56	9	21	9	5.2	18	3.1	-	-
3	pH value	7.35	7.25	6.91	7.42	6.91	8.36	7.56	8.38	6.5-8.5	6.0-9.0
4	Total dissolved solids, mg/l, max.	270	116	84	168	84	152	140	128	-	1500
5	Chlorides (as Cl), mg/l, max.	31.7	17.8	11.9	19.8	11.9	34	31.7	49	-	600
6	Sulphates (as SO <sub>4</sub> ), mg/l, max.	90	10.9	5.1	25.9	5.1	36	16	30	-	400
7	Fluorides (as F), mg/l, max.	0.57	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	1.50
8	Total alkalinity	72	56	72	76	72	80	84	96	-	-
9	Total hardness (as CaCO <sub>3</sub> ), mg/l, max.	72	48	32	72	32	68	68	80	-	-
10	Calcium (as Ca), mg/l, max.	25.7	9.6	9.6	20.8	9.6	19.2	19.2	24	-	-
11	Magnesium (as Mg), mg/l, max.	1.9	5.8	1.9	4.9	1.9	4.9	4.9	4.9	-	-
12	Dissolved Oxygen (DO)mg/l, min	6.4	6.5	5.8	*	5.8	6.4	*	6.2	4	4
13	Biochemical Oxygen	<2	4	<2	*	<2	6	*	2	2#	3

