



सत्यमेव जयते

Forests and Environment Department

November'2022

Final Report on GREEN AUDIT of Dhirubhai Ambani Institute of Information and Communication Technology (DAIICT)

Issue GEMI/GA/683(7)/29/2022



Gujarat Environment Management Institute (GEMI)

(An Autonomous Institute of Government of Gujarat)

(ISO 9001:2015, 14001:2015 & 45001:2018 Certified Institute)

"We Provide Environmental Solutions"



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**Forests & Environment Department
Government of Gujarat**

**Final Report
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Figure 4 Water Sampling

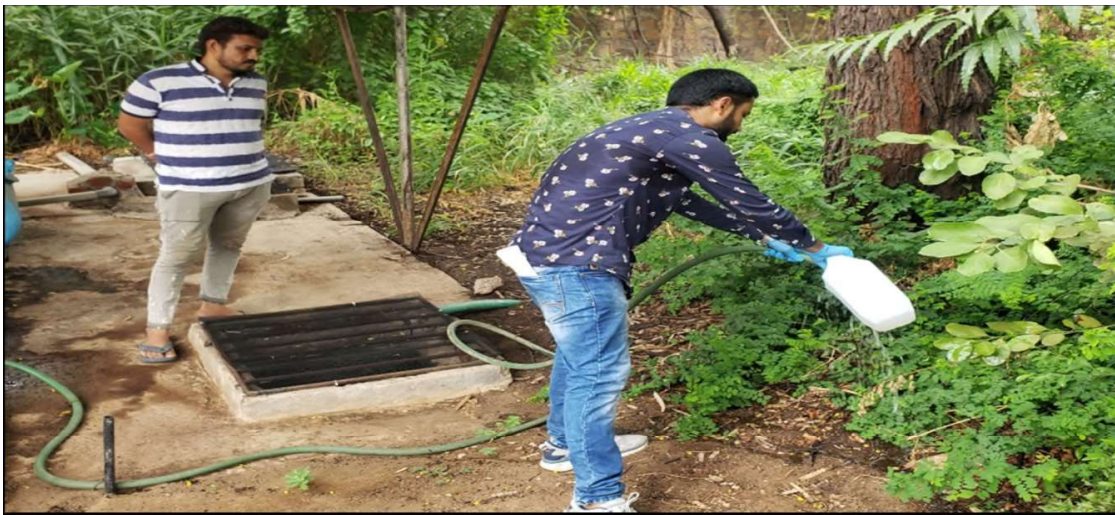


Figure 5 Wastewater Sampling



Figure 6 Ambient Air Monitoring near Canteen Area



Figure 7 Soil Sampling



Figure 8 Noise Monitoring carried out at Resource Centre

➔ **Evaluation of the observations made in the audit.**

The observations have been evaluated as per quality check, which are required to be maintained for each category to have sustainable environment for students, teaching staff as well as working staff.



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Chapter : 5

Green Audit Assessment Findings, Suggestions and Actions

The Green audit of DAIICT campus has been carried out based on the information provided by the Institute. Further, to audit various aspects such as Water, Wastewater, Waste Management, Energy Saving, Environmental Quality, Green Cover, Carbon Accounting, Health, Hygiene and Food, Environmental Awareness, visits to the campus were carried out. The quality of environmental components has been assessed by carrying out their monitoring that includes water quality monitoring, noise monitoring and soil quality monitoring.

5.1 General assessment

Name of the College	Dhirubhai Ambani Institute of Information and Communication Technology, Gandhinagar
Location:	Reliance Cross Road, O/p. National Institute of Design (NID), Gandhinagar, Gujarat-382007.
Month and Year of Establishment:	2001
No. of students enrolled:	Boys : 1032 Girls : 436 New Students : 476 Total Students : 1944
Number of Staff in college:	Faculties : 66 Staff Members : 59
Date of walk-through:	10/06/2022 & 06/07/2022

5.2 Water Audit

5.2.1 Water Assessment

Checklist	Response
Source of water	Bore well
Raw water requirements for various usages	An estimated water requirement as per National Building Code, 2016 for the Institute is about 230.4 KLD, the detailed calculation of which is given in Annexure - I
Analysis Report of Raw Water	Refer Annexure - II
Analysis Report of Drinking Water	Refer Annexure - III
Analysis Report of Treated Sewage	Refer Annexure - IV
Water consumption	450 KLD as per the data provided
Technologies conservation being used for water	Water level sensor system has been installed with overhead tanks to prevent wastages from overflow

The quality of raw water and R.O. water as per the laboratory analysis is shown in Table 1.

Table 1 Quality of Raw Water and RO Water

Sr.	Parameter	Unit	RO Water	Raw Water	Drinking Water Standards IS 10500:2012
Physico-chemical					
1.	pH	-	8.49	7.92	6.5-8.5
2.	Colour	Hazen	5	5	5
3.	Turbidity	NTU	1	1.7	1
4.	Chloride as Cl ⁻	mg/L	8	119.96	250
5.	Total Hardness	mg/L	2	130	200
6.	Calcium Hardness	mg/L	BDL* (DL=1)	80	200
7.	Magnesium Hardness	mg/L	1.5	50	200
8.	Alkalinity	mg/L	21	409.5	200
9.	Total Dissolved Solids	mg/L	36	612	500
10.	Fluoride	mg/L	BDL* (DL=0.3)	1.145	1
11.	Sulphate	mg/L	BDL* (DL=10)	43.67	200
12.	Nitrate	mg/L	2.39	28.56	45
Microbiological					
13.	Detection and enumeration of coliform bacteria	CFU/100 ml	80	--	Shall not be detectable in any 100 ml sample

*BDL= Below Detection Limit, DL=Detection Limit

5.2.2 Observations

During the field visit, no leakage/dropping was observed in pipeline/taps. The Institute has provided non-concussive taps for drinking water for conservation of water. For any problem related to plumbing and sanitary works, an in-house maintenance team is kept available for 24X7 hours.



Figure 9 Drinking Water



Figure 10 Water Cooler

- ➔ The Institute extracts raw water from bore well and stores in raw water storage tank, for which a log book (Annexure-V) for consumption of water is maintained.
- ➔ The Institute has total water storage capacity of 400 KLD (4 Storage tank, each of 1 Lakh Litres Capacity).
- ➔ The storage is adequate in accordance to the water requirement of 230.4 KLD.