# GURU NANAK KHALSA COLLEGE FOR WOMEN GUJARKHAN CAMPUS, MODEL TOWN, LUDHIANA



# SUPPORTING DOCUMENT

# (2022-2023)

7.1.6 Quality audits on environment and energy are regularly undertaken by the institution

Dr. Maneeta Kahlon Principal

Dr. MANEETA KAHLON Principal G.N.Kh. College for Wome Gujarkhan Campus, Model Town Ludhiane

### WATER AUDIT

#### About college

Guru Nanak Khalsa College for Women, Gujarkhan Campus, Model Town, Ludhiana, has championed the pursuit of broadening learning and critical thinking landscapes throughout its five exciting decades of history. Today, this college is acknowledged as a top-tier institution of higher learning that fosters academic and intellectual rigour, lively co-curricular pursuits, community service projects, and civic participation. The institution provides a distinctive set of resources where a community of passionate instructors and gifted students can come together to learn and develop in order to share the dynamic energy field. It is a venue for instruction as well as collaborative scholarship, which strengthens the unique relationship between students and teachers. Despite having a humble beginning, the college now has a wide range of facilities, including high-tech seminar room, Smart Class Rooms, Arts and Commerce buildings, well-equipped laboratories, with computers and internet access, a gymnasium and a fully functional library.



Figure: 1.1 - Image of Guru Nanak Khalsa college for Women from Google map

### **Institutional strengths**

- Highly skilled and knowledgeable teaching staff
- Combination of conventional and contemporary pedagogical techniques
- Facilitators of research activities
- Automated administrative and library block
- Well-maintained infrastructure
- Well-equipped laboratories
- Achievements in sports and cultural activities
- ▶ Large, well-maintained green area with landscapes
- Clean, green campus Eco-friendly facilities
- Locational advantage

#### About water auditing

A water audit is a study of the water use of an entity. It starts at the point where water enters the premises and goes up to the point where the waste water is discharged, critically examining all aspects of use. The audit establishes the quantity/volume of water being used, wastage if any, leakages existing, excess use etc., and identifies areas where consumption can be reduced. It critically examines existing treatment systems and practices and recommends changes to improve efficiency and reduce usage. Based on this detailed study and observations, an audit gives recommendations on how to reduce wastage as well as consumption of water, improvements in treatment practices and methods along with cost benefit analyses. It also recommends the setting up of a system to maintain a record of the amount of water entering a system and to keep track of how this water is distributed and used (National Productivity council, Govt of India).

#### Objectives

- > To monitor the water use and conservation systems
- To evaluate the amount of water generation and its use, and its reduction inside the college.

#### Water audit committee

Name	Designation
Dr Kuldeep Kaur	Associate Professor
Ms. Shikha Kalra	Assistant Professor

Ms. Jaspreet Kaur	Assistant Professor
Ms. Amarpreet Kaur	Assistant Professor
Ms. Harpreet Kaur	Assistant Professor
Ms. Balwinder Kaur	Assistant Professor
Ms. Seema Devi	Assistant Professor

## **Target Areas of Water audit**

This indicator addresses below areas related to water utilization.



# Step 1: Walk through survey

- > Figuring for existing water sourcing, storage and distribution facility.
- > Understanding the water demand and water utilization spheres.

# **Step 2: Secondary Data Collection**

- Analyze water bills of past months
- > Analyze Wastewater treatment scheme & costs etc.

## Step 3: Conduction of Detailed Water Audit & Measurements

- Power measurement of pumps/motors
- > Detection of potential leaks & water losses in the system
- Assessment of productive and unproductive usage of water
- Determine key opportunities for water consumption reduction, reuse & recycle.

## **Step 4: Preparation of Water Audit Report**

- Documentation of collected & analyzed water balancing and measurement details
- Projects and procedures to maximize water savings and minimize water losses.
- Chances for water conservation based on reduce/ recycle/ reuse and recharge options

Washroom	Taps	Туре		
Office	1Wash Basin	Simple		
	1 Toilet (English Seat)	Jet		
	1 Flush	Handle Tab		
Principal Room	1 wash Basin			
	1 Flush(English Seat)	One shower jet		
	1 Shower			
Secretery Sir	1 wash Basin	One Tap		
	1 Flush(English Seat)	Simple Jet		
Ground floor girls	1 Wash Basin			
with room	T wash basin			
with room	1 Gate Wall	1 tap		
	1 Toilet (English Seat)	Simple Jet		
	I TONEL (LIGHSH SEAL)	Handle		
	3 Toilet (Indian Seat)	3 tap		
	o roner (maian sear)			
Staff Room	2 Wash Basin			
	1 Toilet (English Seat)	1 tap simple jet		
	1 Toilet (Indian Seat)	2 tap		
Second Floor girls	2 Wash Basin			
washroom		3 tap		
	3 Toilet (English Seat)	3 simple jet		
		2 tap		
		Later -		
Hsc Lab	1 Wash Basin	1 tap		
	1 Toilet (English Seat)	1 simple jet		
Lib Staff Room	1 wash Basin	1 tap		
LID Staff Room	1 Toilet (Indian Seat)	Trap		
	1 Tollet (Indian Seat)			
Commerce	2 Wash Room			
Dept.girls		2 simple jet		
	2 Toilet (English Seat)	2 tap		
	2 wash Basin			
Commerce Staff				
Room	1 Wash Basin	2 tap		
	1 Toilet (English Seat)	1 simple jet		

s:

Details of Source of Fresh Water and Use Area

BCA dept. girls	2 Wash Room	2 tap	
0	2 Toilet (English Seat)	2 simple jet	
	2 Was Basin	2 simple jet	
BCA Staff Room	1 Wash Basin	2 tap	
	1 Toilet (Indian Seat)	2 tap	
MA Staff Room	1 Wash Basin	2.64	
	1 Toilet (Indian Seat)	2 tap	
New Building	1 Wash Basin		
New Building	2 Toilet (English Seat)	2 tap 2 simple jet	
Visitor Room	1 Wash Basin	2 tap	
	1 Toilet (Indian Seat)		
Peon Washroom	1 Wash Basin	2 tap	
	1 Toilet (Indian Seat)		

Dorecte

Dr. MANEETA KAHLON Principal G.N.Kh. College for Women Gujarkhan Gampus, Model Town, Ludhiana

#### WATER BILLS



/	ſ		ē				8			
/		ALL AND ALL AN	(http://w	sepaymen ent Receip		cludhiana.gov.in) pplicant Copy)		A CONTRACT OF A		
		Account No.:	29654	and the second	Date:	99-24	13/09/2022			
		Block:	18	18		Property No.: 686W				
		Name:	PRINCIPAL ( COLL	G N KHALS	SA Contact N	No.	9501017	7435		
	1	Due Amount	12344.00/-	te and i	Amount F	Paid:	12344.0	and the second sec		
	I	Payment Mode:	Demand Dra	ft	Bank:		and the second second second second	verseas Ban	k	
		DD/Cheque No.:	179628	and Mail	DD/Cheq	que Date:	13/09/20		19	
		Transaction ID:	a) 10,	-	Service	DD/Ghell	and the second second second second	ewerage Pay	ment	
		G8 Book No.:	97057		G8 Rece		9			
		Created By:	Harsimran Ka	aur	Bill Perio	: bc	31/03/20	)23	All and a second	
						CALL NO.				
	Į	Remarks :		a a gui fa di se					The second	
MUNICI	L PAL CORPO	Remarks : RATION, LUDH & Address	HANA V Mete		ND SEWERA Type W.C. 'S.C.	GE BILI Taps Seats	For The Bill No.	e Period of Water Principal	01/04 Coan Ba	Sewerage
Account Numbe Name of Zone	L PAL CORPO r Name	RATION, LUDH & Address IPAL G N KHAL	Meter	r No. Tariff	Type W.C. S.C.	Taps Seats	Bill No.	Vater Principal Id- 29654 UID No.	Interest	lance 31/03/2023
MUNICI ccount Numbe Name of Zone A1B/AL1E	L PAL CORPO r Name 3/1413PR INC 686W	RATION, LUDH & Address IPAL G N KHAL . Id N	SA COLL (Squ	d) Cor 25C.00 mption Met	Type W.C. S.C. mm. 14861 885 er nt Water	Taps Seats 1 6 2 Arrears	Bill No. 593505	Water Principal Id- 29654 UID No.	Interest	lance 51/03/2023 Sewerage Principal Interest
MUNICI ccount Numbe Name of Zone A1B/AL1E Zone: New Reading	L PAL CORPO r Name 3/1413PRINC 600 Old Reading Pe On	RATION, LUDH & Address IPAL G N KHAL Id N eriod Conditi 2Months	SA COLL (Sqy to 29654	r No. Tariff d) Con 25C.00 mption Met Rei 0.0	Type   W.C. ·S.C.     mm.   14861     885     er nt   Water     00   4,7	Taps Seats 1 6 2 Arrears S	Bill No. 593505 Principal for Women	Water Principal Id- 29654 UID No. terest on Arrears	Interest	ance 51/03/2023 Sewerage Principal Interest . 00 Loan Instalments
MUNICI Account Numbe Name of Zone A1B/AL1E Zone: New Reading	L PAL CORPO r Name 3/1413PRINC 6860 Old Reading Pe On 11	RATION, LUDH & Address IPAL G N KHAL Id N Sried Condition 2Months	Additional	d) Cor 25C.00 mption Met	Type   W.C. ·S.C.     mm.   14861     885     er nt   Water     00   4,7	Taps Seats 1 Arrears S 389 (h, College (h, College bebblow Am Date aft	Bill No. 593505	Water Principal Id- 29654 UID No.	Interest	ance 31/03/2023 Sewerage Principal Interest . 00 Loan Instalments Sewerage

Due Amount 2430.00/- Payment Mode: Demand Draft DD/Cheque No.: 179627 Transaction ID: G8 Book No.: 97057 Created By: Harsimran Kaur Remarks : Neast Office	Amount Pal Bank: DD/Cheque Service G8 Receip Bill Period	
DD/Cheque No.: 179627 Transaction ID: G8 Book No.: 97057 Created By: Harsimran Kaur Remarks :	Bank: DD/Cheque Service G8 Receip	
Transaction ID:   G8 Book No.: 97057   Created By: Harsimran Kaur   Remarks :	DD/Cheque Service G8 Receip	
G8 Book No.: 97057 Created By: Harsimran Kaur Remarks :	Service G8 Receip	
Created By: Harsimran Kaur Remarks :	G8 Receip	
Remarks :		
Remarks :		
	and the second se	
1 0.1. 28/20	and the second sec	
IL MILADE'AD	19.	
Near Post office		
A NUMBER OF THE STATES OF THE	RAGE BILL	
MUNICIPAL CORPORATION, LUDINANA Meter No. Tariff Type W.	C. Taps	
count Number Name & Address		
lame of Zone 143	07 2 4	
COLL C N KHALSA COLL (Squa)	7/   = T	
AIB/ALID/ODU INT Id No 34930 200 000	1	
ZONE: UCMEN	. Arrears	
New Reading Old Reading Period Condition of Meter Consumption Rent Water		
On On 0,00	G.N. Kh. College f	
12Months G.N		
Adjustment of Rebate A		
Less Excess Less Excess Pravious BIII	By Due conto	
270	2430	
0.00 0.00 1.00	meludhiana.gov.in	
00.00 2100.00 0.00 www.mcludhin	111-10	
machine after making the payment		

SECOLLEDE FOR ι College for Women BILL / CASH fust 2/1/23 ਨਗਰ ਨਿਗਮ ਲੁਧਿਆਣਾ 1226 2 pared o ficials h ANK I perfor । ਅਜੇ ਤੱਕ ਮਿਊਸਪਲ ਕਾਰਪੋਰੇਸ਼ਨ ਦੇ ਬਜ਼ਾਨੇ ਵਿੱਚ ਸ਼ੁਮਾਂ ਨਹੀਂ ਬਰਾਈ। ਆਪ ਜੀ ਨੂੰ ਇਸ ਨੋਟਿਸ ਰਾਂਹੀ ਸੂਚਿਤ 3 ਦਿਨ ਦੇ ਔਦਰ-ਅੰਦਰ ਵਟਰ ਹੋਟ ਸਮੇਤ ਵਿਆਸ - ਤੁਸਦੇ ਸਿਊਸ਼ਪੁਲ ਕਾਰਪੋਰੇਸ਼ਨ ਦੇ ਖਜ਼ਾਨੇ ਵਿੱਚ ਜ਼ਮਾ ਕਰਵਾ ਦੇਵੇ। ਨੋਟਿਸ ਦੀ ਪਾਲਣਾ ਮਿਊਸਪਲ ਕਾਰਪ੍ਰੋਰਸ਼ਨ ਐਕਟ ਦੀ ਧਾਰਾ 138 ਦੇ ਸੁਧੀਨ ਆਪ ਦੀ ਜਾਇਦਾਦ ਕੁਰਕ ਕਰਕੇ ਵਸੂਲੀ ਜਾਵੇਗ੍ਰਾ। (A12) TIPE - +15A (A12) TIPE - +15A (A1 - 11A (TEETT 1+- 80048000 1C + (C9E3+- +PCT0280 869 +0,= 8000061 NERVED Grade and and a state of the state of 1/14.59 SIGNATURE AKHILES (620) 00 \_ [62.50 PIN VE ED VK FIN VE JD - N SIGNATURE QUIRED ANHLES, -CH Neue ID PAT & Packet, substantin Neuer Neuer Plates V AN ART 463 16250 Vorect-सेतल मुपवडेंट, सेत 
 Inclusion
 Discrete

 Discrete
 6208447

 ACCIDIT
 6208447

 ACCIDIT
 6208447

 MILL
 111

 MULL Restrict
 1124

 MULL Restrict
 ਤਹਿਰੀਕ ਕਾਬਲ ਸਮਾਇਤ ਨਾ ਹੋਵੇਗੀ। DISPUSAL BILL PAYMENT ਤਹਿਰਕਿ ਕਾਬਲ ਸਮਾਇਤ ਨੇ ਰਵਗਾ। ਹੋਵੇ ਡਾਂ ਪੇਸ਼ ਕਰ ਸਕਦੇ ਹੈ। <u>S.N. Kh. College for Women</u> Model Town, LUDHIANA. 102596 31 63659 Card et 0- 0221-6-21-08 ·s 16200.00 PREVACY PERICY AS OF  $\log_{100}(1/\omega_{10})$  . Contains crutin tracy policy APPLY

## Water Accounting & Metering system

### Suggestions

Some of the crucial recommendations are:

- Create and put into action a plan to reduce water use while also preparing the water management policy.
- Create an institutional ecology policy and lead by example in terms of environmental responsibility and resource conservation, recycling, and waste management techniques.
- Encourage government, foundations, and industry participation in transdisciplinary research, education, policy creation, and information sharing related to water conservation and sustainable development. Involve all relevant parties.
- Work together to establish curricula, research projects, operations, and outreach activities that support an environmentally sustainable future using interdisciplinary approaches.