



# GREEN & ENVIRONMENT AUDIT REPORT

GURUGRAM GLOBAL COLLEGE OF PHARMACY  
GURGAON-122506



GURUGRAM GLOBAL  
COLLEGE OF PHARMACY  
GURUGRAM

Approved by AICTE, Govt. Of India & Pharmacy Council of India  
Affiliated to Pt. B.D Sharma University of Health Science Rohtak  
Affiliated to Haryana Board of Technical Education



IGNITE  
Engineering

- THE SPARK OF SOLUTIONS -

January 2021

IGNITE ENGINEERING

CHENNAI



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## Executive Summary

The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the Green Campus for the institute which will pave way for sustainable development.

Gurugram Global College Of Pharmacy believes that there is an urgent need to address these fundamental environmental problems and reverse the trends. The purpose of the audit was to ensure that the practices followed in the campus are in accordance with the Green Policy adopted by the institution.

It works on the several facets of 'Green Campus' including Water Conservation, Tree Plantation, Waste Management, Paperless Work, and Alternative Energy. With this in mind, the specific objectives of the audit was to evaluate the adequacy of the management control framework of environment sustainability as well as the degree to which the Departments are in compliance with the applicable regulations, policies and standards. It can make a tremendous impact on student health and learning college operational costs and the environment. The criteria, methods and recommendations used in the audit were based on the identified risks.

## Introduction

Green audit was initiated with the beginning of 1970s with the motive of inspecting the work conducted within the organizations whose exercises can cause risk to the health of inhabitants and the environment. It is known as the systematic identification, quantification, recording, reporting and analysis of components of environmental diversity.

It is the duty of organizations to carry out the Green Audits of their ongoing processes for various reasons such as; to make sure whether they are performing in accordance with relevant rules and regulations, to improve the procedures and ability of materials, to analyze the potential duties and to determine a way which can lower the cost and add to the revenue.



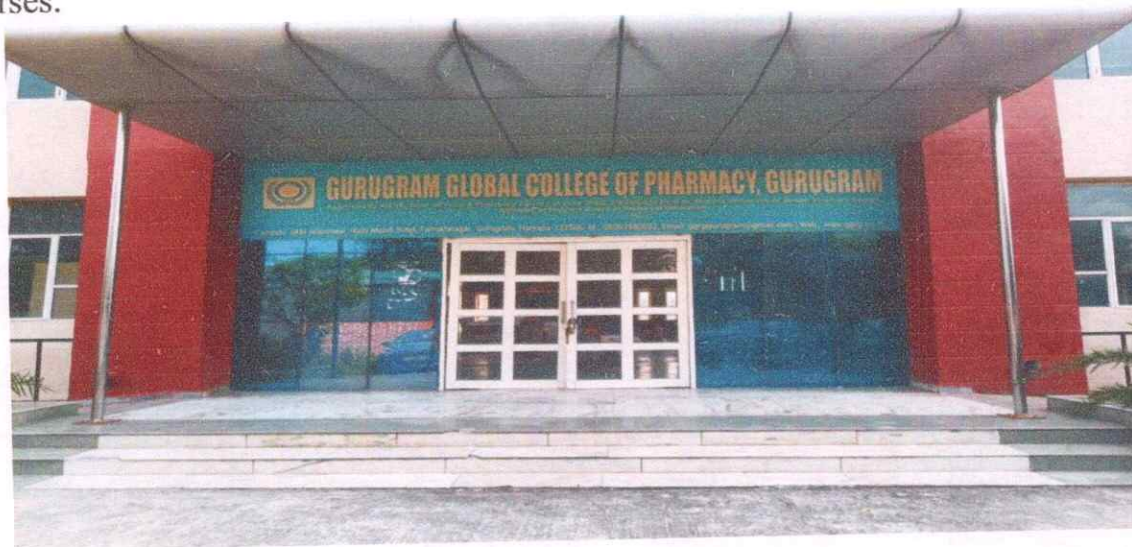


## Green & Environment Audit Report - 2021 GURUGRAM GLOBAL COLLEGE OF PHARMACY

Green Audit is assigned to the Criteria 7 of NAAC, National Assessment and Accreditation Council which is a self-governing organization of India that declares the institutions as Grade A, Grade B or Grade C according to the scores assigned at the time of accreditation. The intention of organizing Green Audit is to upgrade the environment condition in and around the institutes, colleges, companies and other organizations. It is carried out with the aid of performing tasks like waste management, energy saving and others to turn into a better environmental friendly institute.

### About the College

**Gurugram Global College of Pharmacy** started B. Pharm & D. Pharm Course in 2017 under the private self - financing sector in the state of Haryana. The Institute offers 4 year (8 Semesters) Bachelor degree in Pharmacy (B. Pharm), 2 year Diploma in Pharmacy (D. Pharm) approved by Pharmacy Council of India, New Delhi. Accredited with ISO 9001 – 2015 Certification for Quality Management System It has been recognized as a premier institution of higher learning for job-oriented courses.



The campus is spread over an area of 2 acres of land with Huge built up area The college offers Diploma and Under Graduate Courses in Pharmacy & There are 360 students and 22 teaching faculty in the college which is promising to grow rapidly.





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The College offers job-oriented courses, extra-curricular activities and technologically advanced facilities accessible to the faculty, the students and the support staff. Here, each individual is encouraged to step beyond the confines of academic and administrative disciplines to explore and intervene in the larger interests of the GGCP community that thrives on participation and the desire to venture into newer vistas.

### **Objectives of the Study**

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The main objective of the green audit is to promote the Environment Management and Conservation in the College Campus. The purpose of the audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards.

The main objectives of carrying out Green Audit are:

- To introduce and aware students to real concerns of environment and its Sustainability.
- To secure the environment and cut down the threats posed to human health by analyzing the pattern and extent of resource use of the campus.
- To establish a baseline data to assess future sustainability by avoiding the Interruptions in environment that are more difficult to handle and their corrections requiring high cost.
- To bring out a status report on environmental compliance.

### **Benefits of green audit**

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- Green auditing should become a valuable tool in the management and monitoring of environmental and sustainable development programs of the college.
- Impart environmental education through systematic environmental Management approach and Improving environmental standards.
- To create a green campus.
- To enable waste management through reduction of waste generation, solid-waste and water recycling.



## Methodology

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In order to perform green audit, the methodology included different tools such as preparation of questionnaire, physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. The study covered the following areas to summarize the present status of environment management in the campus:

- Water management
- Energy Conservation
- Waste management
- E-waste management
- Green area management
- Environment Monitoring

## Observations and Recommendations

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### Water Use

The study observed that the main source of water for the institute is received from two bore wells. Water is used for drinking purpose, toilets and gardening. The waste water from the RO water purifier is used for gardening purpose. During the survey, no loss of water is observed, neither by any leakages, or by over flow of water from overhead tanks. The data collected from all the departments is examined and verified. On an average the total use of water in the college is 25,000L/day, which include 20,000 L/day for domestic, 3,000 L/day for gardening purposes and 2,000 L/day for drinking purpose.





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*Recharge Bore well-001*





### **Rain Water Harvesting**

On the campus, rainwater harvesting units are designed to collect rainwater from various surfaces, including rooftops and paved areas. The harvested rainwater is directed through a network of pipes and channels to a designated recharge well located within the campus grounds. This process not only helps in managing stormwater runoff but also plays a crucial role in recharging the groundwater levels. By capturing and storing rainwater, the system reduces the demand on municipal water supplies, promotes the efficient use of water resources, and helps mitigate the risk of flooding.



*Rain Water Harvesting Pits inside the campus*





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**Recommendations**

- There is a need for monitoring and controlling overflow and periodically supervision drills should be arranged.
- Minimize wastage of water and use of electricity during the reverse osmosis process and ensure that the equipment used are regularly serviced and in good condition.
- The cleaning products used by staff should have a minimal detrimental impact on the environment. They should be biodegradable and non-toxic.
- Ensure that all cleaning products used by college staff have a minimal detrimental impact on the environment, i.e. they are biodegradable and non-toxic, even where this exceeds the Control of Substances Hazardous to Health (COSHH) regulations.
- Gardens should be watered by using drip/sprinkler irrigation system to minimize water use.



## **Waste Management**

This indicator addresses waste production and disposal of different wastes like paper, food, plastic, biodegradable, construction, glass, dust etc. Furthermore, solid waste often includes wasted material resources that could otherwise be channeled into better service through recycling, repair, and reuse. Solid waste generation and management is a burning issue. Unscientific handling of solid waste can create threats to everyone. The survey focused on volume, type and current management practice of solid waste generated in the campus.

### **Observations**

#### **Liquid waste management**

The college is equipped with a central Reverse Osmosis (RO) plant that has a capacity of 1000 litres per hour. This state-of-the-art facility plays a crucial role in ensuring a consistent supply of purified water throughout the campus. The RO system is strategically installed to deliver high-quality drinking water to all academic and administrative blocks, making it readily accessible to both students and staff.

In addition to providing potable water for daily consumption, the RO plant supports water needs in the college's mess and canteen. This ensures that all food preparation activities are carried out using safe, clean water, contributing to overall hygiene and health standards.

Key aspects of the RO plant include:

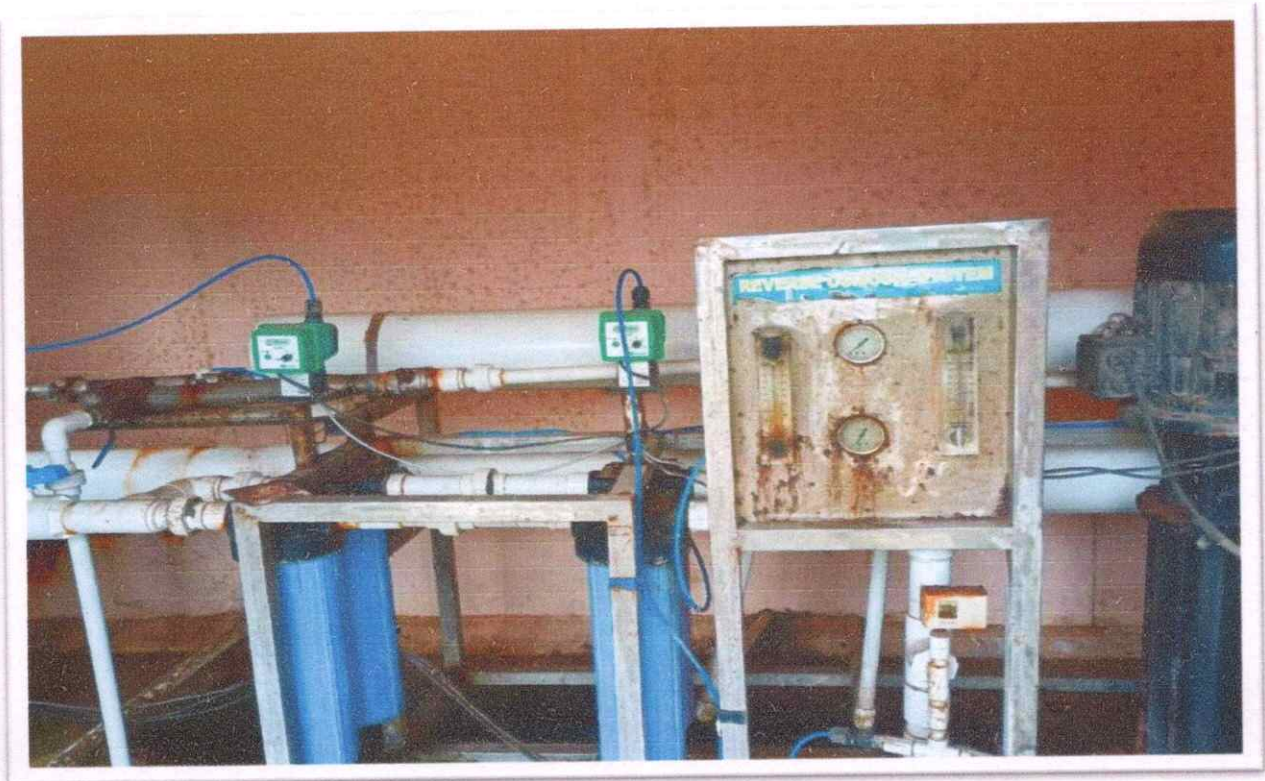
- **Accessibility:** The purified water is distributed across various campus buildings, ensuring easy access for all users.
- **Safety and Compliance:** The system adheres to relevant health and safety standards, providing water that meets quality requirements for drinking and food preparation.
- **Maintenance and Monitoring:** Regular maintenance checks and quality monitoring are conducted to ensure the plant operates efficiently and continues to provide safe drinking water.
- **Sustainability:** The RO plant is part of the college's broader commitment to sustainability and resource management, contributing to reduced reliance on bottled water and promoting eco-friendly practices.





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Overall, the RO plant is an integral component of the college's infrastructure, supporting both the health and convenience of its community while upholding high standards of water quality and safety.



*RO Water Unit Inside the campus*





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*Purified Water inside the campus for students*





### **Recommendations**

- Consider installing a Sewage Treatment Plant (STP) to manage wastewater generated on campus effectively. An STP will aid in treating and recycling wastewater, thereby reducing environmental impact and supporting sustainable water management practices.
- **Overflow Management:** Establish a robust monitoring system to detect and control overflow incidents. Implement regular inspection routines and emergency response drills to ensure swift action and minimize potential damage.
- **Water and Energy Efficiency:** Implement strategies to reduce water and energy consumption during the reverse osmosis process. Ensure that all associated equipment is maintained in optimal condition through scheduled servicing, and explore energy-efficient technologies and water-saving practices to further enhance efficiency.
- **Eco-Friendly Cleaning Products:** Adopt cleaning products that are biodegradable and non-toxic to minimize their environmental impact. Ensure that these products are used consistently across all cleaning operations, even if this requires exceeding current Control of Substances Hazardous to Health (COSHH) regulations. Consider sourcing products with eco-certifications or green labels to verify their environmental credentials.
- **Sustainable Gardening Practices:** Utilize advanced irrigation systems, such as drip or sprinkler systems, to optimize water usage in garden areas. Implement rainwater harvesting for irrigation to further reduce reliance on potable water. Additionally, consider incorporating native plants that require less water and maintenance, contributing to overall sustainability.
- **Regular Training and Awareness:** Provide ongoing training for staff on best practices for water and energy conservation, the use of eco-friendly products, and proper irrigation techniques. Foster a culture of environmental responsibility through workshops and awareness campaigns to ensure adherence to these recommendations.





## Green & Environment Audit Report - 2021 GURUGRAM GLOBAL COLLEGE OF PHARMACY

### Solid waste management

Waste generated from tree droppings and lawn management is major solid waste generated in the campus. Separate dustbins are provided for Bio-degradable and Plastic waste in order to segregate them at the source itself. Single sided used papers are reused for writing and printing in all the departments to minimize the usage of papers. Important and confidential reports/ papers are sent for pulping and recycling after completion of their preservation period.

Chemical waste generated in laboratories that are potentially hazardous are segregated. Very less plastic waste (0.1Kg/day) is generated by some departments, office, garden etc Metal waste and wooden waste is stored and sent to authorized scrap agents for further processing. Glass bottles are reused in the laboratories.

The college had Placed separate bins to collect biodegradable and non-biodegradable waste generated in the campus.



*Separate Bins for Degradable & Non Bio Degradable*







*Plastic Free Campus*

### **Recommendations**

- The amount of waste generated from classrooms and staff rooms can be minimized.
- Full use of all recycling facilities provided by City Municipality and private suppliers can be utilized for waste disposal.
- Sufficient, accessible and well-publicized collection points can be made available for recyclable waste, with responsibility for recycling clearly allocated.
- If Biomedical Waste Accumulated Ensure to Proper Government Authorized Vendor to collect it.
- Solid Waste Management awareness Training Recommended for all the works one who are Involved in Gardening & Sweeping Work.



### **E-waste Management**

E-waste is a consumer and business electronic equipment that is near or at the end of its useful life. This waste makes up about 5% of all municipal solid waste worldwide. It is hazardous than other waste because electronic components contain cadmium, lead, mercury, and Polychlorinated biphenyls (PCBs) that can damage human health and the environment.

### **Observations**

E-waste generated in the campus is of minimal quantity. It is being effectively managed, keeping in mind the environmental hazards that may arise if not disposed properly.

The cartridges of laser printers are refilled outside the college campus. Administration Awareness programmes are being conducted regarding E-waste Management in various departments. The E-wastes and defective items from computer laboratories are being stored properly.

The dismantled hardware of personal computers are used in PC trouble shooting lab. This is put to use to conduct practical courses for Students and The dismantled electronic spare parts are immediately sold for reuse. The minimal amount of e-waste that is generated after reusing is sent to recycler at specific intervals.





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*E-Waste is Properly Collected in the campus*







*E-Waste is Properly Collected and Disposed Frequently*

### **Recommendations**

- Use reusable resources and containers and avoid unnecessary packaging wherever possible.
- The management should take an initiative to purchase recycled resources when they are available.
- Recycle or safely dispose of white goods, computers and electrical appliances.
- The Management engage proper Vendor to dispose the E Waste frequently.



## Chemical Storage

Chemical storage in a pharmacy college or any academic setting requires careful consideration of safety, proper organization, and regulatory compliance. Below are some key guidelines for managing chemical storage in a pharmacy college

### 1. Segregation of Chemicals

- **Acids, Bases, and Solvents:** Store these separately to avoid reactions. Acids and bases should be stored in compatible, ventilated cabinets, while solvents (flammable and combustible liquids) should be in flammable storage cabinets.
- **Toxic and Hazardous Chemicals:** Should be stored in secure, designated areas with proper labeling.
- **Oxidizers and Reducing Agents:** Must be separated to avoid explosive reactions.
- **Peroxide Forming Chemicals:** Store in airtight containers and monitor their shelf life carefully

### 2. Ventilated Storage

- Chemicals that release fumes, vapors, or gases (e.g., volatile organic compounds, strong acids) should be stored in well-ventilated areas or fume hoods to prevent exposure.

### 3. Proper Labeling and Documentation

- **Chemical Labels:** All chemicals must be clearly labeled with the name, Concentration hazard symbols, and expiry date.
- **Safety Data Sheets (SDS):** Keep an updated file of SDS for all chemicals, accessible to all personnel.
- **Inventory Management:** Keep track of chemical usage, quantities, and shelf life with a digital or physical inventory system.



#### **4. Fire and Explosion Prevention**

- **Flammable Chemicals:** Store in approved flammable storage cabinets with appropriate fire suppression systems.
- **Explosion Hazards:** Some chemicals may need to be stored in explosion-proof refrigerators or in temperature-controlled environments.





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*Proper Chemical Storage Inside the campus*



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**Recommendations**

1. Records of training given to concerned team members about proper storage, handling and spill control of such chemicals, if any, should be maintained.
2. Disposal method of spilled chemicals and expired/discarded chemicals should be documented.
3. Records of first aid training for exposure of chemicals after spillage should be maintained
4. Material Safety Data Sheet (MSDS) of chemicals for handling and disposal of chemicals and Record of training given to related people about MSDS should be maintained





## **Green & Environment Audit Report - 2021** **GURUGRAM GLOBAL COLLEGE OF PHARMACY**

### **Green Area Management**

This includes the plants, greenery and sustainability of the campus to ensure that the buildings conform to green standards. This also helps in ensuring that the Environmental Policy enacted, enforced and reviewed using various environmental awareness programmes.

### **Observations**

Campus is located in the vicinity of many trees (species) to maintain the bio-diversity. Various tree plantation programs are being organized at college campus and surrounding villages through NSS (National Service Scheme) unit. This program helps in encouraging eco-friendly environment which provides pure oxygen within the institute and awareness among villagers. The plantation program includes various type of indigenous species of ornamental and medicinal wild plant species.

The college cultivates vegetables for its own use through organic farming initiatives.



*Green Area Management Inside The campus*



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*Green Belt Across The campus*





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*Green Belt Across The campus*





## World Environment Day

Every June 5th GGCP Celebrate World Environment day Observed On That Day Colleges organizes programmes to create awareness about the theme of UN Decade and other significant issues related to the environment and sustainable living .



*World Environment Day Celebrated Inside The campus*





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*Student & Faculty Involvement in tree Plantation*



**Sanitary Napkin Incinerator**

To educate and create awareness of use of Sanitary Napkins and provide easy access to Sanitary Napkins by installation Simple Vending Machines in our girls toilet so that Girls/Women get habituated to use this Sanitary Napkins for their better health care. Secondly, to solve the problem of sanitary napkin disposal by installing incinerators which shall reduce spread of infection due to unhygienic disposal of sanitary napkins, reduce environmental pollution due to non-biodegradable sanitary napkins and reduce clogging of public drainage system due to spongy nature of napkins.



**Sanitary Napkin Vending & Incinerator Unit inside The Campus**





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**Recommendations**

- Review periodically the list of trees planted in the garden, allot numbers to the trees and keep records. Assign scientific names to the trees.
- Promote environmental awareness as a part of course work in various curricular areas, independent research projects, and community service.
- Create awareness of environmental sustainability and take actions to ensure environmental sustainability.
- Establish a College Environmental Committee that will hold responsibility for the enactment, enforcement and review of the Environmental Policy. The
- Environmental Committee shall be the source of advice and guidance to staff and students on how to implement this Policy.
- Ensure that an audit is conducted annually and action is taken on the basis of audit report, recommendation and findings.
- Indoor plantation to inculcate interest in students, Bonsai can be planted in corridors to bond a relation with nature.
- Green library should be established.
- Establish Miyawaki Forest inside the college campus.



### Sanitation and Hygiene

Unsafe operation of educational institution can lead to transmission of diseases. It can cause negative impacts to students, their families, institute reputation and overall development. Therefore, good health and sanitation practices are very important especially considering the ongoing Covid'19 pandemic.

The provision of safe water and sanitation facilities is a first step towards a healthy physical learning environment. However, the mere provision of facilities does not make them sustainable or ensure the desired impact. Hygiene practices are employed as preventative measures to reduce the incidence and spreading of disease. Hygiene education aims to promote those practices that will help prevent water and sanitation-related diseases as well as inculcating healthy behaviours in the future generation of

adults. Therefore, the combination of facilities, correct behavioural practices and education are meant to have a positive impact on the health and hygiene conditions of the community as a whole, both now and in the future.

**1. Drinking water:** Clean water as per drinking water standards have been ensured to students through Reverse Osmosis plant. RO plants of different capacity (6 nos.) have been installed.

**2. Water Supply:** Adequate and clean water supply through Public Water Supply and borewell system has been ensured.

**3. Sanitation:** Adequate number of urinals/toilets have been operational in main Campus, Hostel, and Other areas. No open and flowing latrines were noticed. Sanitation facilities are found to be proper and adequate.

**4. Waste Management:** Waste management bins are placed at each block to store and dispose through municipality. During audit, no unattended waste dumping was noticed.

**5. Awareness:** Hygiene awareness posters especially related to Covid'19 is displayed at various locations in the campus. Overall, campus follows very good sanitation practices.





## Green Initiatives and Best Practices

The list of few important green initiatives and good environmental practices adopted by the campus is given below.

- Rainwater harvesting pits are constructed at appropriate locations to improve local ground water table.
- Installed solar Plant to meet partial power requirement of the Campus
- Replaced 60% of CFL lights with LED lights as part of energy conservation measures. Also, some of the old fans were replaced with energy efficient super fans.
- Engagement of authorized paper recycling vendor to manage bulk paper waste generated.
- Establishment of Organic Cultivation
- Celebration Of World Environment Day and creating Environment Awareness to all Students & Staffs
- Restricted movement of vehicles inside the campus. Parking space inside campus is provided for vehicles, however, no movement of vehicles inside campus is encouraged.
- Awareness posters on resource conservation, good sanitation and hygiene drive.
- Strictly follow the Plastic Free zone inside the campus is Encouraged.



## Environmental Monitoring

As part of green audit of campus, the Green Audit Assessment Team has carried out the environmental monitoring of campus. This includes Illumination, Noise level, ventilation and indoor Air quality of the class rooms. It was observed that Illumination and Ventilation is adequate considering natural light and air velocity present. Noise level in the campus is well below the limit.

The following surveys were conducted:

1. Ambient air quality by NABL approved air sampler
2. Lux monitoring
3. Noise monitoring
4. Co2 Monitoring





## **Green & Environment Audit Report - 2021 GURUGRAM GLOBAL COLLEGE OF PHARMACY**

### ***Ambient Air Quality Monitoring***

Ambient air quality monitoring can help in providing a strategic solution towards air purification and help lead a safer life. Also, air quality monitoring in the college campus not only develops trust among the parents but ensures that the administration cares about their Students and Staff.



### ***Ambient Air Quality Monitoring Inside the Campus***



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**Lux & Noise Monitoring**

Illumination is one of the most important environmental factors in the classroom. Many Doctors have discovered that lighting settings have significant impact on students' performance. So Lux monitoring can help in providing a Comfort Vision Environment to Students.

When assessing noise exposure in campus environments, it can be difficult to determine whether the level of sound has reached a point where it interferes with student learning and staff productivity, or worse, becomes a threat to their health and well-being.

**CO<sub>2</sub> Monitoring**

Monitoring CO<sub>2</sub> levels in college classrooms offers a direct measure of ventilation effectiveness, specifically the cubic feet per minute (CFM) per person. This ongoing assessment ensures that the ventilation rates meet code requirements and maintain a healthy indoor environment.

It is crucial to keep CO<sub>2</sub> concentrations within acceptable limits, typically ranging from 400 to 2,000 ppm, to prevent levels from becoming a contaminant or pollutant. These measurements should adhere to ASHRAE standards to ensure compliance and optimal air quality in building spaces.





## Conclusion

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Green audit is a systematic approach to understand the existing environmental practices and identify areas of improvement for attaining an eco-friendly approach to the sustainable development of the college. The report is prepared based on the site visit observations and information provided by the campus.

Overall, GGCP has taken many environmentally friendly approaches and campaigns in the area of energy, water, solid waste, sanitation and green cover, which is highly commendable.

Though the institution is predominantly an Pharmacy college, there is significant environmental research both by faculty and students. The environmental awareness initiatives taken by the management are substantial. The installation of Drinking water recycling plants, paperless work system and Solar Plant are remarkable. Besides, environmental awareness programmes initiated by the administration prove the campus is going green. Few recommendations are added for waste management and waste reduction using alternate eco-friendly and scientific techniques. This may lead to the prosperous future in context of Green Campus and thus aid in a sustainable environment and community development.



## Acknowledgement

We are grateful to the management and committee members of Gurugram Global College of Pharmacy to award this prestigious project on green auditing. Further we sincerely thank the college staff for providing us the necessary facilities and co-operation during the audit. This ample co-operation helped us a lot in making this audit possible and successful.

**FOR IGNITE ENGINEERING**

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**FOR IGNITE ENGINEERING**

**ER.S.KARTHIGA M.E(Ph.d)**  
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## ILLUMINATION MONITORING


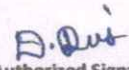
Report No	IES-NO-IN-21-320-2021	Report Date:	11.01.2021			
Customer Name & Address		Sample of Reference No:	IES-NO-IN-21-121-2021			
M/s. GURUGRAM GLOBAL COLLEGE OF PHARMACY		Sample Description:	Light			
5 KM, Milestones, Kheda Khurampur, Haily Mandi		Monitoring By:	Laboratory			
Road, Farrukh Nagar 122506, Gurugram, India.		Monitoring Date:	06.01.2021			
		Data Received On:	07.01.2021			
		Sampling Method:	IS 3646 (part1):1992 (Reaffirmed 2003)			
		Monitoring unit:	Lux			

S.no	Name of the Location	Monitoring Distance in m	Monitoring Time	Day Time (6.00 a.m - 10.00 p.m)		
				Minimum	Maximum	L Equivalent
1.	Admin Block	0.9	11 AM -12PM	333	420	402
2.	Library	0.9	11 AM -12PM	224	235	234
3.	Class Room-01	0.9	11 AM -12PM	306	363	318
4.	Class Room-02	0.9	11 AM -12PM	401	452	213
5.	Class Room-03	0.9	11 AM -12PM	416	444	431
Permissible Limit For Light as Per The Factories Rules, 1950				Maximum 65		

<-----End of Report----->

**NOTES:**  
The above Location Light levels are fulfill the necessities of Factories Rules 1950 standard.

Report Confirmed by	FOR IGNITE ENVIRONMENTAL SERVICES
	 Authorized Signatory







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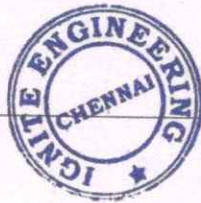
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## NOISE MONITORING

Report No	EL-NO-NE-21-321-2021	Report Date:	11.01.2021			
Customer Name & Address <b>M/s. GURUGRAM GLOBAL COLLEGE OF PHARMACY</b> 5 KM, Milestones, Kheda Khurampur, Haily Mandi Road, Farrukh Nagar 122506, Gurugram, India.		Sample of Reference No:	IES-NO-IN-21-122-2021			
		Sample Description:	Noise			
		Monitoring By:	Laboratory			
		Monitoring Date:	06.01.2021			
		Data received On:	07.01.2021			
		Sampling Method:	IS:9989- 1981 (Reaffirmed 2001)			
Monitoring unit:	Db (A)					
S.no	Name of the Location	Monitoring Distance in m	Monitoring Time	Day Time (6.00 a.m -10.00 p.m)		
				Minimum	Maximum	L Equivalent
1.	Admin Block	Site	11 AM -12PM	53.9	58.2	57.3
2.	Library	Site	11 AM -12PM	58.9	65.3	61.2
3.	Canteen	Site	11 AM -12PM	56.0	55.1	55.6
4.	Class Room-1	Site	11 AM -12PM	51.0	60.4	60.0
5.	Class Room-11	Site	11 AM -12PM	58.1	62.2	56.1
Permissible Limit For Noise as Per The Factories Rules 1950				Maximum 90.0		
←-----End of Report-----→						
<b>NOTES:</b> The sound levels tested in the above locations are within the prescribed limits of Factories rules 1950 Standard Limits						
Report Confirmed by 			FOR IGNITE ENVIRONMENTAL SERVICES  Authorized Signatory			







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Contact : 8778740104, 9384381615 | Email : igniteengg@gmail.com



## AMBIENT AIR MONITORING

Report No	IES-NO-AR-72-210-2021	Report Date:	11.01.2021
Customer Name & Address  M/s. GURUGRAM GLOBAL COLLEGE OF PHARMACY 5 KM, Milestones, Kheda Khurampur, Haily Mandi Road, Farrukh Nagar 122506, Gurugram, India.	Sample Reference No:	IES-NO-AR-72-098-2021	
	Sample Description:	Ambient Air	
	Sample Drawn by:	Laboratory	
	Sample Collected Date:	06.01.2021	
	Qty of sample Received:	Filter Paper(2nos) & Approx 25ml Solution(4nos)	
	Sample Received On:	07.01.2021	
	Test Commenced On:	08.01.2021	
	Test Completed On:	09.01.2021	
	Sampling Method:	IES-SOP-ARS-01 to 11	
	Sample Mark:	Near to Main block	

S.No	Name of the Test	Test Method	Units	Results	Max. Annual Average Limits Of NAAQs
1.	Ammonia (as NH <sub>3</sub> )	CPCB Guidelines, Volume I, NAAQMS/36/2012-13	µg/m <sup>3</sup>	<5.0	100
2.	Arsenic (as As)	CPCB Guidelines, Volume I, NAAQMS/36/2012-13	µg/m <sup>3</sup>	<0.1	6.0
3.	Benzene (as C <sub>6</sub> H <sub>6</sub> )	IS 5182 (Part 11): 2006 (Reaffirmed 2017)	µg/m <sup>3</sup>	<0.5	5.0
4.	Benza (α) Pyrene(as C <sub>20</sub> H <sub>12</sub> )	CPCB Guidelines, Volume I, NAAQMS/36/2012-13	µg/m <sup>3</sup>	<0.5	1.0
5.	Carbon Monoxide (as CO)	Instruments Manual Based SOP No.EL-SOP-ARS-17	µg/m <sup>3</sup>	<1.2	2.0
6.	Lead (as Pb)	IS 5182 (Part 22): 2004 (Reaffirmed 2014) Clause No.5	µg/m <sup>3</sup>	<0.5	0.5
7.	Nickel (as Nil)	CPCB Guidelines, Volume I, NAAQMS/36/2012-13	µg/m <sup>3</sup>	<1.0	20
8.	Oxidants (as Ozone O <sub>3</sub> )	IS 5182 (Part IX)- 19747 (Reaffirmed 2014)	µg/m <sup>3</sup>	<10.0	100
9.	Oxidants of Nitrogen (as Ozone NO <sub>2</sub> )	IS 5182 (Part 6): 2006 (Reaffirmed 2017)	µg/m <sup>3</sup>	9.1	40
10.	Particulate Matter (as PM <sub>10</sub> )	IS 5182 (Part 23): 2006 (Reaffirmed 2017)	µg/m <sup>3</sup>	9.2	60
11.	Particulate Matter (as PM <sub>2.5</sub> )	EPA 40 CFR Part 50- Appendix L	µg/m <sup>3</sup>	5.1	40
12.	Sulphur Dioxide (as SO <sub>2</sub> )	IS 5182 (Part 2): 2001 (Reaffirmed 2017)	µg/m <sup>3</sup>	5.6	50

←-----END OF REPORT-----→

### NOTES:

The Concentrations of the parameters tested in the above Location are within the prescribed annual average limits of NAAQs tolerance limits.

Report Confirmed by

*Amirthes*



FOR IGNITE ENVIRONMENTAL SERVICES

*D. Div*  
Authorized Signatory







# IGNITE ENVIRONMENTAL SERVICES

An ISO 9001:2015 Certified Organization  
Environmental Testing & Analysis, Calibration of Instruments



No.38/2, F1 Ranga Flats, Bharathiyar Street, Near Indian Bank,  
Hasthinapuram Road, Chrompet, Chennai - 44.

Regional Office : Pondicherry, Coimbatore & Andhra Pradesh

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## AMBIENT AIR MONITORING

Report No	IES-NO-AR-72-211-2021	Report Date:	11.01.2021
Customer Name & Address  M/s. GURUGRAM GLOBAL COLLEGE OF PHARMACY 5 KM, Milestones, Kheda Khurampur, Haily Mandi Road, Farrukh Nagar 122506, Gurugram, India.	Sample Reference No:		IES-NO-AR-72-099-2021
	Sample Description:		Ambient Air
	Sample Drawn by:		Laboratory
	Sample Collected Date:		06.01.2021
	Qty of sample Received:	Filter Paper(2nos) & Approx 25ml Solution(4nos)	
	Sample Received On:		07.01.2021
	Test Commenced On:		08.01.2021
	Test Completed On:		09.01.2021
	Sampling Method:		IES-SOP-ARS-01 to 11
	Sample Mark:		Near to Canteen

S.No	Name of the Test	Test Method	Units	Results	Max. Annual Average Limits Of NAAQs
1.	Ammonia (as NH <sub>3</sub> )	CPCB Guidelines, Volume I, NAAQMS/36/2012-13	µg/m <sup>3</sup>	<5.0	100
2.	Arsenic (as As)	CPCB Guidelines, Volume I, NAAQMS/36/2012-13	µg/m <sup>3</sup>	<0.1	6.0
3.	Benzene (as C <sub>6</sub> H <sub>6</sub> )	IS 5182 (Part 11): 2006 (Reaffirmed 2017)	µg/m <sup>3</sup>	<0.5	5.0
4.	Benza (α) Pyrene(as C <sub>20</sub> H <sub>12</sub> )	CPCB Guidelines, Volume I, NAAQMS/36/2012-13	µg/m <sup>3</sup>	<0.5	1.0
5.	Carbon Monoxide (as CO)	Instruments Manual Based SOP No.EL-SOP-ARS-17	µg/m <sup>3</sup>	<1.2	2.0
6.	Lead (as Pb)	IS 5182 (Part 22): 2004 (Reaffirmed 2014) Clause No.5	µg/m <sup>3</sup>	<0.5	0.5
7.	Nickel (as Nil)	CPCB Guidelines, Volume I, NAAQMS/36/2012-13	µg/m <sup>3</sup>	<1.0	20
8.	Oxidants (as Ozone O <sub>3</sub> )	IS 5182 (Part IX)- 19747 (Reaffirmed 2014)	µg/m <sup>3</sup>	<10.0	100
9.	Oxidants of Nitrogen (as Ozone NO <sub>2</sub> )	IS 5182 (Part 6): 2006 (Reaffirmed 2017)	µg/m <sup>3</sup>	9.0	40
10.	Particulate Matter (as PM <sub>10</sub> )	IS 5182 (Part 23): 2006 (Reaffirmed 2017)	µg/m <sup>3</sup>	9.6	60
11.	Particulate Matter (as PM <sub>2.5</sub> )	EPA 40 CFR Part 50- Appendix L	µg/m <sup>3</sup>	5.4	40
12.	Sulphur Dioxide (as SO <sub>2</sub> )	IS 5182 (Part 2): 2001 (Reaffirmed 2017)	µg/m <sup>3</sup>	6.0	50

←-----END OF REPORT----->

**NOTES:**

The Concentrations of the parameters tested in the above Location are within the prescribed annual average limits of NAAQs tolerance limits.

Report Confirmed by

*Amulya*



FOR IGNITE ENVIRONMENTAL SERVICES

*D. D. D.*  
Authorized Signatory







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## TEST REPORT

Sample Ref No: IES/AS/164/2021		Date of Sampling: 06.01.2021		
Issued To:		Report Date/Report No: 11.01.2021		
<b>M/s. GURUGRAM GLOBAL COLLEGE OF PHARMACY</b> 5 KM, Milestones, Kheda Khurampur, Hally Mandi Road, Farrukh Nagar 122506, Gurugram, India.				
Page 1 of 1				
Group	: Atmospheric Pollution	Sample Drawn By/Date	: IES/06.01.2021	
Discipline	: Chemical Testing	Received On	: 07.01.2021	
Sample Description	: Indoor Air Quality	Analysis Commenced On	: 08.01.2021	
Sampling Method	: IS 5182, NIOSH & SOP	Analysis Completed On	: 09.01.2021	
		Valid Upto	: 10.01.2024	
Sl. No	Sampling Location	UNIT	RESULT Carbon-di-oxide (CO <sub>2</sub> )	ASHRAE LIMITS
1	Central Library	ppm	252	1000
2	Office	ppm	251	
3	Principal Room	ppm	234	
4	Class Room-1	ppm	233	
5	Computer Lab	ppm	236	
ASHRAE- American Society of Heating Refrigerating and Air Conditioning Engineers,				

-----End of Report-----



*S. Q. W.*  
Authorized Signatory

- Note
1. Test result shown in this test report relate only to the items tested
  2. This test Report shall not be reproduce anywhere except in full and in same format without the approval of the Laboratory







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Geetha Ravichandran, M.E, PMP, LEED AP,

Faculty / Program Coordinator

Course ID : GIGA0400

Certificate Number : GIGA-791



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**P.VIVEK**

(CQI ULN : AC/ENMS/0521)

has successfully passed all the course assessment requirements for PR366 ISO  
50001 : 2018 (Energy Management System) Lead Auditor Training Course

Course Start Date : 15.03.2021

Certificate No : 2021ENMS1466

Course End Date : 20.03.2021

Course No : 2318



Approved by:

Managing Director

S.No : ENMS/5689/2021 The Certificate is valid for 5 years from the date above for the purpose of registering as an auditor with IRCA

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has successfully passed the examination of the CQI & IRCA Certified

**ISO 9001:2015 Lead Auditor  
(Quality Management Systems)  
Training Course**

*Organized in Co-operation with*



*DRV Certification Services, India*

CQI & IRCA Course No : 17980

Certificate Number: TVEQ12142154

CQI Unique Delegate ID No : 147061

Course Dates : Nov - Dec 2018

(Weekend Programme)



CQI



IRCA

CERTIFIED COURSE

Course Director



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has successfully passed the examination of the CQI & IRCA Certified

**ISO 45001:2018 Lead Auditor**  
(Occupational Health and Safety Management Systems)  
Training Course

*Organized in Co-operation with*



DRV Certification Services, India

CQI & IRCA Course No : 1878      Certificate Number: TVEH06212158  
CQI Unique Delegate ID No : 187536      Course Dates : May - Jun 2019  
(Weekend Programme)



CERTIFIED COURSE

  
Course Director



For current validity of the certificate, visit [www.tvecert.org](http://www.tvecert.org)