Environmental Audit Report

K. R. MANGALAM UNIVERSITY

Address –Sohna Road, Gurugram, Haryana 122103

Audit Date 22/23.05.2025

Auditor - Vinay Kumar Jham

Audit Conducted by

M/S Samarth Management Private Limited

212, Bhera Enclave, Paschim Vihar, New Delhi, Delhi, 110087

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Table 1 List of Abbreviations

BMW	Biomedical Waste
CTE	Consent to Establish
CTO	Consent to Operate
KRMU	K. R. Mangalam University.
LOR	List of Requirements
NABET	National Accreditation Board for Education and Training
RWH	Rainwater Harvesting
STP	Sewage Treatment Plant
L	Liters
KLD	Kilolitre per Day
Kg	Kilogram
LED	Light-emitting diode
PVC	Photovoltaic cell

1. CHAPTER 1: INTRODUCTION

1.1.BACKGROUND

Environmental audit is systematic and objective assessments of the environmental status and performance of facilities, processes, and/or operations. It is a valuable management tool which can be used to identify and assess environmental problems and initiate corrective actions which ensure legal compliance and internal management policies and practices. Environmental audits can also be used to assess the quality of the existing environmental management systems, and to foster additional initiatives to improve the environmental performance. International Chambers of Commerce (ICC) has defined Environmental Auditing as

"A management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organization, management and equipment are performing with the aim of safeguarding the environment and natural resources in its operations/projects."

This Environment Audit aims to assess all the attributes of the environmental paradigm & natural resources which are likely to be impacted from different activities of the University. Samarth Consultants have been appointed by K. R. Mangalam University to ensure the University's environmental performances are in-alliance with enviro-legal compliance set up by the Government.

This audit is prepared based on the legal compliances applicable to the University and environmental mitigation measures that have been undertaken by the University to reduce the environmental impacts. The detailed approach and methodology of this report is explained in Chapter 2 while this Chapter (1), provides the overview of the University along with the Audit objectives and scope.

1.2.OVERVIEW OF UNIVERSITY

K.R. Mangalam University is the fastest-growing higher education institute in Gurugram, India. Since its inception in 2013, the University has been striving to fulfil its prime objective of transforming young lives through ground-breaking pedagogy, global collaborations, and world-class infrastructure.

As we have stepped into the innovative world, we have gained exposure to unlimited learning and employment opportunities beyond the social and geographical boundaries. K.R. Mangalam University being a progressive learning platform is a host to knowledge-seekers from across the globe. KRMU has signed MOU with University of Portsmouth (London), University of Bialystok (Poland), Namangan Engineering Construction Institute (Uzbekistan), Houston University (Texas), Roehampton University (London) and many more under which many articulations are being designed for advanced learning programmes.

More Universities are added like Middlesex University, Jinggangshan University, China, Jiangxi Administration institute China, Hubei University London, Dubna State University

Russia, Saint Petersburg State University of Aerospace & Instrumentation Russia, George Mason University USA, Geman Varsity of advanced Studies Germany. National Forensic University, Delhi University. And many More.

KR Mangalam University aspires to become an internationally recognized institution of higher learning through excellence in interdisciplinary education, research and innovation, preparing socially responsible life-long learners contributing to nation building.

- Foster employability and entrepreneurship through futuristic curriculum and progressive pedagogy with cutting-edge technology
- Install notion of lifelong learning through stimulating research, Outcomes-based education and innovative thinking
- Integrate global needs and expectations through collaborative programs with premier universities, research centres, industries and professional bodies
- Enhance leadership qualities among the youth having understanding of ethical values and environmental realities

K. R. Mangalam University education carries a strong emphasis on foundational knowledge, thorough academic research based on rigorous pedagogy and hands-on experience with real-world challenges. The synthesizing nature of the curriculum allows the student to learn by making connections between ideas and concepts across different disciplinary boundaries. The interdisciplinary structure at K. R. Mangalam University is designed to enable the integration of ideas & the characteristics from across disciplines. At the same time, it addresses students' individual differences and helps to develop important, transferable skills. K. R. Mangalam University, owned by K. R. Mangalam Group is developing 'K. R. Mangalam University ' with a motive of providing world class education in Indian Scenario and K. R. Mangalam University started to fulfil the same purpose. The University is having Undergraduates and Postgraduates programmes for

- BASIC AND APPLIED SCIENCES
- ENGINEERING AND TECHNOLOGY
- MEDICAL AND ALLIED SCIENCES
- MANAGEMENT AND COMMERCE
- LEGAL STUDIES
- HUMANITIES
- EDUCATION
- HOTEL MANAGEMENT & CATERING TECHNOLOGY
- AGRICULTURE SCIENCES
- ARCHITECTURE & DESIGN
- JOURNALISM & MASS COMMUNICATION
- PHYSIOTHERAPY AND REHABLITATION SCIENCES.

In addition of the schools of studies, university have established Centres of Excellence: Artificial Intelligence, Robotics and Automation, Cyber Security, Cloud Computing, Sustainable Development Goals, Human Rights and Criminology and Victimology.

1.3.CHRONOLOGY OF ENVIRONMENTAL PERMISSION

This section explains the historical background of the university in terms of the clearances that it has obtained from different authorities as per the national norms, related with environment clearance, consent to establish (CTE), and consent to operate (CTO). The series of the clearances obtained by the University at different times as presented below in Table.

Table 2 Brief History

S. No.	Date	Description
1.	2011	KR Mangalam has taken Environment clearance for Institutional College in Revenue Estate of Village Sohna, Gurgaon. Built up area is 521435.682 Sq. ft.
2.	2013	KR Mangalam has taken NOC from the Forest Department that University Land is non-forest land and not covered/fall under Aravalli notification.
3.	2019	KR Mangalam has taken Consent to Establish from Haryana State Pollution Control Board. Ref HSPCB/consent/6843690 dated 17/08/19
4.	2019	KR Mangalam has taken the Fire NOC from Fire Department
5.	2019	Consent To Operate and Consent to establish valid 31/03/29 category Orange
6.	2024	NOC for NHAI 248A access permission
7.	2023	Established Bio-Gas Plant Installation of STP of 300KLD
8.	2024	Operational of Vermicompost Pit
9.	2024	Dome shape ventilated Poly House for agriculture Research. And Green House

1.4.AUDIT OBJECTIVES

This audit focuses on the effective management of environment, health and safety within the University premises both during construction and operation phases along with legal compliances associated with the university. The objectives of this auditing are as follows:

- To assess the performance of implementation of environmental safeguards,
- To identify shortfalls and intimate the proponent regarding action required for improved & effective obedience of environmental conditions as stipulated in Environmental Clearance, Consent to Establish Certificate and statutory approvals / permissions.

1.5.ABOUT THE AUDITORS

M/S SAMARTH CONSULTANTS is an Environmental Consulting Organization working in Environmental field since 2004. The organization is having a team of Environment Experts with wide knowledge in the subject. Samarth consultant is providing services for various sectors such as

- Preparing Environment Impact Assessment (for Building & Construction Projects, Small and big manufacturing units, Hospitals, Educational Institutions, Hotels etc.)
- Samarth Consultants has prepared Environmental Audit reports for various institutes and organizations.
- Team involved in this auditing and report preparation is given below
    - **Mr. Vinay Kumar Jham (Auditor)**

1.6.REPORT STRUCTURE

This audit report has been divided into the following chapters:

- **Chapter 1:** Introduction briefs on project background, project status, audit objectives.
- **Chapter 2:** Approach & Methodology briefs the methodology and approach followed to conduct Environment Audit
- **Chapter 3:** Data Collection and Analysis explains the norms applicable to the University and management measures undertaken by it.
- **Chapter 4:** Conclusion elucidates the findings of the audit report and area for improvements

1.7.DISCLAIMER

Samarth consultant Environment Audit Team has prepared this report based on input data submitted by the representatives of the University and the best judgment capacity of the expert team. It is further informed that the conclusions are arrived at following best

estimates based on the provided information, and onsite observations to the extent possible.

2. CHAPTER 2: APPROACH AND METHODOLOGY

2.1.APPROACH & METHODOLOGY

The audit has been carried out in two stages. In the first stage, it includes the review of documents while involving the site inspection and report preparation. The general approach followed to prepare the audit report.

This report has been prepared based on the documents provided by the K. R. Mangalam University, and site inspection carried out by the Samarth consultant team. Based on detailed scrutiny of documents and field observations on complied/partially complied /not complied/not assessed particulars, this report has been prepared.

Samarth consultant team reviewed the previous reports, documents, and listed out the required information / documents to prepare this audit report. The checklist was prepared and was shared with the client to collect them during the site inspections. The audit was carried out as per compliance obligation applicable to the University. There are certain rules and notification that the university shall comply with either in the construction or in operation phases as explained below in Table.

Table 3 Applicable Rules and Notifications to University

S. No.	Act/Rule Notification	Related NOC/Clearance/Annual Returns	Concerned Department
1.	Environment Protection Rule 1986,	Submission of Environmental Statement (Form-5).	State Pollution Control Board
2.	Water prevention and Control of pollution act 1974.	- Consent to Establish - Consent to Operate	State Pollution Control Board
3.	Air prevention and control of pollution acts 1981	- Consent to Establish - Consent to Operate	State Pollution Control Board
4.	Hazardous & Other Wastes (Management and Tran-boundary Movement) Rules, 2016.	- Hazardous Waste Authorization - Hazardous Waste Return (Form 4) - Manifest- Form 10. - Maintain a record of hazardous and other wastes in Form 3	State Pollution Control Board
5.	E-Waste (Management) Rules, 2016.	- Form 3 (Annual returns) and - Form 6 (Manifest) - Form-2: Maintain records of E- waste generated	State Pollution Control Board

S. No.	Act/Rule Notification	Related NOC/Clearance/Annual Returns	Concerned Department
6.	Biomedical Waste Management Rules2016.	- BMW Authorization - Annual Return (Form 4)	State Pollution Control Board
7.	Municipal Solid Waste Management Rules 2018		Municipal Corporation

Statutory Observation –

- Consent STP from HSPCB 13/08/19 to 31/03/29.
- Monitoring Ambient Noise near tennis garden last Report VEL/N/2009264006 dated 08/05/25 of Vardan Enviro Lab as per IS 9989 within limits. AAQ last tested vide report VEL/A/2009260001 dated 08/05/25 of Vardan Envirolab, Bhi wadi for parameters PM 10 Pm 2.2 Ozone, Pb, Arsenic all Ok.
- Agreement with Rajmurti Cooperative Labor and Construction Society Ltd. Nuh Mewat Haryana for disposal Dry and Non-Hazardous waste Disposal 12/11/24 to 11/10/25. Registration of vendor by Asst Registrar Cooperative Societies ref 411 dated 04/12/2017

3. CHAPTER 3: DATA COLLECTION AND ANALYSIS

3.1.ENVIRONMENT MANAGEMENT SYSTEM ASSESSMENT

This audit has been carried out based on norms/rules/ laws applicable to the University and the actions undertaken by the University to combat the impacts on environmental components. The activities undertaken by the University along with the aspects and impacts are given below

Table 4 Environment Impact/Aspects

S. No	Activities	Aspects	Impacts
1.	Water usage-domestic use, drinking purposes, etc.	Water consumption: almost 95 KLD which is fulfilled by the Municipal.	**Depletion of water sources.**
2.	Use of diesel generator (DG) sets.	- Air Emission - Waste generation spent oil - Noise nuisances - Leakages	- **Increase the pollutant into the air.** - **Spent oil is a hazardous waste.** - **Increase in noise level.** - **Adverse impacts on the soil.**
3.	Canteen Operation- produces the solid wastes.	Production of solid wastes;	- **Soil contamination** - **Groundwater contamination** - **Health issues**
4.	Use of medicine and first aid services-Medical waste	Biomedical waste generation	**Health issues from the waste if not disposed of properly.**
5.	Use of electronic equipment's and E waste *(TVs, computer monitors, printers, scanners, keyboards, mouse, cables, circuit boards, lamps, clocks, flashlight, calculators, phones, answering machines)*-	E-waste generation	**Depletion of the resources**
6.	Planting around the premises of university.	Generation of green waste.	- **Safety issues** - **Increase in greenery**
7.	Electricity Usage: Lightening/appliances/office electrical equipment.	Energy consumption in the University:	- **Depletion of resources.** - **Increase the pollution level.**
8.	Vehicular Movement & Access	Traffic and transportation in the University	- **Release of dust from un-surfaced roads.** - **Increase in noise level.** - **Increased localized traffic movements and congestion in the parking area.**
9.	Printed material: flyers, newspapers, posters, others	Paper use Printing Internally – electricity use Externally: transportation Energy usage	- **Raw materials (paper)** - **Unsustainable forestry, habitat loss, biodiversity, air pollution.** - **Contribution to climate change: air pollution.**

S. No	Activities	Aspects	Impacts
			- **Contribution to climate change: land degradation.**

3.2.DATA COLLECTION

In order to audit the legal compliances, all the required documents as per the norms and standards applicable for construction/expansion of the University are listed and collected. Similarly, the existing environmental conditions were examined through the site observations.

3.3.DATA ANALYSIS

3.3.1. DOCUMENT ANALYSIS

- As per the Environment Protection Rule 1986, the University is supposed to submit the Environmental Statement in the prescribed Form V. The University is regularly submitting the Statement to the State Pollution Control Board.
- The University is having an agreement with the M/s Raj Murti Co-operative Labour and Construction Society Limited. The agreement is for the period from 21.12.2017 to 20.12.2020. The University is having Hazardous Waste Authorization and maintaining the records of Manifest.
- Also, the University is filing annual returns of hazardous waste. The records show that the University provides its hazardous waste to the vendor within 90 days of the generation of waste. Sub Rule (5) under Rule 6 of Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016 mentions that every occupier authorized under these rules, shall maintain a record of hazardous and other wastes managed by him.
- As per Bio-Medical Waste (Management and Handling) Rules, 2016, The University shall maintain and update on day-to-day basis the bio-medical waste management register in terms of category and colour coding as specified in Schedule I. It is observed that the University is maintaining the record of day-to-day basis the bio-medical waste management registers.
- University has obtained NOC for access to retail outlet/property from The Ministry of Road Transport of Highways, Govt. of India, New Delhi, in the year 2014.
- Environmental Clearance has been obtained by the university in revenue Estate of Village – Sohna, Gurgaon.
- Renewal of Fire NOC in 2019, 15 mars and above height from the fire Safety Point of View of the Group B-Educational Building at Engineering College and Higher

Education Cum Management Institute in Village Sohna, Gurugram Mis Shakuntala Reality Pvt. Ltd.).

3.3.2. MONITORING REPORT

The University is conducting quarterly monitoring of STP outlets, stack emission, and DG noise from ISO certified laboratories.

- For STP outlets, the parameters such as pH, total suspended solid, chemical oxygen demand (COD), biological oxygen demand (BOD), oil and grease are tested. The recent monitoring shows that the parameters are within the limit as per CPCB norms.
- The University is regularly monitoring the DG stack emission and noise. The monitoring results show that the emissions from the DG sets are within the limit and so the noise.

3.3.3. MANAGEMENT MEASURE

In the above Table 4, the aspect and impact matrix of the University is given. The University is following different management measures to reduce the possible impacts. The overview of the same is given in the Figure 3.1 while the detail measures taken for each component are explained in the Table below.

Table 5 Management Measures

S. No	Aspects	Impacts	Management Measures
1.	Water consumption	Depletion of water sources.	• Water Recycling: The University has the STP of capacity 1 X 100 KLD. The treated water is used for flushing, landscape irrigation, and dust suppression. The treated water is tested each time before its use internally while quarterly monitoring is carried out from accredited laboratories. • Use of a low flow tap. • Rainwater Harvesting Pits: 17 rainwater harvesting pits are present in the University.

S. No	Aspects	Impacts	Management Measures
2.	DG sets Operations • Air Emission • Waste generation - spent oil. • Noise nuisances • Leakages	• Increase the pollutant into the air. • Spent oil is a hazardous waste. • Increase in noise level. • Adverse impacts on the soil.	• Almost 72,000 sqm is under the landscaping and the University is planning to plant almost 4000 trees (as of today). These landscaping acts as a carbon sink. • The DG sets are provided with stack height as per the government notification for the DG sets, i.e. 35 meters. Also, DG set is within the enclosure to reduce the noise nuisances. • The DG set is used only during emergencies. • The spent oil generated from the DG sets is given to Bharat Oil and waste management Ltd. • Regular monitoring of DG sets.
3.	Production of biodegradable solid wastes	• Soil contamination • Groundwater contamination • Health issues	• The University is having the Organic Waste Converter and biodegradable wastes are converted into the compost which is further used as manure in the landscape area.
4.	Biomedical waste generation	Health issues from the waste if not disposed of properly.	• Management as per Bio-medical Waste Management Rule 2016.
5.	E-waste generation	Depletion of the resources	• The University has an agreement with Bharat Oil and waste management Ltd. for E-waste Management.
6.	Energy consumption in the University:	• Depletion of resources. • Increase the pollution level.	• Adoption of Energy efficient measures. Such as LED lights, light sensor lights.
7.	**Paper use** **Printing** • Internally – electricity use • External: transportation **Energy usage**	• Raw materials (paper) – unsustainable forestry, habitat loss, Biodiversity, and air pollution. • Contribution to climate change: air pollution. • Contribution to climate change: land Degradation.	• The University is having a paperless office policy and has discarded the use of paper cups.

3.4.WASTE MANAGEMENT

3.4.1. SEWAGE TREATMENT PLANT

The University has a Sewage Treatment Plant of 100 KLD capacity, which is utilized for treating wastewater of the hostel and all other blocks. There is 100% utilization of liquid waste within the campus. The treated water is stored in tanks and further utilized for gardens. Low flush cistern and sensor-based water tapes have been installed in washrooms to minimize wastage of water.

- **Now 300KLD STP under installation.**

3.4.2. RAINWATER HARVESTING

Conserving and preserving of water is a key issue that has been addressed by the University in the form of Rainwater harvesting. The campus has been practicing rainwater mechanism in site area of 26 acres approx. where there are 17 rainwater harvesting pits (Not all pits are functional as not required in current system) all over campus. This mechanism ensures increase in water table index. The detail of rainwater harvesting system has been designed by a certified architect and has been implemented throughout the campus. Average yearly rainfall data of Gurugram tabulated below: -

Table 6 Average Yearly Rainfall Data

Month	Avg. Temp (°C / °F)	Min. Temp (°C / °F)	Max. Temp (°C / °F)	Rainfall (mm / in)	Humidity (%)	Rainy Days (d)
January	10.5 °C / 56.4 °F	7.6 °C / 45.6 °F	20.1 °C / 68.2 °F	23 mm / 0.91 in	66%	2
February	17.0 °C / 62.6 °F	10.5 °C / 50.9 °F	23.8 °C / 74.8 °F	31 mm / 1.22 in	59%	3
March	22.8 °C / 73.0 °F	15.3 °C / 59.6 °F	30.2 °C / 86.3 °F	20 mm / 0.79 in	45%	2
April	29.4 °C / 85.0 °F	21.2 °C / 70.1 °F	37.0 °C / 98.6 °F	13 mm / 0.51 in	27%	2
May	31.1 °C / 91.6 °F	25.6 °C / 78.1 °F	40.0 °C / 104.0 °F	12 mm / 0.47 in	30%	4
June	33.4 °C / 93.1 °F	28.0 °C / 82.4 °F	38.7 °C / 101.6 °F	71 mm / 2.80 in	45%	6
July	30.2 °C / 86.4 °F	26.9 °C / 80.4 °F	34.1 °C / 93.4 °F	197 mm / 7.76 in	69%	13
August	29.0 °C / 84.2 °F	26.0 °C / 78.8 °F	32.6 °C / 90.7 °F	180 mm / 7.09 in	75%	15
September	28.2 °C / 82.7 °F	24.1 °C / 75.4 °F	32.7 °C / 90.9 °F	90 mm / 3.54 in	69%	8
October	27.8 °C / 78.4 °F	19.3 °C / 66.8 °F	32.4 °C / 90.4 °F	14 mm / 0.55 in	52%	2
November	20.8 °C / 69.4 °F	14.3 °C / 57.7 °F	27.8 °C / 82.0 °F	5 mm / 0.20 in	52%	1

Month	Avg. Temp (°C / °F)	Min. Temp (°C / °F)	Max. Temp (°C / °F)	Rainfall (mm / in)	Humidity (%)	Rainy Days (d)
December	15.5 °C / 59.9 °F	9.2 °C / 48.6 °F	22.4 °C / 72.3 °F	7 mm / 0.28 in	60%	1

Dimension of Rainwater Harvesting Pits and Desilting Pits as appended below: -

1. Rainwater Harvesting Pits:

- **Depth:** 3 meters
- **Diameter:** 3 meters
- **Estimated Volume (per pit):**
  Calculation: 3 m (depth) × 3 m (diameter) × 670 mm (average annual rainfall) × 0.8
  = **3,216 litters per pit** (approx.)
- **Total Number of Pits:** 17
- **Total Rainwater Collection Capacity:**
  3,216 litters/pit × 17 pits = **54,672 litters**

2. Desilting Pits:

- **Depth:** 3 meters
- **Surface Area:** 3 m × 3 m = 9 m^2

3.5.WATER MANAGEMENT

Water conservation is a critical activity, as the availability of water significantly impacts the overall development of the campus and related sectors such as agriculture, industry, and infrastructure. Recognizing its importance, the institution has implemented various initiatives to promote efficient water use.

Sources of Water Supply

- **Municipal Water Supply:** The primary source of water for the campus is municipal water.
- **RO Systems:** Reverse Osmosis (RO) units have been installed in the hostels and the administrative block to provide clean drinking water.

The source of wastewater is Domestic Wastewater i.e., Sewage water. The Sewage water mainly comes from Toilets of college, hostel, kitchen and canteen. One Sewage Treatment Plant was installed in the campus of 100 KLD. Total sewage treatment plant capacity is 100KLD. The treated water is stored in tanks and further utilized for gardens. Low flush

cistern and censor-based water tapes have been installed in washrooms to minimize wastage of water. Another STP 300KLD under Installation.

The following type of waste is being generated in the university campus and quantity is calculated based on average of certain items received and the waste material sold out to vendors during last years: -

Water

- Presently RO water is used for drinking while on an average 115000 Liters water per day is used in hostel. Water meter is not installed in the blocks, therefore actual consumption of water cannot be ascertained, and however approx. 50000 Liters water is consumed in all blocks.

STP

- A STP has been installed in campus which is capable of treating 100000 Liters water per 24 hrs. The STP is being run 24 hours per day as per contract, therefore on an average per day 50000 Liters of water is being treated. The treated water is used of irrigation of plants. New STP under Installation.

Oil

- There are 5 DG sets in university as power back up during failure of main electrical supply. On an average approx.220 Liters of waste oil was generated this year. The waste oil is contained in leak proof container and disposed to authorized vendor of pollution board.

3.6.SITE VISIT

They Generate Dry Waste from Paper, Leaves from Horticulture. Wet waste from Food served in Hostels and Canteens. Additionally Biomedical waste from Animal house, Medical Room and E waste from hard wares, computers, LED's etc. is generated which is disposed after the inspection and recommendation of IT Department

- Dry waste to Municipality authorized vendor Rajmurti Cooperative Labor & Construction Society Limited. Nuh. Agreement validity 11/11/25.
- Other waste material disposal dated 27/03/25 and 23/09/24 comprises of Newspaper, Wastepaper from Projects, Cardboard valued 17707/- and 14375/- respectively.
- Verified the disposal of Bio waste given to Biotic Waste Limited, Gurugram as per MOU 25/04/25 validity 31/03/26.generated in Practical's.

Activities for awareness in the adopted villages:

- Verified the Eco-friendly events done for Cleanliness, Wastewater Utilizations, Hygiene for the five villages adopted around 6 Kms area. These are Lakhuwas, Daulah, Garhi wazidpur, Alipur, Ghamroj, Berka as per DM advice.

- Protection and Conservation of Species in aravali.
- Awareness program me is done for Swachh Campain, Health impact of wastewater Utilization. Cleanliness Drive on 2nd Oct. for clean environment.
- Events at village for Recycling Waste and conservation water is held on 22/03/25 at Govt Higher, Secondary School Ghangola.

Greenery

- Total area 94848 sq. m, Built up 48,400 excluding sports area. Rest is all Green. In a garden 35% of ground coverage is for miscellaneous activities like sport while 45% area is used as a lawn with grass and flowers.
- Students can use the lawn for meditation or reading books for relaxation Total 1409 plants are planted till 31.03.2022 e.g. Pipal, Ashok, La'tonia, Coro carpus. Pil khan - 37 nos.
- A Separate horticulture department headed by Mr. Pawan Kumar, Supervisor. Shows the commitment of top management. Students and staff are involved in this activity
- The trees and plants are planted by Students, Villagers, adaption by female villagers.
- Van Mahotsav in June 24. World environment day is celebrated in the adapted villages and campus.
- Verified the List of Plants total 2121 includes Ficus Black Ficus Green, Kachnar Tota Palm Neem 10 Excluding the Medicinal. Plants
- Verified the list of Herbal Plants total 33 detailing plant common name like Ajwain/Botanical Name like Trachyspermum ammi/Family Umbelliferae/Uses stimulant, carminative.
- Eco Club run by students participate in Debate competition, Nukkar Natak, Eco friendly Gardening, Fruit Plantation held from Jan to April 25

Maintenance

- Verified the Solar Invertor data of April 25 showing 35334 units and these are installed near DG set, A &C blocks, Hostel.
- Verified the Wastewater Inlet Report VEL/WW/2009241006 dated 09/05/25 for color, BOD 7.4 COD 39.20 mg/l, pH 8.16. For Outlet pH 7.75, BOD 2.3 and COD 19.60 Ni 5.0 ng/m3, Alpha Benzo 0.5 ng/m3 all the parameters within limits.
- Last e waste on 14/05/25 to M/S Adinatha Cyclotronic Private Limited
- MOU with Indian Petro & Chemicals, Ballabgarh for lifting hazardous used oil.

4. CHAPTER 4: CONCLUSION

It has been observed that the University is following the applicable norms/laws and undertaking the management measures to reduce emission to the air, waste generation, water consumptions, and measures to conserve energy, and water.

However, this a continuous activity needs to be monitored effectively and documented.

Following conclusions are made based on the documents received from the University and site observations.

4.1.ACTION TAKEN ON LAST AUDIT POINTS

The University is working for the reduction in the paper waste, by using both sides of paper, using emails, and electronic way of communication.

The University is expanding and improving waste reduction and recycling programs on campus. Including increasing the number of recycling bins, implementing composting programs for food waste and landscaping debris, and educating students and staff about proper recycling practices Vermicompost Plant now operational.

4.2.OFI/Observation

- Yearly Monitoring Documentation of Rain Harvesting Data to be to be maintained.
- Suggested to the University to maintain the records of waste generated by them in the Forms as prescribed in the waste management rule. Waste Disposal to be documented in Form 10 used by the authorized vendors who lift used oils and any sludge. This a Continuous Process.
- The new water meters installed to be calibrated and also maintain document for usage of water.
- Suggest implementing water-saving initiatives such as installing low-flow faucets and toilets, fixing leaks in plumbing systems, and capturing rainwater for irrigation purposes. Encourage the use of drought-resistant landscaping and the adoption of water-efficient practices in laboratories and research facilities.
- NOC from Ground water authority needed either from Central or state authorities.
- Stack emission reports of DG set to be maintained
- Lux to be monitored in all the blocks
- Water sprinklers may be installed in administrative blocks and all other locations for fire protection.
- Use of paper may be a KPI.
- More birds' houses can be placed on trees to attract them.
- As a long-term vision opening of a mini zoo or a fishpond can be thought of.
- A butterfly park may be developed.

4.3.PHOTOGRAPHS

	
Vermicompost Unit now operational	**New STP 300 KLD under installation**
	
Rain Harvesting Pit	**Waste Management**

	
Solar Panels	**Bio Gas Plant**
	

4.4.INITIATIVE/ACTIVITY THROUGH ENVIRONMENT

KRMU under its Green Campus Initiatives adopts an eco-friendly activity each year in order to keep up its commitment as per the Green Policy. Over the years, KRMU has adopted various green initiatives like the School of Agriculture Sciences organized an orientation program entitled "Moral Obligation for Green Environment & Clean Environment. The Activity was conducted by Dr S.S. Sharma. Dents were advised not to throw garbage on the roads or in the premises around them. It was also suggested to keep the dry and wet garbage separate for easy decomposition and renewable to protect the environment from pollution created by the spread of garbage. To keep the environment, clean the students were encouraged to do more and more planting. This will help in maintaining the Environment clean and green. The main purpose of the activity was to educate the students of SOAS regarding the green and clean Environment.

Annexure 1 Environment Clearance

296 University

GOVERNMENT OF HARYANA
STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY HARYANA
Bay No. 55-58, Prayatan Bhawan, Sector-2, PANCHKULA.

No. SEIAA/HR/2011 134 Dated: 22-2-11

To

M/S MANGALAM EDU GATE Pvt. Ltd.
843, Ward No. 6, Main Bazar Mehrauli,
New Delhi- 110 030

Subject: **Environmental Clearance for Institutional College (Engineering Collage, Higher Education cum management Institute) in Revenue Estate of Village- Sohna, Gurgaon.**

Dear Sir,

This has reference to your application no. Nil dated 02.11.2010 addressed to M.S. SEIAA Haryana received on 10.11.2010 and subsequent letters dated 31.12.2010 & 11.01.2011 seeking prior environmental clearance for the above project under the EIA Notification, 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application viz., Form-1, Form1-A & Conceptual Plan and the additional clarifications furnished in response to the observations of the State Expert Appraisal Committee (SEAC) constituted by MOEF, GOI vide their Notification 21.4.2008, in its meeting held on 11.01.2011 awarded **"Gold"** grading to the project.

[2] It is, interalia, noted that the project involves the Institutional College (Engineering Collage, Higher Education cum management Institute) in Revenue Estate of Village- Sohna, Gurgaon, Haryana. The CLU permission has been granted by Town and Country Planning Department on 08.03.2010 for setting up of Engineering College and Education-cum-Management Institute. The total plot area of the proposed project is 98711.826 sqmt. The proposed built-up area will be 80678.75 sqmt. The proposed complex will have Academic block, Boys hostel,

Girl hostel, Teachers residence, Staff residence, Swimming pool, Play ground etc. The Project Proponent has submitted application with the PCCF, Forest Department Haryana for diversion of forest land for access to Institutional College. During construction phase the water requirement of 35 KLD for 2 years will be sourced from the tube-well located on land of Mr. Yoginder, Kila no. 26 village- Kaliyaka, Tehsil – Nuh District- Mewat, (Haryana). During operation phase the fresh water requirement of 473 KLD will be met from the same tube-well located on land of Mr. Yoginder, Kila no. 26 village- Kaliyaka, Tehsil – Nuh District- Mewat, (Haryana). 567 KLD of waste water will be generated which will be treated in the STP of 680 KLD capacity by primary, secondary and tertiary treatment. The entire treated water will be recycled & reused leading to zero discharge. Total solid waste generation will be 1500 kg per day which will be disposed off as per Solid Waste Management & Handling Rules. The project proponent has proposed to use bio-degradable waste for composting within the project area. The power requirement is 4500 KW which will be supplied by DHBVN. The total parking spaces proposed are for 1037 ECS. Total cost of the project is Rs.150 crores.

[3] The State Expert Appraisal Committee, Haryana after due consideration of the relevant documents submitted by the project proponent and additional clarification furnished in response to its observations have recommended the grant of environmental clearance for the project mentioned above subject to compliance with the stipulated conditions. Accordingly, the State Environment Impact Assessment Authority hereby accords necessary environmental clearance for the project under Category 8(a) of EIA Notification 2006 subject to the strict compliance with the specific and general conditions mentioned below:-

PART A-

SPECIFIC CONDITIONS:-

Construction Phase:-

[i] A first aid room as proposed in the project report will be provided in both during construction and operation phase of the project.

[ii] Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. Open defecation by the laborers is strictly prohibited. The safe disposal of waste water and solid wastes generated during the construction phase should be ensured.

[iii] All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.

[iv] Disposal of mock during construction phase should not create any adverse effect on the neighboring communities and be disposed of taking necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

[v] Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water and any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approval of the Haryana State Pollution Control Board.

[vi] The diesel generator sets to be used during construction phase should be of low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.

[vii] The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.

[viii] Ambient noise levels should conform to the Educational Institutional standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be taken to reduce ambient air and noise level during construction phase, so as to conform to the stipulated Educational Institutional standards.

[ix] Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and amended as on 27th August 2003.

[x] Ready mixed concrete must be used in building construction.

[xi] Storm water control and its re-use as per CGWB and BIS standards for various applications should be ensured.

[xii] Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices as referred.

[xiii] Permission from Competent Authority for supply of water shall be obtained prior to operation of the project.

[xiv] Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.

[xv] Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all air conditioned spaces while it is aspiration for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.

[xvi] The approval of the competent authority shall be obtained for structural safety of the building due to earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightening etc. If any forest land is involved in the proposed site, clearance under Forest Conservation Act shall be obtained from the competent Authority.

[xvii] The project proponent will use water for construction phase through tankers from safe zone. However, prior permission from CGWA will be taken before using the bore well water for construction purposes.

[xviii] The project proponent will construct 25 (Twenty five) no. of rain water harvesting pits for recharging the ground water within the project premises.

[xix] The Project Proponent shall provide one under ground tank of 5 lac litre capacity for storage of rain water from roof and paved area and reuse the water after slow sand filtration for domestic purposes.

[xx] The Project Proponent shall not use ground water either directly from the bore-well or through tankers during the construction as well as operation of the project except as directed by the Hon'ble High Court. However, if the

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[xx] The Project Proponent shall not use ground water either directly from the bore-well or through tankers during the construction as well as operation of the project except as directed by the Hon'ble High Court. However, if the

Project Proponent makes other arrangements, the same shall be subject to the approval of the Deputy Commissioner Gurgaon.

[xxi] The project Proponent shall submit the copy of approved layout plan / building plan in the office of SEIAA before the start of construction.

Operational Phase:

[i] The STP shall be installed for the treatment of the sewage generated to the prescribed standards including odor and treated effluent will be recycled to achieve zero exit discharge. The STP should be installed at the remotest place in the project area.

[ii] Separation of the grey and black water should be done by the use of dual plumbing line. Treatment of 100% grey water by decentralized treatment should be done ensuring that the re-circulated water should have BOD maximum upto 10 pm and the recycled water will be used for flushing, gardening and DG set cooling and running of fountain in the water body.

[iii] For disinfections of the treated wastewater ultra violate radiation or ozonization should be used.

[iv] The solid waste generated should be properly collected and segregated. Bio-degradable waste will be decomposed at site and dry/ inert solid waste should be disposed off to approved sites for land filling after recovering recyclable material.

[v] Diesel power generating sets proposed as source of back up power for lifts, common area illumination and for domestic use should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The location of the DG sets should be in the basement as proposed by the project proponent with appropriate stack height i.e. above the roof level as per the CPCB norms. The diesel used for DG sets should be of low sulphur contents (maximum 0.25%).

[vi] Ambient Noise level should be controlled to ensure that it does not exceed the prescribed standards both within and at the boundary of the Educational Institutional Complex.

[vii] The project proponent should maintain at least 20% as green cover area for tree plantation especially all around the periphery of the project and on the

road sides preferably with local species so as to provide protection against particulates and noise. The open spaces inside the plot should be preferably landscaped and covered with vegetation/grass/ ornamental plants.

[viii] Weep holes in the compound front walls shall be provided to ensure natural drainage of rain water in the catchments area during the monsoon period.

[ix] Rain water harvesting for roof run-off and surface run-off, as per plan submitted should be implemented. Before recharging the surface run off, pre-treatment through sedimentation tanks must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging should be kept at least 5 mts. above the highest ground water table.

[x] The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.

[xi] There should be no traffic congestion near the entry and exit points from the roads adjoining the proposed project site. Parking should be fully internalized and no public space should be utilized.

[xii] A report on the energy conservation measures conforming to energy conservation norms finalized by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submitted to the SEIAA, Haryana in three months time.

[xiii] Energy conservation measures like installation of CFLs/TFLs for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels must be adapted to the maximum extent possible for energy conservation.

[xiv] The solid waste generated should be properly collected and segregated as per the requirement of the MSW Rules, 2000 and as amended from time to time. The bio-degradable waste should be composted by vermi-composting at the site ear marked within the project area and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.

[xv] The provision of the solar water heating system shall be as per norms specified by HAREDA and shall be made operational in each building block.

should be advertised within 7 days from the date of issue of the clearance letter at least in two local newspapers that are widely circulated in the region and the copy of the same should be forwarded to SEIAA Haryana.

[viii] The investment made in the project, if any, based on environmental clearance so granted, in anticipation of the clearance from Forestry angle shall be entirely at the cost and risk of the Project Proponent and SEIAA, Haryana shall not be responsible in this regard in any manner.

Member Secretary,
State Level Environment Impact
Assessment Authority, Haryana, Panchkula.

Endst. No. SEIAA/HR/2011 Dated:.....

A copy of the above is forwarded to the following:

1. The Additional Director (IA Division), MOEF, GOI, CGO Complex, Lodhi Road, New Delhi.
2. The Regional office, Ministry of Environment & Forests, Govt. of India, Sector 31, Chandigarh.
3. The Chairman, Haryana State Pollution Control Board, Pkl.

Member Secretary,
State Level Environment Impact
Assessment Authority, Haryana, Panchkula.

Annexure 2 Forest Department NOC

प्रेषक

उपायुक्त,गुडगांव।

सेवा मे,

M/s Manglam Edu Gate,
843 Ward No. 6 Main Bazar,
Mehrauli New Delhi

क्रमांक 93 /एम.बी. दिनांक 04.07.13

विषयः- **Request for issuance of Report to this effect that applicants land is non forest land and not covered/fall under Aravali notification.**

उपरोक्त विषय पर आपके प्रार्थना पत्र के सन्दर्भ में।

विषयोक्त मामले मे इस कार्यालय द्वारा उक्त प्रार्थना पत्र पर तहसीलदार सोहना व जिला वन अधिकारी, गुडगांव के रिपोर्ट मांगी गई। जो निम्न प्रकार है:-

1. तहसीलदार, सोहना ने पटवारी हल्का रिपोर्ट अनुसार कीला नम्बरान 42//17-18-23-24-26,53//8-9-10-11-12-13-18/1-19/1-23,54//3-4-6-7/1-7/2-8-9/2-10/2-11-12-13-14/1-14/2-15-17-18-19-20,55//6/2-15-16,71//3/1 कुल रकबा 209 कनाल 6 मरला की बरूवे इंतकाल न0 18873 से मंगलम एडयूगेर मालक है। रिकार्ड माल मे अरावली नोटिफिकेशन से सम्बन्धित कोई इन्द्राज नही है व रिकार्ड माल मे उपरोक्त खाना किस्म चाही है तथा रिकार्ड माल मे उपरोक्त रकबा शामलात देह या अन्य किसी सरकारी संस्था का नही है।

2. Deputy Conservator of Forest, Gurgaon की रिपोर्ट अनुसार M/s Manglam Edu Gate 843 Ward No. 6 Main Bazar Mehrauli New Delhi vide letter no. Nill Dated 17-02-12 made a request in connection with land measuring 26.13 acres having Rect.No. 42//17, 18, 23, 24, 26 Killa No. 53//8, 9, 10, 11, 12, 13, 18/1, 18/2, 19/1, 23 Rect.No. 54//3, 4, 6, 7/1, 7/2, 8, 9/2, 10/2, 11, 12, 13, 14/1, 14/2, 15, 17 Killa No. 54//18, 19, 20 Rect.No. 55//6/2, 15, 16 Rect. No. 71//3/1 Land located at village Sohna District Gurgaon. Applicant made a proposal to use this land for **Engineering College & Higher Education** Purpose. In continuation of report submitted by RFO, Sohna vide letter no. 378-S dated 05-03-12 and approved from C.F. South Circle, Gurgaon vide letter No. 2773 dated 20-09-12, it is made clear that:

(A) As per record available above said land is not part of notified/closed area under IFA 1927/FCA/1980/specific section 4 & 5 of PLPA 1900/WLPA 1972/or any other forest land.

(B) It is clarified that by the Notification No. S.O.121/PA.2/1900/S.4/97 dated 28-11-1997, all revenue estate of Gurgaon District is notified u/s 4 of PLPA 1900 and s.o.

113/PA.2/1900/S.3/97 dated 17-11-1997 u/s 3 of PLPA. The area is however not recorded as forest in the Government record but felling of any tree is strictly prohibited without the permission of Divisional Forest Officer, Gurgaon.

(C) Although the user agency has applied case for diversion of Forest Conservation Act 1980 for access to M/s Manglam Edu Gate 843 Ward No. 6 Main Bazar Mehrauli New Delhi . land located at village Sohna Gurgaon is strictly prohibited unless approval from Ministry of Invironment & Forest is obtained by user agency.

(D) As per record with the Forest Department, Gurgaon, the area does not fall under Aravali Project Plantation done by the Forest Department.

(E) All other statutory clearance mandated under the Environment Protection Act, 1986 or any other Act/order shall be obtained as applicable by the project proponents from the concerned authorities.

(F) The project proponent shall ensure that Judicial orders/Pronouncements issued by the Hon'ble Supreme Court/High Courts.

(G) It is clarified that the Hon'ble Supreme Court has issued various Judgment dated 06-05-02, 29-10-02, 16-12-02, 18-03-04 etc. Pertaining to Aravali region in Haryana, Should be followed.

अतः उक्त रिपोर्टो तहसीलदार, सोहना तथा उप-वन संरक्षक, गुडगांव अनुसार वर्णित खसरा व किला न0 अरावली क्षेत्र में नहीं आता है।

For Deputy Commissioner
कृते: उपायुक्त, गुडगांव।

----------**End of the Report**----------