



ZEAL EDUCATION SOCIETY'S
ZEAL INSTITUTE OF BUSINESS ADMINISTRATION,
COMPUTER APPLICATION AND RESEARCH (ZIBACAR)
NARHE | PUNE | INDIA
PUN CODE: IMMP013170 DTE CODE: 6152 AISHE CODE: C-41828



Environment Audit Report



(10.01.2023)

**ZEAL INSTITUTE OF
BUSINESS
ADMINISTRATION
COMPUTER APPLICATION
AND RESEARCH**

NARHE, PUNE MAHARASHTRA – 411041



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1. INTRODUCTION:

The environment audit aims to analyze environmental practices within and outside the ZEAL campus, which will have an impact on the eco-friendly atmosphere. Environment audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of university environment. It was initiated with the motive of inspecting the effort within the institutions whose exercises can cause threat to the health of inhabitants and the environment. Through the environment audit, a direction as how to improve the structure of environment and there are include several factors that have determined the growth of carried out the environment audit.

1.1. NEED FOR ENVIRONMENT AUDIT

Environment auditing is the process of identifying and determining whether institutions practices are eco-friendly and sustainable. Traditionally, we are good and efficient users of natural resources. But over the period of time excess use of resources like water become habitual for everyone especially, in common areas. Now, it is necessary to check whether we are handling resources carefully. Environment audit regulates all such practices and gives an efficient way of natural resource utilization. In the era of climate change and resource depletion it is necessary to verify the processes and convert it in to green and clean one. Environment audit provides an approach for it. It also increases overall consciousness among the people working in institution towards an environment.

1.2. GOALS OF ENVIRONMENT AUDIT

Zeal Institute of Business Administration Computer Application & Research Narhe, Pune, has conducted an environment audit with specific goals as:

1. Identification and documentation of environment practices.
2. Identify strength and weakness in environment practices.
3. Analyze and suggest solution for problems identified.
4. Assess facility of different types of waste management.
5. Increase environmental awareness throughout campus
6. Identify and assess environmental risk.
7. Motivates staff for optimized sustainable use of available resources.
8. The long-term goal of the environmental audit program is to collect baseline data of environmental parameters and resolve environmental issue before they become problem.

1.3. OBJECTIVES OF ENVIRONMENT AUDIT

1. To examine the current practices, which can impact on environment such as of resource utilization, waste management etc.
2. To identify and analyze significant environmental issues.
3. Setup goal, vision, and mission for environment practices in campus.
4. Establish and implement Environment Management in ZIBACAR Campus.
5. Continuous assessment for betterment in performance in environmen



1.4. BENEFITS OF ENVIRONMENT AUDIT TO

There are many advantages of environment audit

1. It would help to protect the environment in and around the campus.
2. Recognize the cost saving methods through waste minimization and energy conservation.
3. Empower the organization to frame a better environmental performance.
4. It portrays good image of institution through its clean and green campus.

2. OBJECTIVE AND SCOPE

The broad aims/benefits of the eco-auditing system would be

- Environmental education through systematic environmental management approach
- Improving environmental standards
- Benchmarking for environmental protection initiatives
- Sustainable use of natural resource in the campus.
- Financial savings through a reduction in resource use
- Curriculum enrichment through practical experience
- Development of ownership, personal and social responsibility for the College campus and its environment
- Enhancement of College profile
- Developing an environmental ethic and value systems among students, teaching & non-teaching staff.

3. EXECUTIVE SUMMARY

An environmental audit is a snapshot in time, in which one assesses campus performance in complying with applicable environmental laws and regulations. Though a helpful benchmark, the audit almost immediately becomes outdated unless there is some mechanism in place to continue the effort of monitoring environmental compliance.

This audit report contains observations and recommendations for improvement of environmental consciousne



4. ENVIRONMENTAL INFRASTRUCTURE

DETAILS OF TREES AND PLANTS IN CAMPUS

| S.No. | Botanical Name | Common Name |
|-------|-------------------------|---------------------------|
| 1. | Citrus × aurantiifolia | Lime |
| 2. | Hibiscus | Hibiscus |
| 3. | Mangifera indica | Mango |
| 4. | Musa | Banana Palm |
| 5. | Catharanthus | Periwinkle |
| 6. | Carica papaya | Papaya |
| 7. | Bauhinia racemosa | Bidi leaf tree |
| 8. | Rosa | Rose |
| 9. | Psidium | Guava |
| 10. | Cocos nucifera | Coconut |
| 11. | Dyopsis lutescens | Areca palm/Butterfly Palm |
| 12. | Peltophorum Pterocarpum | Yellow flame tree |
| 13. | Ficus benjamina | Ficus Tree |
| 14. | Azadirachta indica | Neem Tree |
| 15. | Ficus Banghalensis | Banyan Tree |



Papaya Tree



Neem Tree

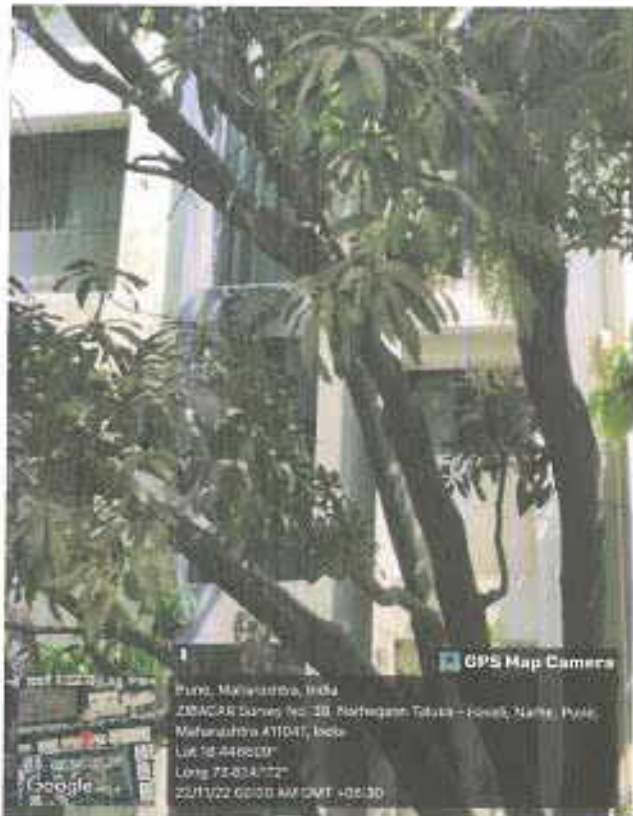




Bidi leaf Tree



Butterfly Palm



Mango Tree



Coconut Tree





Yellow Flame Tree



Guava Tree



Lemon Plant



Banyan Tree





Ficus plants



Hibiscus Plant



Periwinkle Plant



Rose Plant



RO PLANT

RO plant is provided inside the campus to supply water to the entire campus.



Water purification plant in our campus

RAINWATER HARVESTING

The rainwater harvesting strengthens the water supply to the campus as well as enhance water level of wells in the campus through ground water recharging process.



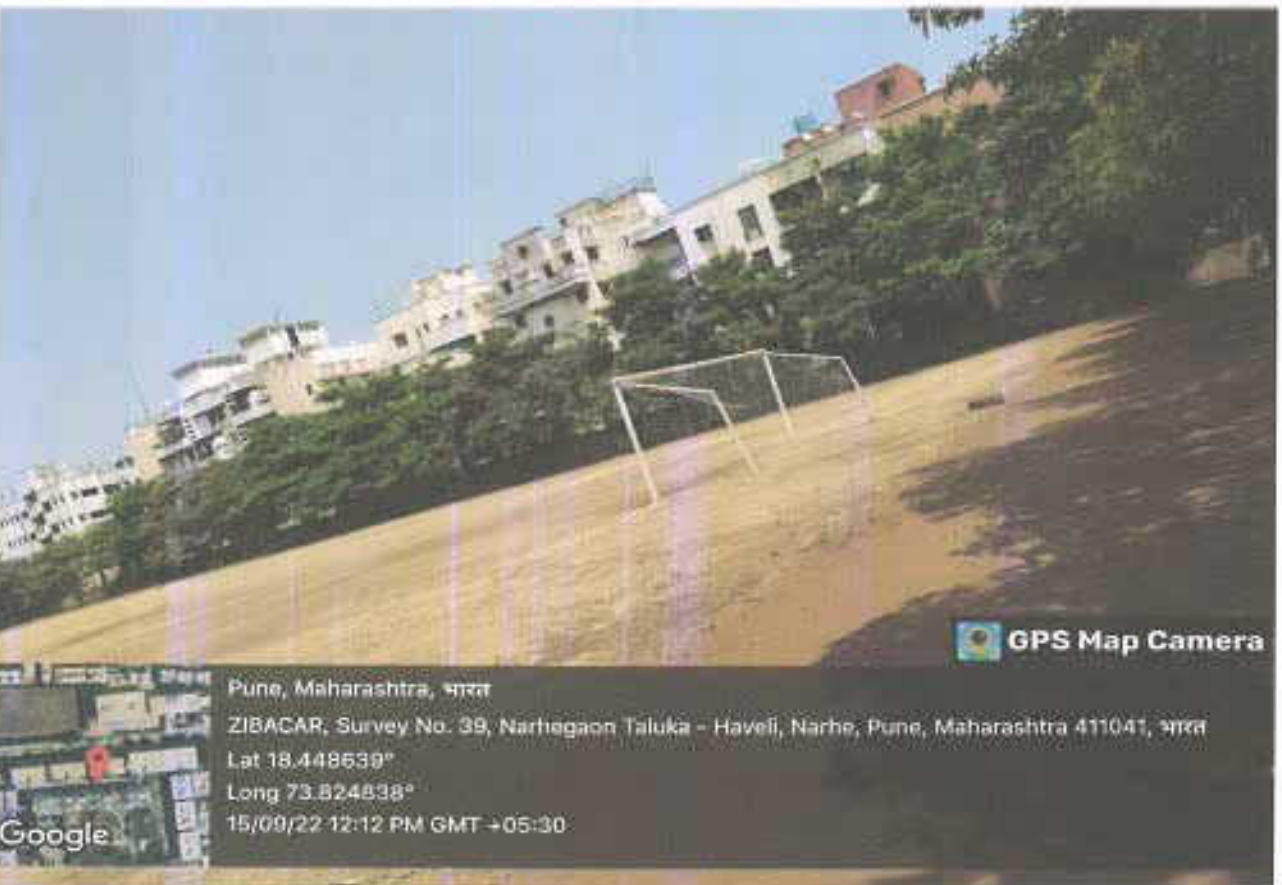
Photograph showing open well recharge through rainwater harvesting





Rainwater is collected in the reservoir through Pipes





VIEW OF GREENERY IN CAMPUS

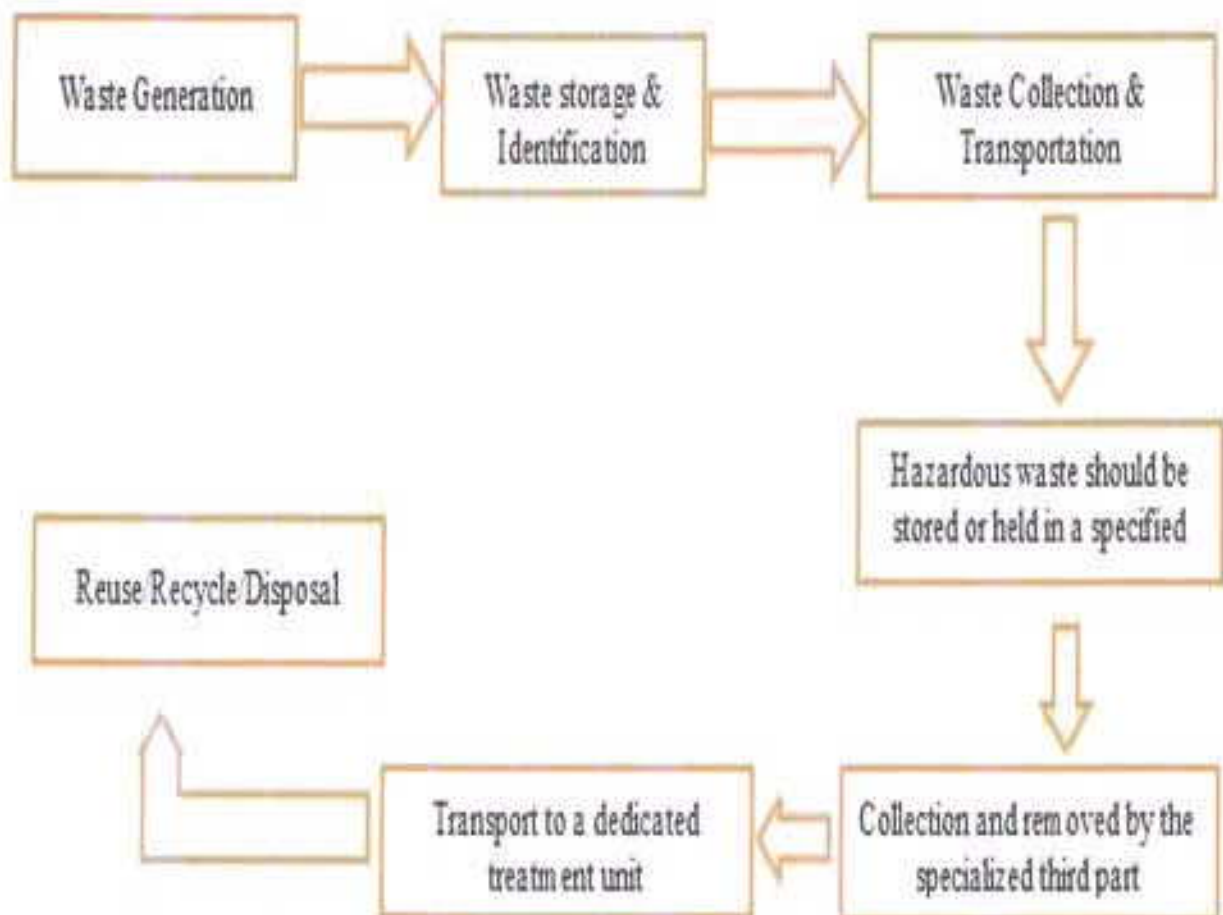


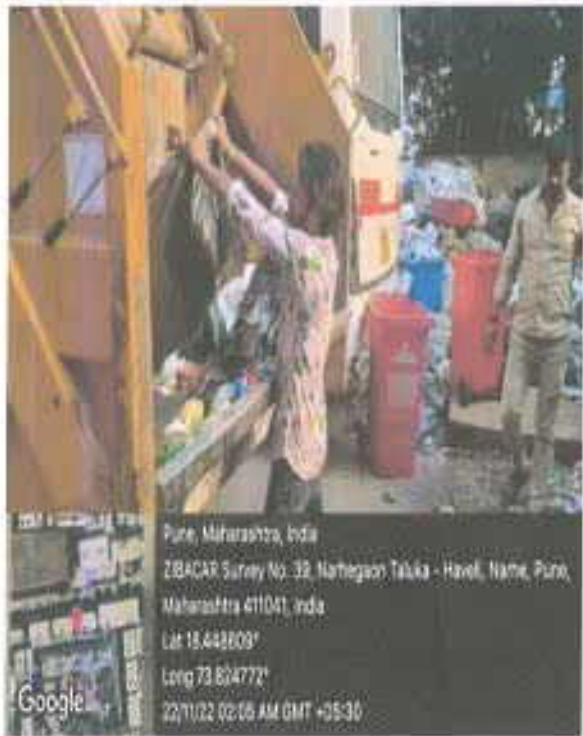
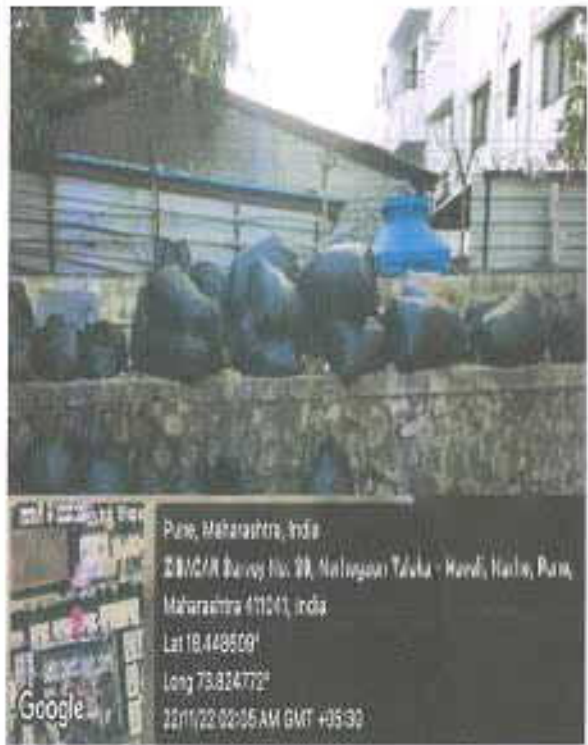
5. WASTE MANAGEMENT

Effective management of waste – either by disposal or recycling, is a critical process for any Organization as it impacts the health and environment of not only the people working and living in the campus but also of those living in the vicinity.

The campus has an efficient system for waste management. The housekeeping team takes care of this segregation of solid waste which mainly includes waste paper, garden waste, and plastic waste. Handling over the collected waste in a segregated manner to local authorities is practiced every alternate day. No biomedical waste is generated on the campus. In case of any occasions like blood donation camps, sports, etc.; care is taken to hand over the biomedical waste to authorized agencies whenever required.

Waste Management Cycle:





Segregated Waste In Different bags and Uploading of dry & wet waste for transportation in PMC Van



E-WASTE MANAGEMENT

E-waste generated in the campus is disposed in scientific and eco-friendly manner. Effective e-waste management is essential for ZIBACAR to fulfill its commitment to environmental sustainability and responsible resource management. By implementing the recommendations outlined in this report, the institute can significantly improve its e-waste management practices and contribute to a greener, more sustainable future.

Recommendations:

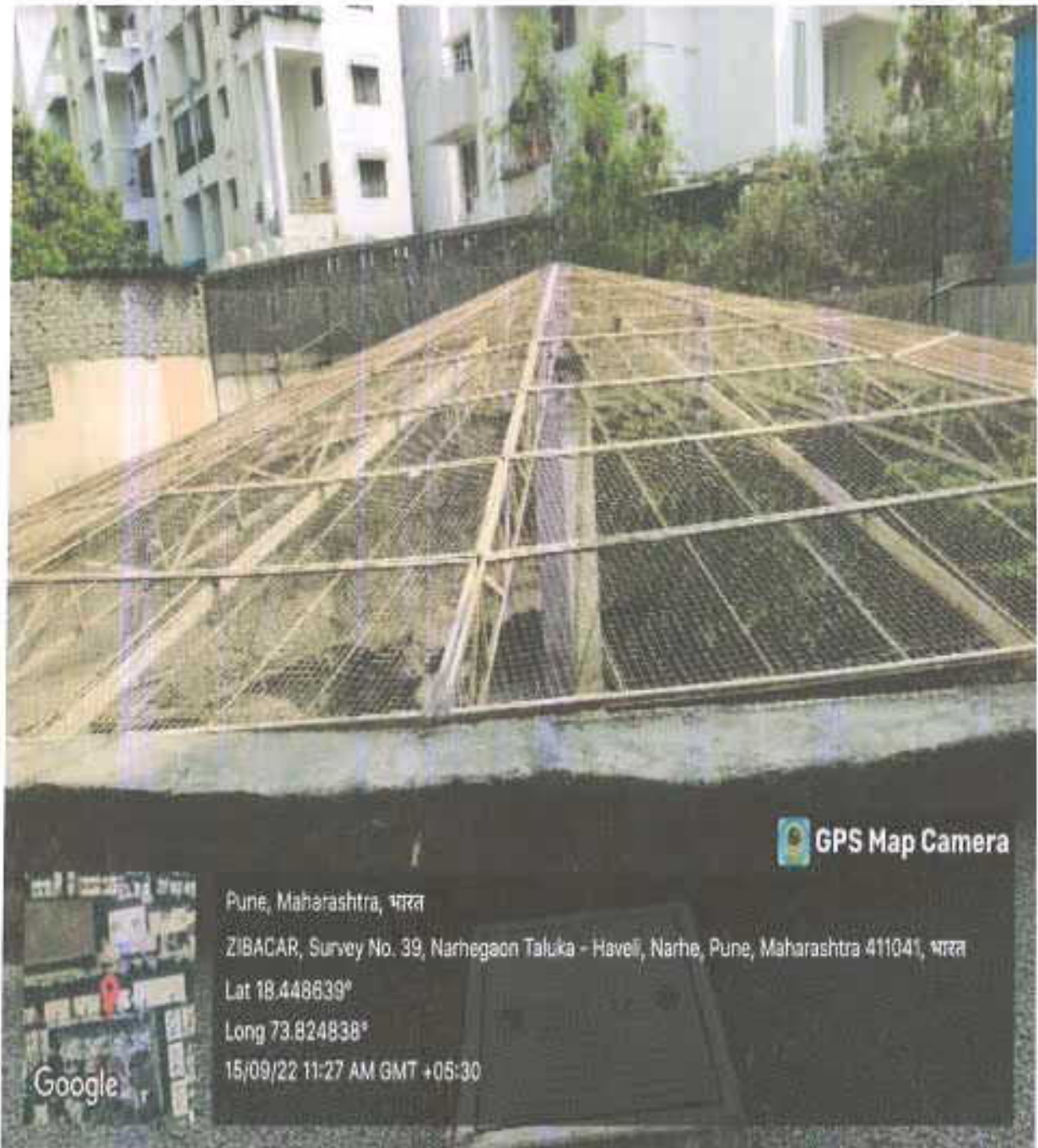
- Develop and implement a comprehensive e-waste management policy tailored to the institute's needs.
- Establish a centralized inventory system for electronic devices to facilitate tracking and management of e-waste.
- Enhance awareness and education initiatives to promote responsible e-waste disposal practices among staff and students.
- Introduce designated collection points and organize periodic e-waste collection drives to facilitate proper disposal.
- Prioritize the procurement of energy-efficient and eco-friendly electronic devices to minimize e-waste generation.
- Collaborate with certified e-waste recyclers for responsible recycling of obsolete electronic equipment.



Incinerator in washroom



Main source of water is Ground water is extracted to fulfill the requirement. At present there is one well which has open well structure. The college stores the water in overhead tank.



Well in the Campus





ZEAL EDUCATION SOCIETY'S
ZEAL POLYTECHNIC, PUNE
NARHE | PUNE -41 | INDIA



WATER TESTING REPORT

Date: 02/10/2023

To,
Prof. Uday S. Shinde,
Director
Academics, Admissions and Administration
Zeal Education Society, Pune

As per the demand to generate a water quality testing report, the sample of water was collected from the water coolers of Zeal Institutes and was tested at the Environment Laboratory, Civil Department, Zeal Polytechnic, Narhe, Pune-411041. The samples were tested for the parameters: Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Dissolved Oxygen (DO), Dissolved Solids, Total Dissolved Residue (TDR), pH Level, Conductivity, Turbidity.


Following is the analysed report for the collected water samples:

1. Location of Sample – F Building, Zeal Institutes, Narhe.


| Sr.No | Particular | Unit | Permissible Limit | Well Water supply | Tap Water Supply | Cooler Sample Bldg. D |
|------------------|-------------------------------------|----------|-------------------|-------------------|------------------|-----------------------|
| Date of Sampling | | | | 28/09/2023 | 28/09/2023 | 28/09/2023 |
| 1. | Color | - | Colorless | Colorless | Colorless | Colorless |
| 2. | pH | - | 6.5-8.5 | 8.2 | 7.8 | 6.7 |
| 3. | Turbidity | NTU | <5NTU | 3 | 2 | 1 |
| 4. | Total Dissolved solids | Mg/Litre | <500 | 478 | 351 | 210 |
| 5. | Total Hardness as CaCO ₃ | Mg/Litre | <300 | 201 | 289 | 109 |
| 6. | Residual Chlorine | Mg/Litre | 1 | 1.9 | 1.8 | 1.9 |
| 7. | Coliform | MPN | <1.8 | 1.1 | 1.4 | 1.2 |

2. Location of Sample – B Building, Zeal Institutes, Narhe.

| Sr.No | Particular | Unit | Permissible Limit | Well Water supply | Tap Water Supply | Cooler Sample Bldg. B |
|------------------|-------------------------------------|----------|-------------------|-------------------|------------------|-----------------------|
| Date of Sampling | | | | 28/09/2023 | 28/09/2023 | 28/09/2023 |
| 1. | Color | - | Colorless | Colorless | Colorless | Colorless |
| 2. | pH | - | 6.5-8.5 | 8.2 | 7.8 | 6.7 |
| 3. | Turbidity | NTU | <5NTU | 4 | 3 | 1 |
| 4. | Total Dissolved solids | Mg/Litre | <500 | 451 | 352 | 219 |
| 5. | Total Hardness as CaCO ₃ | Mg/Litre | <300 | 287 | 128 | 116 |
| 6. | Residual Chlorine | Mg/Litre | 1.2 | 1.1 | 1.7 | 1.9 |
| 7. | Coliform | MPN | <1.8 | 1.1 | 1.2 | 1.1 |


Lab In-Charge
Environmental Engineering Lab
Civil Engineering Department,
Zeal Polytechnic, Pune.




HOD
Civil Engineering,
Zeal Polytechnic, Pune
Head of Department
Dept. of Civil Engineering
Zeal Polytechnic, Narhe, Pune-411041



ZEAL EDUCATION SOCIETY'S
ZEAL POLYTECHNIC, PUNE
 NARHE | PUNE -41 | INDIA



WATER TESTING REPORT

Date: 02/10/2023

To,
 Prof. Uddhav S. Shid,
 Director
 Academics, Admissions and Administration
 Zeal Education Society, Pune

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| Sr.No | Particular | Unit | Permissible Limit | Well Water supply | Tap Water Supply | Cooler Sample Bldg. D |
|------------------|-------------------------------------|----------|-------------------|-------------------|------------------|-----------------------|
| Date of Sampling | | | | 28/09/2023 | 28/09/2023 | 28/09/2023 |
| 1. | Color | - | Colorless | Colorless | Colorless | Colorless |
| 2. | pH | - | 6.5-8.5 | 8.2 | 7.8 | 6.7 |
| 3. | Turbidity | NTU | <5NTU | 3 | 2 | 1 |
| 4. | Total Dissolved solids | Mg/Litre | <500 | 478 | 351 | 210 |
| 5. | Total Hardness as CaCO ₃ | Mg/Litre | <300 | 201 | 289 | 109 |
| 6. | Residual Chlorine | Mg/Litre | 1 | 1.9 | 1.8 | 1.9 |
| 7. | Caliform | MPN | <1.8 | 1.1 | 1.4 | 1.2 |


 Lab In-Charge
 Environmental Engineering Lab
 Civil Engineering Department,
 Zeal Polytechnic, Pune.

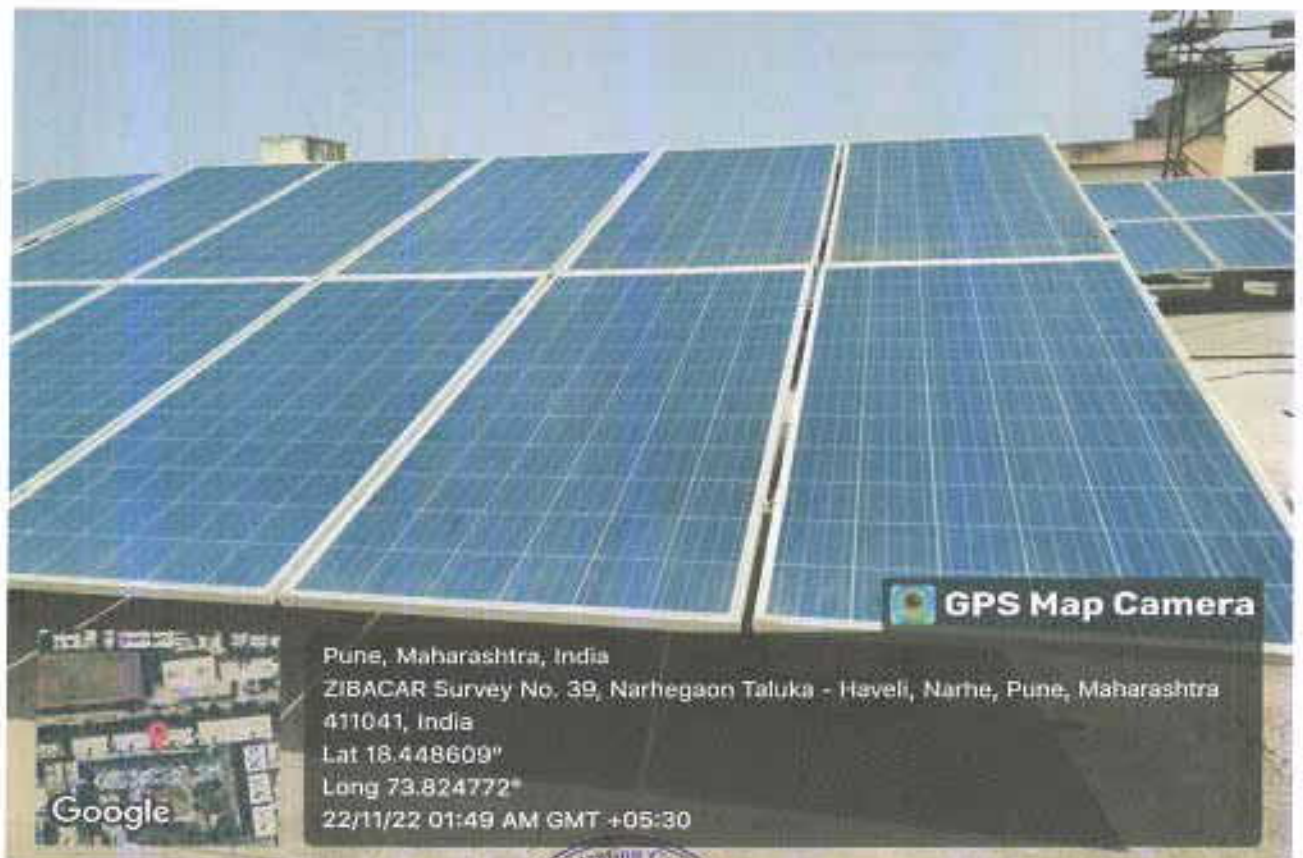



 HOD
 Civil Engineering,
 Zeal Polytechnic, Pune
 Head of Department
 Dept. of Civil Engineering
 452's Zeal Polytechnic, Narhe, Pune-411041



7. ALTERNATIVE ENERGY SOURCE:

The institute has established system of a120 kW Solar system since 2017 as a part of an alternative energy initiative. The percentage of power requirement of the College met by the solar system is 41- 45 kW.



Solar panels at rooftop





Solar Lamps in Different Buildings



8. SUMMARY

Environment Audit is one of the important tools to check the balance of natural resources and its judicious use. Environment auditing is the process of identifying and determining whether institutional practices are eco- friendly and sustainable. It is a process of regular identification, quantification, documenting, reporting and monitoring of environmentally important components in a specified area.

Zeal Institute of Business Administration Computer Application & Research as conducted an "Environment Audit" in the academic year 2022-23. The main objective to carry out environment audit is to check the green practices followed by ZIBACAR and to conduct a well-defined audit report to understand whether the ZIBACAR is on the track of sustainable development.

9. CONCLUSION

From the Environment audit following are the conclusions, which can be taken for improvement in the campus.

1. ZIBACAR generate paper waste. Especially, academic building is using more one paper for printing and writing is good practices.
2. Food waste generated in campus is mostly collected from canteen areas. The food waste is well segregated and handed-over to PMC for further processing.

10. RECOMMENDATIONS

Following are some of the key recommendations for improving campus environment:

1. A frequent visit should be conducted to ensure that the generated waste is measured, monitored and recorded regularly and information should be made available to administration.
2. The solid waste should be reused or recycled at maximum possible places.




Yash Enviro Tech India Pvt Ltd
 (Water & Waste Water Treatment System)

Office: S. No.3, Rajwade Commercial Complex,
Office No. 8A, 11th Floor, Katraj Mumbai Bypass,
Ambegaon BK, Pune - 411046
GST NO- 27AABCY1694G123

+91 7262002520
accounts@yashenviro.com
www.yashenviro.com

Tax Invoice

| | |
|--------------------------|-------------------------------|
| Invoice No: YE/24-25/007 | PO.No: - YETIPL/EM24/04/01 |
| Invoice date: 03/04/2024 | PO.Date: - 01.04.2024 |
| Reverse Charge (Y/N): | Date of Supply: 03/04/2024 |
| State: Maharashtra. | Code 27 Place of Supply: Pune |

| Bill to Party | | | | Ship to Party | | | |
|--|--|--|--|--|--|--|--|
| Name: Zeal Institute of Business Administration, Computer Application and Research (ZIBACAR) | | | | Name: Zeal Institute of Business Administration, Computer Application and Research (ZIBACAR) | | | |
| Address: Narhe, Pune - 411041 | | | | Address: Narhe, Pune - 411041 | | | |
| GSTIN: | | | | GSTIN: | | | |
| State: Maharashtra. | | | | State: Maharashtra. | | | |
| Code 27 | | | | Code 27 | | | |

| S. No. | Product Description | HSN Code/SAC Code | UOM | Qty | Rate | Amount | Disc. amt | Taxable value | CGST | | SGST | | Total |
|--------------|---|-------------------|-----|----------|-------|--------------|-----------|---------------|------|------------|------|------------|--------------|
| | | | | | | | | | Rate | Amount | Rate | Amount | |
| 1 | ENVIRONMENTAL AMBIENT & WORK PLACE AIR MONITORING | 898399 | NO | 1 | 10000 | 10000 | | 10000 | 9 | 900 | 9 | 900 | 11800 |
| Total | | | | 1 | | 10000 | 0 | 10000 | | 900 | | 900 | 11800 |

| | | | |
|-------------------------------------|--|-------------------------|-------|
| Total Invoice amount in words | | Total Amount before Tax | 10000 |
| Eleven Thousand Eight Hundred Only. | | Add: CGST 9% | 900 |
| | | Add: SGST 9% | 900 |
| | | Total Tax Amount | 1800 |
| | | Total Amount after Tax: | 11800 |

| Bank Details | | GST on Reverse Charge | |
|---|--|---|--|
| Bank Name: HDFC BANK (SAHKAR NAGAR, PUNE) | | 0 | |
| Bank A/C: 50200045685681 | | I declare that the particulars given above are true and correct | |
| Bank IFSC: HDFC0000359 | | For YASH ENVIRO TECH INDIA PVT LTD. | |
| A/C Type - Current A/C | |  Yash Enviro Tech India Pvt Ltd Authorized signature | |
| Terms & conditions | | | |
| Common Seal | | | |



Neetal Laboratories And Environmental Services Pvt. Ltd.

Address : H.NO. 43, SANTOSH NAGAR, WAKI BK., TAL. KHED, DIST. PUNE - 410 501
Website : www.neetalenvirolab.com, Mob. 8669699854 / 52
Email: sales@neetalenvirolab.com / neetalenviro@gmail.com

Certifications :
ISO 9001 : 2015
ISO 14001 : 2015
ISO 45001 : 2018

TEST REPORT (Ambient Air)

| | | | |
|------------------------------|--|----------------------------------|---------------------------|
| Report No. | NLES/23-24/03/AA/RE/1079 | Report Issue Date | 30/03/2024 |
| Name and Address of Customer | ZEAL INSTITUTE OF BUSINESS ADMINISTRATION COMPUTER APPLICATION & RESEARCH Survey No. 39, Dhayari Narhe Rd, Narhe, Pune, Maharashtra 411 041 | | |
| Discipline | Chemical | Date & Time of Sampling | 25/03/2024 Time: 11:00 AM |
| Group | Atmospheric Pollution | Date of receipt of sample in lab | 26/03/2024 |
| Sub Group | Ambient Air | Sampling Procedure | IS 5182 Part 5 |
| Sampling Location | Near Gate | Dry bulb temperature | 38 °C |
| Wet bulb temperature | 25 °C | Relative Humidity | 35 % |
| Sampling done by | M/s VSK Enviro Solution | | |
| Start Date of Analysis | 26/03/2024 | End Date of Analysis | 29/04/2024 |

Results

| Sr. No. | Parameters | Results | Unit(s) | Specifications (NAAQ Standards) | Methods |
|---------|---|---------|-------------------|---------------------------------|--|
| 1 | Sulphur Dioxide (SO ₂) | 18.2 | µg/m ³ | ≤ 80 | IS 5182 (Part 2) |
| 2 | Oxides of Nitrogen (NO ₂) | 24.6 | µg/m ³ | ≤ 80 | IS 5182 (Part 6) |
| 3 | Particulate Matter PM ₁₀ | 54.8 | µg/m ³ | ≤ 100 | IS 5182 (Part 4), 1999 |
| 4 | Particulate Matter PM _{2.5} | 22.5 | µg/m ³ | ≤ 60 | IS 5182 (Part 24), 2019 |
| 5 | Ozone (O ₃) | 19.14 | µg/m ³ | ≤ 180 | Method 411, Air Sampling and Analysis, 3rd Edition, 2020 |
| 6 | Ammonia (NH ₃) | BDL | µg/m ³ | ≤ 400 | Method 401, Air Sampling and Analysis 3rd Edition, 2020 |
| 7 | Lead (Pb) | BDL | µg/m ³ | ≤ 01 | Air Sampling and Analysis, 3rd Edition, 2020 |
| 8 | Arsenic (As) | BDL | ng/m ³ | ≤ 06 | |
| 9 | Nickel (Ni) | BDL | ng/m ³ | ≤ 20 | |
| 10 | Carbon Monoxide (CO) | 0.44 | mg/m ³ | ≤ 04 | GC FID Methanizer Method |
| 11 | Benzo(a)Pyrene (BaP) | BDL | ng/m ³ | ≤ 1.0 | IS 5182 Part 12 |
| 12 | Benzene(C ₆ H ₆) | BDL | µg/m ³ | ≤ 05 | IS 5182 Part 11 |
| 13 | Carbon Dioxide (CO ₂) | 0.06 | % | NS | Instrumental Method |

Remark- All above results are within National Ambient Air Quality standards.

BDL – Bellow Detection Limit.

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Kalyani
Reviewed By
(Ms. Kalyani Gore)



Abhishek
Authorized Signatory
(Mr. Abhishek Tope)

..... End of Report

Page 1 of 1



Neetal Laboratories And Environmental Services Pvt. Ltd.

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 Website : www.neetalenvirolab.com, Mob. 8659699854 / 52
 Email: sales@neetalenvirolab.com / neetalenviro@gmail.com

Certifications :
 ISO 9001 : 2015
 ISO 14001 : 2015
 ISO 45001 : 2018

TEST REPORT (Ambient Air)

| | | | |
|------------------------------|--|----------------------------------|---------------------------|
| Report No. | NLES/23-24/03/AA/RE/1080 | Report Issue Date | 30/03/2024 |
| Name and Address of Customer | ZEAL INSTITUTE OF BUSINESS ADMINISTRATION COMPUTER APPLICATION & RESEARCH Survey No. 39, Dhayari Narhe Rd, Narhe, Pune, Maharashtra 411 041 | | |
| Discipline | Chemical | Date & Time of Sampling | 25/03/2024 Time: 11:30 AM |
| Group | Atmospheric Pollution | Date of receipt of sample in lab | 26/03/2024 |
| Sub Group | Ambient Air | Sampling Procedure | IS 5182 Part 5 |
| Sampling Location | Near Building "F" | Dry bulb temperature | 38 °C |
| Wet bulb temperature | 25 °C | Relative Humidity | 35 % |
| Sampling done by | M/s VSK Enviro Solution | | |
| Start Date of Analysis | 26/03/2024 | End Date of Analysis | 29/04/2024 |

Results

| Sr. No. | Parameters | Results | Unit(s) | Specifications (NAAQ Standards) | Methods |
|---------|---|---------|-------------------|---------------------------------|--|
| 1 | Sulphur Dioxide (SO ₂) | 16.4 | µg/m ³ | ≤ 80 | IS 5182 (Part 2) |
| 2 | Oxides of Nitrogen (NO ₂) | 22.1 | µg/m ³ | ≤ 80 | IS 5182 (Part 6) |
| 3 | Particulate Matter PM ₁₀ | 51.8 | µg/m ³ | ≤ 100 | IS 5182 (Part 4), 1999 |
| 4 | Particulate Matter PM _{2.5} | 18.7 | µg/m ³ | ≤ 60 | IS 5182 (Part 24), 2019 |
| 5 | Ozone (O ₃) | 19.68 | µg/m ³ | ≤ 180 | Method 411, Air Sampling and Analysis, 3rd Edition, 2020 |
| 6 | Ammonia (NH ₃) | BDL | µg/m ³ | ≤ 400 | Method 401, Air Sampling and Analysis 3rd Edition, 2020 |
| 7 | Lead (Pb) | BDL | µg/m ³ | ≤ 01 | Air Sampling and Analysis, 3rd Edition, 2020 |
| 8 | Arsenic (As) | BDL | ng/m ³ | ≤ 06 | |
| 9 | Nickel (Ni) | BDL | ng/m ³ | ≤ 20 | GC FID Methanizer Method |
| 10 | Carbon Monoxide (CO) | 0.43 | mg/m ³ | ≤ 04 | |
| 11 | Benzo(a)Pyrene (BaP) | BDL | ng/m ³ | ≤ 1.0 | IS 5182 Part 12 |
| 12 | Benzene(C ₆ H ₆) | BDL | µg/m ³ | ≤ 05 | IS 5182 Part 11 |
| 13 | Carbon Dioxide (CO ₂) | 0.07 | % | N5 | Instrumental Method |

Remark- All above results are within National Ambient Air Quality standards.
 BDL – Below Detection Limit.

Terms and Conditions

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Kalyani
 Reviewed By
 (Ms. Kalyani Gore)



Abhishek
 Authorized Signatory
 (Mr. Abhishek Tope)

*****End of Report*****

Page 1 of 1



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Email: sales@neetalenvirolab.com / neetalenviro@gmail.com

Certifications :
ISO 9001 : 2015
ISO 14001 : 2015
ISO 45001 : 2018

TEST REPORT (Work Zone Air)

| | | | |
|------------------------------|---|----------------------------------|---------------------------|
| Report No. | NLES/23-24/03/WZ/RE/1081 | Report Issue Date | 30/03/2024 |
| Name and Address of Customer | ZEAL INSTITUTE OF BUSINESS ADMINISTRATION COMPUTER APPLICATION & RESEARCH Survey No. 39, Dhayari Narhe Rd, Narhe, Pune, Maharashtra 411041 | | |
| Discipline | Chemical | Date & Time of Sampling | 25/03/2024 Time: 12:15 AM |
| Group | Atmospheric Pollution | Date of receipt of sample in lab | 26/03/2024 |
| Sub Group | Work Zone Air | Sampling Procedure | IS 5182 Part 5 |
| Sampling Location | Entrance & Waiting Lobby of Building "F" | Dry bulb temperature | 32 °C |
| Wet bulb temperature | 22 °C | Relative Humidity | 41 % |
| Sampling done by | M/s VSK Enviro Solution | | |
| Start Date of Analysis | 26/03/2024 | End Date of Analysis | 29/03/2024 |

Results

| Sr. No. | Parameters | Results | Unit(s) | The Factories Act 1948 Standards | Methods |
|---------|------------------------------------|---------|-------------------|----------------------------------|-------------------------|
| 1 | Sulphur Dioxide (SO ₂) | 11.8 | µg/m ³ | ≤ 5000 | IS 5182 (Part 2): R2018 |
| 2 | Nitrogen Oxides (NO _x) | 8.2 | µg/m ³ | ≤ 6000 | IS 5182 (Part 6): R2018 |
| 3 | Carbon Dioxide (CO ₂) | 0.08 | % | NS | Instrumental Method |
| 4 | Suspended Particulate Matter | 12.4 | µg/m ³ | NS | NIOSH 0500 |

Remark- All above results are well within The Factories Act, 1948 Standards.
NS – Not Specified.

Terms and Conditions

- This Report is valid for tested sample only
- The test report cannot be reproduced wholly or in part and cannot be used for promotional or publicity purpose without the written consent of laboratory, NLES.


Reviewed By
(Ms. Kalyani Gore)




Authorized Signatory
(Mr. Abhishek Tope)

*****End of Report*****

Page 1 of 1



Neetal Laboratories And Environmental Services Pvt. Ltd.

Address : H.NO. 43, SANTOSH NAGAR, WAKI BK., TAL. KHED, DIST. PUNE - 410 501
Website : www.neetalenvirolab.com, Mob. 8669699854 / 52
Email: sales@neetalenvirolab.com / neetalenviro@gmail.com

Certifications :
ISO 9001 : 2015
ISO 14001 : 2015
ISO 45001 : 2018

TEST REPORT (Work Zone Air)

| | | | |
|------------------------------|---|----------------------------------|---------------------------|
| Report No. | NLES/23-24/03/WZ/RE/1082 | Report Issue Date | 30/03/2024 |
| Name and Address of Customer | ZEAL INSTITUTE OF BUSINESS ADMINISTRATION COMPUTER APPLICATION & RESEARCH Survey No. 39, Dhayari Narhe Rd, Narhe, Pune, Maharashtra 411041 | | |
| Discipline | Chemical | Date & Time of Sampling | 25/03/2024 Time: 12:45 AM |
| Group | Atmospheric Pollution | Date of receipt of sample in lab | 26/03/2024 |
| Sub Group | Work Zone Air | Sampling Procedure | IS 5182 Part 5 |
| Sampling Location | Library Room | Dry bulb temperature | 32 °C |
| Wet bulb temperature | 21 °C | Relative Humidity | 37 % |
| Sampling done by | M/s VSK Enviro Solution | | |
| Start Date of Analysis | 26/03/2024 | End Date of Analysis | 29/03/2024 |

Results

| Sr. No. | Parameters | Results | Unit(s) | The Factorles Act 1948 Standards | Methods |
|---------|------------------------------------|---------|-------------------|----------------------------------|-------------------------|
| 1 | Sulphur Dioxide (SO ₂) | 10.4 | µg/m ³ | ≤ 5000 | IS 5182 (Part 2): R2018 |
| 2 | Nitrogen Oxides (NO ₂) | 8.1 | µg/m ³ | ≤ 6000 | IS 5182 (Part 6): R2018 |
| 3 | Carbon Dioxide (CO ₂) | 0.06 | % | NS | Instrumental Method |
| 4 | Suspended Particulate Matter | 09.2 | µg/m ³ | NS | NIOSH 0500 |

Remark- All above results are well within The Factorles Act, 1948 Standards.

NS – Not Specified.

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Reviewed By
(Ms. Kalyani Gore)




Authorized Signatory
(Mr. Abhishek Tope)

*****End of Report*****

Page 1 of 1





National Accreditation Board for
Testing and Calibration Laboratories

NABL

CERTIFICATE OF ACCREDITATION

**NEETAL LABORATORIES AND ENVIRONMENTAL
SERVICES PRIVATE LIMITED**

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

**"General Requirements for the Competence of Testing &
Calibration Laboratories"**

for its facilities at

HOUSE NO. 43, SANTOSH NAGAR, AT POST: WAKI BUDRUK, PUNE, MAHARASHTRA, INDIA

in the field of

TESTING

Certificate Number: TC-11184

Issue Date: 24/11/2022

Valid Until:

23/11/2024

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.
(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Identity : Neetal Laboratories and Environmental Services Private Limited

Signed for and on behalf of NABL



N. Venkateswaran
Chief Executive Officer



MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding is executed at Pune on Monday the 01st day of January 2024.

BETWEEN

Neetal Laboratories and Environmental Services Pvt. Ltd., (also referred to as **NEETAL**) a company registered under [Pursuant to sub-section (2) of section 7 and sub-section (1) of section 8 of the Companies Act, 2013 (18 of 2013) and rule 18 of the Companies (Incorporation) Rules, 2014] Act having its registered office at H. No. 3, Santosh Nagar, Waki Budruk, Tal – Khed, Dist - Pune represented by its Partner, **Ms. Kalyani Gore** here in after referred to as party of the first part (which expression shall unless repugnant, include its assigns, legal heirs and authorized representatives).

AND

M/s VSK Enviro Solution., (also referred to as **VSK**) a company registered under Shop and Establishment Act having its registered office at Gat No. 195, Saheels Fortune Park, Flat No. A – 202, 2 Ra Majja, Phase 2, Borhadewadi, Moshi, Haveli, Pune 412 105 represented by its Proprietor **Mr. Vishal Khandagale**, hereinafter referred to as the party of the second part (which expression shall unless repugnant, include its assigns, legal heirs and authorized representatives).





NEETAL LABORATORIES And Environmental Services Pvt. Ltd.

Certifications :
ISO 9001 : 2015
ISO 14001 : 2015
ISO 45001 : 2018

Whereas,

VSK is in the field of providing whole range of services in Environmental Monitoring & Analysis of Air (Ambient Air, Work-zone Air, Source Emission, Fugitive Emission, Efficiency Assessment of Air), Water, Waste Water, Noise, Soil, Manure / Compost, MSW / Hazardous Waste, DG Insertion Loss, Illumination Survey, Ventilation Survey, Environmental Clearance, Environmental Impact Assessment & Environment Management Plan with necessary technical expertise, qualified and experienced personnel since 2023. VSK approached NEETAL which also possess similar technical qualifications, experience, and other pre-requisites, decided to combine, and have the benefit of synergies of the both the organizations.

NEETAL and VSK wish to associate themselves and use the technical and other expertise available with each of them as VSK has approached many clients in Industrial Sector and Building Construction in the above-mentioned fields.

And the parties to the MOU on the basis of this arrangement have decided to outline and enumerate the terms and conditions, the scope of work and the rights and obligations in details for such association

NOW THE PARTIES TO THE MOU AGREE AS UNDER.

NEETAL means Neetal Laboratories and Environmental Services Pvt. Ltd., or Consultant (First party to the association)

M/s. VSK Enviro Solution., (also referred to as VSK) (Second party to the association)



Address : H.NO. 43, SANTOSH NAGAR, WAKI BK., TAL. KHED, DIST. PUNE - 410 501

Website : www.neetalenvirolab.com, Email: sales@neetalenvirolab.com / neetalenviro@gmail.com, Mob. 8669699854 / 52



I SCOPE OF WORK:

The parties to the MOU agree that they shall mainly focus on the following area of mutual expertise in Environmental Monitoring & Analysis.

II OBLIGATIONS OF NEETAL

1. NEETAL shall carry out the Environmental Monitoring and analysis for Industrial Sectors, Environmental Impact Assessment & EMP Studies and submission of report for the clients of VSK whose names are referred to NEETAL.
2. NEETAL shall charge the professional fees & expenses incurred on the basis of services provided and the same shall be finalized on case-to-case basis.

III OBLIGATIONS OF VSK

1. VSK shall be solely responsible for any commercial aspect of any of their Assignments.
2. VSK shall place appropriate work order on NEETAL for availing various services required at different stages and the same shall be discussed and finalized on case-to-case basis.
3. VSK shall make necessary payments to NEETAL as per the Terms of Payment of individual work orders on completion of tasks by NEETAL.
4. VSK shall utilize services of NEETAL wherever found suitable either by directly placing work order or by securing the order from client on case-to-case basis after prior discussions with NEETAL.



IV RIGHTS AND PROPERTY IN DOCUMENTS DESIGNS AND STATISTICAL

DATA:

The property or other rights like copyright in documents, reports etc. prepared by NEETAL or its staff shall remain with NEETAL.

V LANGUAGE:

English will be ruling language for the MOU. Consequently, all correspondence, reports, studies, technical data, certificates, and all documents pertaining for the Projects shall be in English.

VI CO – ORDINATOR

For operational convenience both the parties shall designate one of its employees/ authorised representative to act as Team Leader/ Coordinator for execution of the said assignments.

VII TERMINATION:

Both the parties may, by written notice terminate the MOU giving not less than 30 days' notice on following grounds:

- a. If the parties mutually decided to terminate the MOU
- b. If circumstance arise rendering the performance impossible for one or both the parties and such circumstances are beyond corrective action.

However, the clauses relating to 90 days' notice shall apply to both the parties and either party will be entitled to give notice to terminate the MOU.



VIII INDEMNITY

The parties to the MOU agree to keep each other indemnified from any losses arising or accruing to each by their fault in the course of dealings and this clause shall be applicable to both the parties, subject to other terms and conditions of this MOU.

IX VALIDITY

This MOU is valid for a period of 01/01/2024 to 01/01/2027 from the signing of this MOU. The period of MOU may be extended by mutual written agreement between both the parties.

X SETTLEMENT OF DISPUTES AND REFERENCE TO ARBITRATOR

If at any time during the currency of the MOU or after the period of MOU any dispute, difference or question arises among the parties or an any issue relating to the work assigned or any matter arising in connection with or relating to the MOU, will be settled amicably and if could not be settled amicably by the parties, the same shall be referred to Arbitrator. The person acceptable to both the parties shall act as the Arbitrator. The provisions envisaged in Arbitration and Conciliation Act, 1996 shall apply accordingly.

XI FORCE MAJEURE:

In the event of force majeure & unforeseen event beyond the control of the parties, which prevents either party from carrying out its contractual obligations under this MOU, the duties and rights, as far as are affected by such event or impossibility, shall be suspended as long as the unforeseen situation lasts.



4

XII SECRECY & CONFIDENTIALITY:

Both, during and after the expiry of the MOU, all documents, reports, technical data, and information shall be treated confidentially by both the parties and shall not without the written prior approval of the other party be made available to any third party.

This shall not apply to communications made in the normal discharge of their duties or to facts, which are manifest to the public or of national interest.

XIII MISCELLANEOUS:

This MOU shall become binding on the parties on execution of the said MOU by both the parties. Alterations and amendments to this MOU shall be in writing and signed by the Authorised Representatives of NEETAL and VSK.

The parties to the MOU by mutual consent in writing may modify, alter or add or delete the clauses in this MOU and shall from time to time execute additional or supplementary MOUs for proper and efficient execution of the MOU.



IN WITNESS, WHEREOF THE PARTIES HEREUNTO HAVE SET THEIR HANDS
ON THE DAY AND MONTH OF THE YEAR FIRST MENTIONED HEREIN ABOVE

For Neetal Laboratories & Environmental Services Pvt. Ltd.,


Ms. Kalyani Gore
Director



For VSK Enviro Solution


Mr. Vishal Khandagale
Proprietor



Witness:

1. Mr. Harichandra Dhurnal



2. Mr. Sandip Garad





F.No. LB/99/7/2021-INST LAB-HO-CPCB-HO/Pvt./ 9129

Provisional Certificate

To,

Head of Laboratory,
M/s Neetal laboratories and Environmental Services Private Limited,
H. No.-43, Santosh Nagar, Waki Budruk, Tal. Khed, Dist. Pune,
Maharashtra-410501.

Subject: Recognition of M/s Neetal laboratories and Environmental Services Private Limited, H. No.-43, Santosh Nagar, Waki Budruk Pune, Maharashtra- 410501 as Environmental laboratory under the Environmental (Protection) Act- 1986.

Sir,

I am directed to refer the online application, dated 12/12/2022 for the recognition of your laboratory under Environmental (Protection) Act, 1986. Based on the recommendations of the concerned Division, approval of Competent Authority for recognition of Environmental laboratories and your acceptance of the revised terms and conditions at Annexure-III & IV of the guidelines for recognition of environmental laboratories, CPCB approves the recognition of **M/s Neetal laboratories and Environmental Services Private Limited, H. No.-43, Santosh Nagar, Waki Budruk Pune, Maharashtra- 410501** and shall be notified in the Gazette of India. Considering the current requirement of mandatory accreditation/ certifications of the laboratory, **this recognition shall be valid up to 23/11/2024.**

2. As sought in the aforementioned application, **M/s Neetal laboratories and Environmental Services Private Limited, H. No.-43, Santosh Nagar, Waki Budruk, Pune, Maharashtra-410501** may undertake the following tests:

- Physical Tests**-Conductivity, Colour, pH, Fixed & Volatile Solids, Total Solids, Total Dissolved Solids, Total Suspended Solids, Turbidity, Temperature, Velocity & Discharge Measurement of Industrial Effluent Stream, Flocculation Test (Jar test), Odour, Salinity, Settleable Solids and Sludge Volume Index.
- Inorganic (General and Non-metallic)**: Acidity, Alkalinity, Ammonical Nitrogen, Chloride, Chlorine Residual, Dissolved Oxygen, Fluoride, Total Hardness, Total Kjeldahl Nitrogen (TKN), Nitrite Nitrogen, Nitrate Nitrogen, Phosphate, Sulphate, Bromide, Chlorine Demand, Iodine, Sulphite, Silica, Cyanide and Sulphide.
- Inorganic (Trace Metals)**: Boron, Cadmium, Calcium, Total Chromium, Chromium Hexavalent, Copper, Iron, Lead, Magnesium, Mercury, Nickel, Potassium, Sodium, Sodium Absorption Ratio, Zinc, Arsenic, Aluminium, Beryllium, Barium, Manganese, Selenium, Silver, and Cobalt.
- Organics (General) and Trace Organics**: Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Oil and Grease, Phenolic Compounds, Pesticides (each) (Organo-Chlorine and Organo Nitrogen-Phosphorus), Surfactant, Poly-Chlorinated Biphenyl (PCB's) each, Poly-Nuclear Aromatic Hydrocarbon (PAH), Organic Carbon (in Solid) and Carbon/Nitrogen Ratio.
- Microbiological Test**: Total Coliform, Faecal Coliform, *E. coli*, *Faecal Streptococci* and Total Plate Count.
- Toxicological Tests**: Bioassay Method for Evaluation of Toxicity Using Fish and Measurement of Toxicity Using *Daphnia* or Other Organism.
- Biological Test**: Benthic Organism Identification and Count, Macrophytic Identification and Planktonic Identification Count.
- Characterization of Hazardous Waste**: Corrosivity, Reactivity and Measurement of Heavy Metals/Pesticides in the Waste/Leachate.

Contd.

'परिवेश भवन' पूर्वी अर्जुन नगर, दिल्ली-110032

Parivesh Bhawan, East Arjun Nagar, Delhi-110032

दूरभाष/Tel : 43102030, 22305792, वेबसाइट/Website : www.cpcb.nic.in



- ix. **Soil/Sludge/Sediment and Solid Waste:** Boron, Cation Exchange Capacity (CEC), Electrical Conductivity, Nitrogen (Available), Organic Carbon/Matter (Chemical Method), pH, Phosphorous (Available), Phosphate (Ortho), Phosphate (Total), Potassium, SAR in Soil Extract, Sodium, Soil moisture, TKN, Calorific Value, Ammonia, Bicarbonate, Calcium, Calcium Carbonate, Chloride, Colour, Gypsum Requirement, H.Acid, Heavy Metal, Magnesium, Nitrate, Nitrite, Potash (Available), Sulphate, Sulphur, Total Water Soluble Salt and Water Holding Capacity.
- x. **Ambient Air/ Fugitive Emissions:** Nitrogen Dioxide (NO₂), Sulphur Dioxide (SO₂), Total Suspended Particulate Matter, Respirable Suspended Particulate Matter PM₁₀, Ammonia, Carbon Monoxide, Fluoride, Lead, Ozone, Benzene Toluene Xylene (BTX) and PM_{2.5}.
- xi. **Stack Gases/ Source Emission:** Particulate Matter, Sulphur Dioxide, Velocity & Flow, Carbon Dioxide, Carbon Monoxide, Temperature, Oxygen, Oxides of Nitrogen, Acid Mist, Ammonia, Chlorine, Fluoride(Particulate) and Total Hydrocarbon.
- xii. **Noise Level:** Noise Level Measurement (20-140 dBa) and Ambient Noise and Source Specific Noise.
- xiii. **Meteorological:** Ambient Temperature, Wind Direction, Wind Speed, Relative Humidity, and Rainfall

3. Further, the following analysts have been approved as Government Analysts.

- i. Mrs. Kalyani Yuvraj Gore
- ii. Sh. Abhishek Dattatray Tope
- iii. Mrs. Dipa Nilesh Mahajan

4. The laboratory shall compulsorily participate in the Analytical Quality Exercise conducted by the Central Pollution Control Board (CPCB) to ascertain the capability of the laboratory and analysis carried out and shall submit quarterly progress report to CPCB.
5. The surprise inspection/periodic surveillance of the recognized environment laboratory will be undertaken by CPCB to assess its proper functioning systematic operation and reliability of data generated at the laboratory.
6. It is also mandatory for the laboratory to have requisite accreditations of the ISO: 17025 and ISO:45001 and its renewal as per accreditation rules. This recognition is subject to such accreditations and renewals as applicable. The laboratory is required to apply online for further renewal of recognition through CPCB web portal after renewal of the mandatory accreditations / certifications concerned.
7. The laboratory should compulsorily follow the accepted terms and conditions. In case of serious non-compliance of any of the terms and conditions, the laboratory may be black listed for a minimum period of two years and civil/criminal proceedings, as applicable, may be initiated for performing functions on behalf of the Government in an unauthorized manner.

Yours faithfully,

K. Ranganathan
28/2/23

(Dr. K. Ranganathan)
Scientist-E & Divisional Head
Instrumentation laboratory



डॉ. के. रंगनाथन / Dr. K. Ranganathan
वैज्ञानिक 'ई' / Scientist 'E'
प्रदेशीय जल एवं वायुमंडलीय प्रदूषण नियंत्रण बोर्ड
Dr. Head-Water & Instrumentation Laboratory
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
पर्यावरण, जल एवं वायुमंडलीय प्रदूषण नियंत्रण, भारत सरकार
(Min. Environment, Forest & Climate Change, Govt. of India)
परिचय पत्र, पूर्वी अक्षांश मार्ग, दिल्ली-110002
Parvathi Bhawan, East Arjun Nagar, Delhi-110002