

**Ecological (Environment) Audit**  
**Abhinav Education Society's**  
**College of Education (B.Ed.)**

S.No., 13, Ambegaon Bk. Katraj-Dehu Road Bypass, Pune-46



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## 6 Ecological (Environmental) Audit

Environment is an essential part for human survival. We co-exist with the environment and it cannot be termed as a separate entity. The Ecological audit helps to understand the flora, fauna that exists and steps that can be taken to improve the same. To denote if there are problems related to sound in and around the surrounding. In terms of the carbon footprint it helps in keeping a tab on the eco-friendly habits incorporated by the inhabitants of the premise. Health today is the topmost priority, a general understanding of the initiatives undertaken along with sufficient hygiene practices adopted. Universal design is applicable to all built and unbuilt spaces.

As part of our study we could state that the Institution has developed eco-friendly practices and sustainable solutions which are well reflected in the rich biodiversity of the Premises. Being situated near the city the appreciation space towards the main entrance provides a welcoming approach to the Institute.

The Institute has huge open space used by all. The students use it for as a leisure place for study and Institute ground is used for sports activities. There are ample resting spaces as part of building design which provide a resting and warm welcoming approach in the premise.

- **Open Spaces**

There is a beautiful balance of natural and open spaces in the premise and the open/vegetation spaces are balanced overall. The ground is used by students at present for sports and cultural gatherings. The design on the entire is such that the landscape and softscape spaces are very well oriented and located thus being extremely useful to Institutions in the site. **There are provisions for natural plantations which have enhanced the beauty of the space.**

There are adequate Maintenance staff allotted for the open spaces and they have done an excellent job in terms of the duty allotted. The traditional tap and pipe facility is adopted for watering and the Institute has taken special provisions for the same. The spaces are watered daily in summer. **The efforts to maintain the existing space are commendable.**

## • Noise Audit

### • Macro level

On a macro level there is ample vegetation in the site. The approach road too has very minimal traffic. As the Institute is nestled between educational institutions and a which is almost 0.5 kms away with immense vegetation the noise levels do not affect the students and staff in their day to day functioning. The approach road too is pretty away. **Overall the noise level in terms of bad effect is extremely low and there are positive outcomes as per our analysis on macro level.**

### • Micro level

The Institute has an adequate open space covered with huge trees prevailing naturally in the premise which act as a noise barrier; in addition the Institution building is surrounded by Hospital Buildings which further acts as a benefit in reducing any noise pollution. There are bare minimum parking provisions provided in the premise which causes bare minimum noise as they are situated near the entrance which is a bit away from the Institute building. There are no particular equipments which cause any noise effect. **Overall the noise levels inside the premises are low which is a good approach.**

- **Carbon Footprint Audit**

- **Eco-friendly Commuting Practices**

Based on data collection and discussion with staff the following points were noted:

- **Ease of commuting** – Owing to close proximity to public transport the access is very feasible and walks able.
- **Vehicles details** – The provision by Institute includes vehicle parking is as follows:

| S. No. | Type              | Nos.  | For (student/ Staff) |
|--------|-------------------|-------|----------------------|
| 1.     | Cars              | 5     | Staff                |
| 2      | Bikes             | 20-30 | Staff and Students   |
| 3      | Cycles            | 5-8   | Students             |
| 4      | Electric vehicles | 5-10  | Staff and Students   |

*Table 6: Details of the Parking in the premise*

- **Commute details** – The students and staff commute from multiple places. The details are summarized below.

| Particulars                | Staff | Students |
|----------------------------|-------|----------|
| <b>Up to 5 km distance</b> | 4     | 22       |
| <b>Above 5km distance</b>  | 9     | 100      |

*Table 7: Details of the places students and staff commute from*

- **Heat Island Reduction**

The College has **adopted the following practices which are yielding positive results** in terms of Urban Heat Island Effect which refers to increase in temperature of the surrounding because of ineffective strategies.

- **Exposed roof areas**

There are stilts on which solar panels have been installed covering almost the entire terrace area. The buildings are covered with white paint and the Maintenance staff along with Management have taken ample measures to maintain the same. **There was no weathering of roof observed during the site visit.** The current practices are well maintained.

- **Exposed non-roof hardscape areas**

There are pathway on all sides of the premises. These include some natural and potted

plantations along the pathways. However, the trees are huge and the canopy is wide spread thus providing ample shade to the outdoor areas of the premise. Hence, there are no direct sunrays or similar effect affecting the students and staff. The Institute has plantations which act as a solution for the urban heat island effect. This green space is a very good solution for reducing any harmful health consequences which may arise due to harsh sunlight.

**There are adequate measures adopted in the premises to reduce heat island effect of Building roofs and in site.**

### • Outdoor Light Pollution Study

The Institute compound lights are not upward looking thus, these do not cause light pollution.

### • Universal Campus

As per World Report on Disability, 2011 there are 180 million approx. Persons with Disabilities that makes it 15% of total population of India.

**There are Ramps, Handrails along staircase and low height risers in the Staircases as part of universal campus initiatives.** The design of the premises is appropriate for access with passages and corridors being wide enough in size and naturally ventilated. The doubly and singly loaded corridors are safe from fire safety aspect. The Institute has resting places (seating areas) in the outdoor along the trees thereby making it user friendly for the specially abled students. **The College has separate toilet for the differently abled and a wheelchair too. These measures are excellent.**

### • Fire Safety

The Institution has undertaken adequate fire safety measures. Each floor has an open staircase without any barriers for fire safety measures. These staircases are free of any kind of storage or combustible material. The windows in each classroom are at a low height with fresh air and natural light thereby adding to ample ventilation throughout the day. The current facilities are however quite well maintained.



- **Positive site features as per our study**

**a) User friendly movability in premises**

There are provisions of Kerb Ramp in the Building premises, also low height hand rail for ease of access.

**b) Avoid using plastic in premise**

There are provisions for ban on single use of plastic bags or products in the Premise.

**c) OPAC system**

The system is beneficial for the students.

**d) Paperless technologies**

The Institute has gone technology friendly and paperless in the functioning of the Premise.

**e) Avoid burning of waste**

The waste produced in the premises is not burnt as it is dangerous towards health of students and staff.

**f) Avoid using plastic in premise**

There are provisions for ban on the use of plastic bags or products in the Premise.

**g) Universal accessibility**

There are provisions for lifts, wheelchair and separate toilet for the specially abled.

**h) Resting places**

There are provisions for resting places in the form of break out spaces, a gym, a canteen area of 1500 sq ft. and open areas.

**i) Environment related initiatives**

The Institute has tree plantation drives, a huge tree campaign, competitions on business ideation for sustainable business, conferences on climate change & sustainability, use of cloth bags and sustainability accounting for which they have filed a patent. This area attracts different birds and squirrels.

## • Recommendations for a Sustainable Habitat by Greenview Solutions

### Site beautification

#### **a) Low VOC Paints and Adhesives**

Whenever the Institute undergoes repairs or renovations there should be use of materials with low emissions so as to reduce the adverse health impacts on workmen and the students occupying the space thereafter.

#### **b) Additional facilities for birds**

There can be provision for drinking water and food facility for birds visiting in the Institute premise.

#### **c) Tree adoption scheme**

The Institute can adopt One Faculty – One tree adoption scheme which is one of its kind practice, this can be very beneficial especially during the summer season.

#### **d) Names of the Plants for awareness**

The Management and Institution can undertake initiatives to include the names of the plants as a signage to spread awareness; this will be very beneficial for Students & Staff.

### Pollution Control

#### **a) Bicycles as a gift**

As an appreciation gesture may be the student's toppers/ staff best performers can be awarded with a bicycle occasionally.



**Pune, Maharashtra, India**  
Ambegaon Budruk, Dalavi Nagar, Ambegaon BK, Pune, Maharashtra 411046, India  
Lat 18.4491°  
Long 73.838266°  
16/07/23 11:24 AM GMT +05:30

GPS Map Camera



**Pune, Maharashtra, India**  
Ambegaon Budruk, Dalavi Nagar, Ambegaon BK, Pune, Maharashtra 411046, India  
Lat 18.449111°  
Long 73.838249°  
16/07/23 11:37 AM GMT +05:30

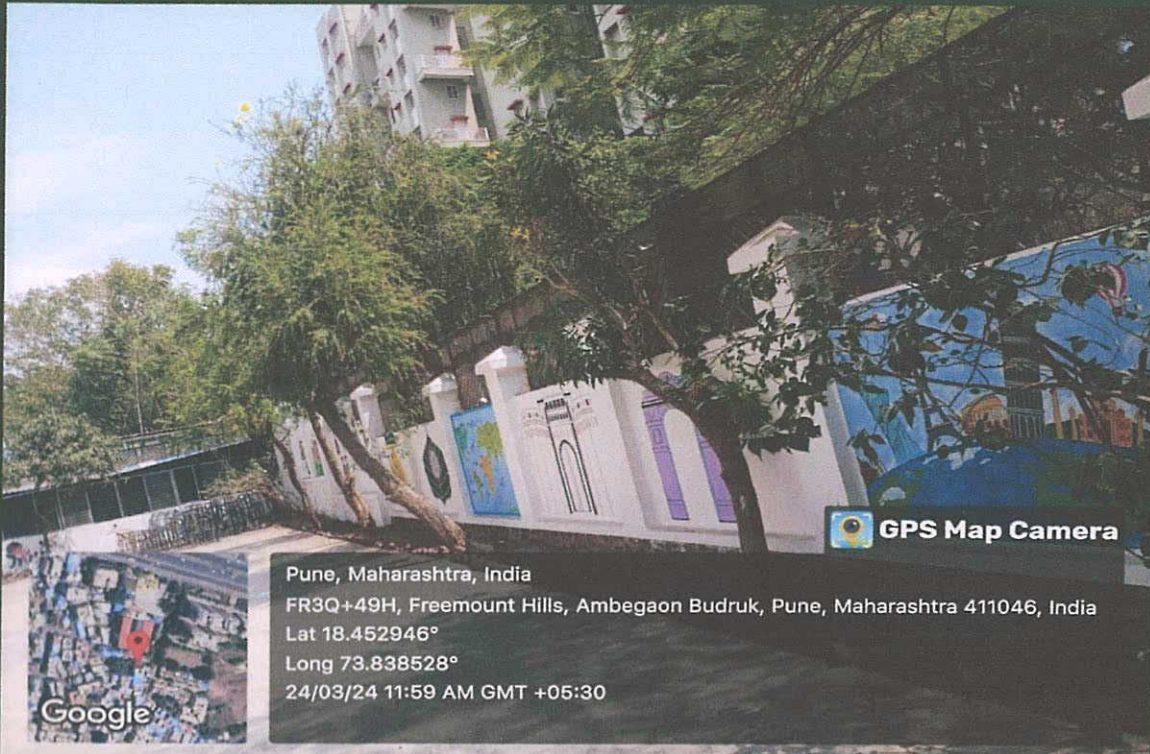
GPS Map Camera





## On-site investigation and physical verification

The ecologically friendly ambience with facilities such as ramps, parking, greenhouse and botanical gardens.



# MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437  
Fax: 24023516  
Website: <http://mpcb.gov.in>  
Email: rohq@mpcb.gov.in



Kalpataru Point, 2nd and  
4th floor, Opp. Cine Planet  
Cinema, Near Sion Circle,  
Sion (E), Mumbai-400022

RED/S.S.I (R3 )  
No:- Format1.0/RO-HQ/UAN  
No.0000119061/CR/2202001098

Date: 17/02/2022

To,  
M/s Kuldeep E-Waste Disposals,  
S. No. 50, Ambegaon Khurd, Katraj-Ambegaon Road,  
Katraj,  
Tal. Haveli, Dist. Pune



Your Service is Our Duty

## Sub: Renewal of consent under RED Category

Your application No.MPCB-CONSENT-0000119061 Dated 01.08.2021

For: grant of Consent to Operate under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 6 of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

1. The consent to renewal is granted for a period up to 30/09/2026
2. The capital investment of the project is Rs.0.231 Crs. (As per C.A Certificate submitted by industry )
3. Consent is valid for the manufacture of:

| Sr No    | Product                                                                                                                                | Maximum Quantity | UOM  |
|----------|----------------------------------------------------------------------------------------------------------------------------------------|------------------|------|
| Products |                                                                                                                                        |                  |      |
| 1        | Collection, Segregation & Dismantling of E-Waste (ITEW - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 & CEEW - 1, 2, 3, 4, 5) | 90               | MT/A |

Using Environmentally Sound Technology as per the provisions of E-Waste (Management) Rules, 2016 and Subject to having valid authorization under Rule 13 (3) of E-Waste (Management) Rules, 2016.

4. Conditions under Water (P&CP), 1974 Act for discharge of effluent:

| Sr No | Description       | Permitted (in CMD) | Standards to      | Disposal Path      |
|-------|-------------------|--------------------|-------------------|--------------------|
| 1.    | Trade effluent    | 0                  | As per Schedule-I | Not Applicable     |
| 2.    | Domestic effluent | 0.5                | As per Schedule-I | Soaked in soak pit |

5. Conditions under Air (P & CP) Act, 1981 for air emissions:

| Sr No. | Stack No. | Description of stack / source | Number of Stack | Standards to be achieved |
|--------|-----------|-------------------------------|-----------------|--------------------------|
| 1      | 1         | Dust Collector                | 1               | As per Schedule -II      |

6. **Non-Hazardous Wastes:**

| Sr No | Type of Waste | Quantity | UoM | Treatment | Disposal |
|-------|---------------|----------|-----|-----------|----------|
| NA    |               |          |     |           |          |

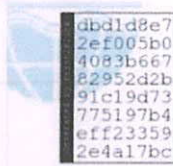
7. **Conditions under Hazardous & Other Wastes (M & T M) Rules 2016 for treatment and disposal of hazardous waste:**

| Sr No | Category No./ Type              | Quantity | UoM  | Treatment | Disposal |
|-------|---------------------------------|----------|------|-----------|----------|
| 1     | 31.1 Process residue and wastes | 10       | MT/A | ---       | CHWTSDF  |

8. **Conditions under E-Waste Management:**

| Sr No | Type of Waste | Quantity | UoM    | Disposal Path |
|-------|---------------|----------|--------|---------------|
| 1     | ---           | 0.00     | --NA-- | ---           |

- The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding on the industry.
- This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.
- The applicant shall make an application for renewal of consent 60 days prior to date of expiry of the consent. (Operate/Renewal)
- The industry shall comply with conditions stipulated in the Authorization issued by MPCB vide No. MPCB/RO(HQ)/HSMD/Autho/21/H&OW/29 dated 16/2/2022 valid up to 30/9/2026 for collection, segregation and dismantling of E-waste.



Signed by: **N.N. Gurav**  
Regional Officer (HQ)  
For and on behalf of,  
**Maharashtra Pollution Control Board**  
rohq@mpcb.gov.in  
2022-02-17 18:14:30 IST

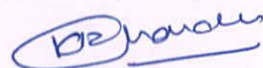
**Received Consent fee of -**

| Sr.No | Amount(Rs.) | Transaction/DR.No. | Date       | Transaction Type |
|-------|-------------|--------------------|------------|------------------|
| 1     | 7500.00     | TXN2108000407      | 04/08/2021 | Online Payment   |

**Copy to:**

- Regional Officer, MPCB, Pune and Sub-Regional Officer, MPCB, Pune II  
- They are directed to ensure the compliance of the consent conditions.
- Chief Accounts Officer, MPCB, Sion, Mumbai



  
**Principal**  
Abhinav Education Society's  
College Of Education  
Ambegaon (Bk.), Pune - 411046