

Shaheed Udham Singh Govt College, Sunam



Environmental Audit

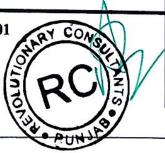


vinay Kumar Jham 16 February 2022

SCO 97, Bhattan Street. Nabha, Dist. Patiala, Punjab-147201

Website: www.revolutionary.co.in; Contact: 7888752963 / 9988064638







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Ref: 5508C/ENV/PB22

Dated: 16-02-2022

TO WHOM IT MAY CONCERN

TO, SHAHEED UDHAM SINGH GOVT COLLEGE, SUNAM, PUNJAB, INDIA

Subject: Conduct of Environment Audit

Dear Sir,

This is to certify that the SHAHEED UDHAM SINGH GOVT COLLEGE, SUNAM has been successfully conducted against Environmental Audit guidelines.

Environmental audit for the college has examined the following systems: -

- Water Management
- Waste Management
- Plastic Waste
- Sanitation management
- Noise & Air Pollution
- Best Practices & etc.

The audit was commenced with a brief opening meeting followed by document review. Site visit was carried out covering all areas including garden, garbage area, rain water harvesting, parking, waste management etc.

The Institute has already done work on Green & Environment Friendly Technology and committed to save the environment and resources. The OFI/Recommendations as mentioned under each activity in the report needs to be closed.

For Revolutionary

Naresh Kumar

(Authorized Signal

ACKNOWLEDGEMENT

REVOLUTIONARY CONSULTANTS, Patiala, Punjab takes this opportunity to appreciate & thank the management of SUS Govt. College Sunam; for giving us an opportunity to conduct environmental audit for the campus of the college.

- Placement and Admission Cell
- Education dept including Labs
- Canteen, Library & Toilets
- Lawn, Parking, Admin Block, Auditorium

We are indeed touched by the helpful attitude and co-operation of all faculties and technical staff, who rendered their valuable assistance and co-operation the course of study.

Audit Team:

Name:

Vinay Kumar Jham (Lead Assessor)

Qualification:

-BSc Hons Chemistry - Delhi University

-Msc in Chemistry in 1972 – Delhi University

-PG Diploma Sales & Marketing 1973 FMS, Delhi University

Experience:

-Worked in PSU - Andrew Yule & Company from 1972 till 2007

-After retirement; completed Lead Auditor Course in ISO standards

9001, 14001, 45001, 21001.

-Completed 2000 man- days as second- & third-party auditor Also a

Lead tutor for auditing process and auditing awareness.

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Name:

Ankur Singla (Auditor)

Qualification:

-B.tech (M.E.) - PTU, Jalandhar

Experience:

-Working in ISO systems from 01 decade

-LA in ISO 9001, 14001, 45001, 21001, ISO 50001

-Completed 1000 man- days as second- & third-party auditor





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Environmental Audit is a systematic process of identification, quantification, recording, reporting and analysis of components of environmental diversity of various establishments. Environmental audit was initiated with the beginning of 1970s with the motive of inspecting the work conducted within the organizations whose exercises can cause risk to the health of inhabitants and the environment.

The objective of Environmental audit

- To determine usage/wastage of energy or water or other resources;
- Implement changes to ascertain optimum usage of resources and make savings.
- To evaluate type, quality and quantity of waste generated in premises.
- To determine waste handling and processing practices to reduce, recove and recycle the generated waste.
- To promote health consciousness and environmental awareness, values and ethics among stake holders of organization.

Globalization with rapid urbanization has led to socio economic and environmental crises. To tackle these issues and impart awareness among generations it is highly important to adopt the system of the Green Campus for the institutes. This may lead for sustainable development and at the same time reduce a sizable amount of atmospheric greenhouse gases from the environment.

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The aim of the environmental Audit is to review the overall environment management systems. Depending on the types of standards and the focus of the audit, there are different types of environmental audits.

Organizations now recognize the importance of environmental matters and accept that their environmental performance should be scrutinized to understand its impact and to take remedial measures to lessen it.

Environmental auditing is used to

- Investigate
- Understand and
- Identify

These are then used to help in improving existing human activities, with the aim of reducing the adverse effects of these activities on the environment.

An environmental auditor studies an organization's environmental effects in a systematic and documented manner and produces an environmental audit report.

Environmental audit for the university has examined the following systems

- Water Management
- Waste Management
- Health and safety management
- Sanitation management
- Adopted Green practices
- Biodiversity

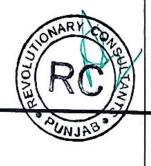
Vinay Kunna Jham

Lead Assessor

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General Details

Project site: Shaheed Udham Singh Govt College, Sunam

Project Team: Vinay Kumar Jham & Ankur Singla

Lead Auditor & Sr. Consultant (IMS), Member of QCI & NSC, India, Revolutionary Consultants

1. About Project site

Shaheed Udham Singh Government College, Sunam was established in the year 1969 as Shaheed Udham Singh Memorial Degree College, Sunam but in 1974, when the ashes of the great martyr were brought from London to Sunam through the efforts of the Central and State Governments. The name of the institute was changed to Shaheed Udham Singh Government College, Sunam. The college is affiliated to Punjabi University, Patiala and has received accreditation-Grade B from NAAC. Its special feature is that it is keen to facilitate the participation of village students in higher education. Its efforts are directed towards providing a holistic education that encourages critical and independent thinking. Adequate infrastructural facilities like classrooms, offices, library, laboratories, playground etc. are available in the college. Apart from the regular teaching learning activities, the college has been striving for the overall development of the students by conducting various extra-curricular activities. The college is continuously progressing towards fulfilling its objectives and goals. It also offers undergraduate and some postgraduate

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Lead Assessor

courses in science, commerce and arts.

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Principal Message: (DDO/Principal Name-Prof. Kamna Gupta)

It is an honour for me to work for this institution named after the great son of India, Shaheed Udham Singh. We also have some duties for the continuous development of this institution, considering them as important, it becomes most important to work in every field for the development of this institution. In this sequence, environmental audit becomes very important. With this, the institution's performance, responsibilities as well as deficiencies regarding the environment will be identified and we will be able to do everything possible to remove those deficiencies in the future. Coming under the Malwa Zone of Punjab, this institution is committed to being future-ready and taking care of the environment by imbibing improvements and fulfilling its duty towards it. I hope that the environment audit will prove beneficial for our institution. A new day will come with new hopes for new paths.





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SUS Govt. College, Sunam

2. Buildings and other allied Facilities

| Sr. No. | Particulars | Space |
|---------|-------------------------------------|-----------------------|
| 1 | Administration Building | Spacious |
| 2 | B.A, B.Com, B.Sc, M.A & M.Com | Spacious |
| 3 | Certificate Courses Integrated | Spacious and Creative |
| 4 | BCA, PGDCA, M.Sc, PG diploma | Spacious |
| 5 | Labs | Spacious and Creative |
| 6 | Sports Building | Spacious and Creative |
| 7 | Auditorium | Spacious and Creative |
| 8 | Library & closed Sports facility | Spacious |
| 9 | Toilet Blocks | Spacious |
| 10 | Parking Area | Spacious |
| 11 | Canteen | Spacious |
| 12 | Internal connecting Roads | Well maintained |
| 13 | Gardens | Spacious and Creative |
| 14 | In campus & transportation facility | Well maintained |
| 1 | | |





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Some of evidences of campus:-

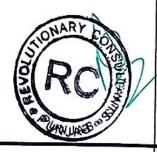








Vinay Kama Jham Lead Assessor



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Aim:

To perform Environmental Audit of SUS Govt. college, Sunam

Objectives:

To undertake comprehensive environmental sustainability assessment of an institutional campus with respect to

- 1. Water resources and management
- Biodiversity and ecological assessment
- 3. Waste generation and management
- 4. Health and Safety management
- 5. Sanitation

Methodology

Primary data collection was done through

- 1. Direct field observations taken by audit team.
- 2. Semi structured interviews of students, teaching staff and administrative staff.
- 3. Photo documentation.

Secondary data was acquired from administrative office of the college

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A. Assessment of building infrastructure

| Sr. No. | Particulars | Space | Ventilation | Natural Light | Cleanliness | Remark |
|------------|--------------------------------------|-----------------------------|-------------|------------------|-------------|--------|
| 1 | Administration | Spacious | Good | Poor | Good | |
| 2 | B.A, B.Com, BSC, M.A & M.Com | Spacious | Good | Good | Good | |
| 3 | Certificate Courses Integrated | Spacious | Good | Good | Good | |
| 4 | BCA, PGDCA, M.Sc, PG diploma | Spacious | Good | Moderate | Good | |
| 5 | Library & closed sports facility | Library Less Spacious | Good | Good | Good | |
| 6 | Canteen | Spacious | Good | Good | Good | |
| 7 | Toilet Blocks | Spacious | Good | Poor | Good | |
| 8 | Parking Area | Spacious | Good | Good | Good | |
| 9 | Staircases | Spacious | Good | Good | Good | |

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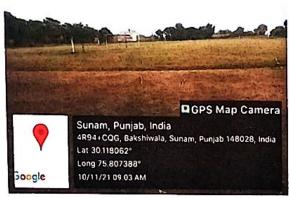
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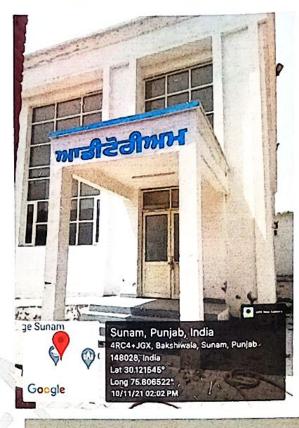


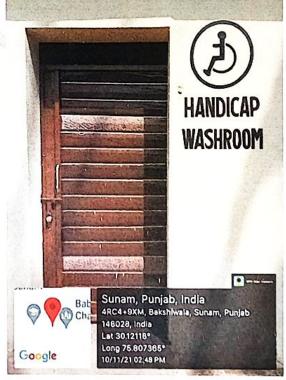












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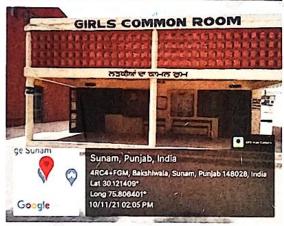
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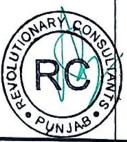








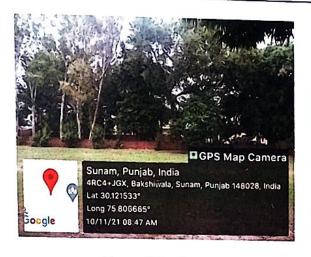


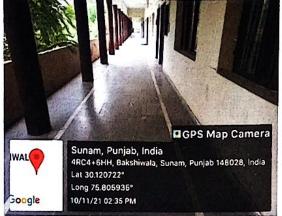


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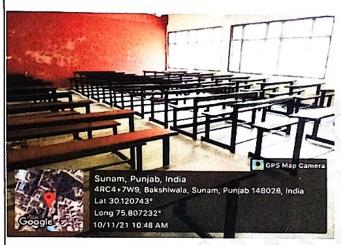
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Overall Building & green campus and other Infrastructure









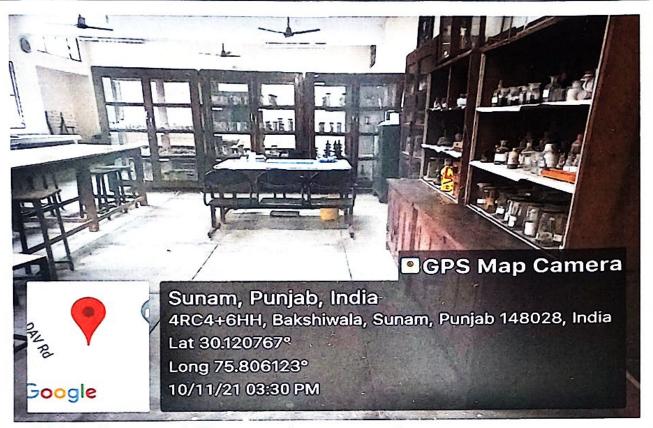
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B. Water Resources & Management:

Water source and storage

Bore well is the sole source that provides water to the whole campus of college. There are 01 big water tanks one, located in college.

Total storage capacity of these tanks is 22,000 litre. The tanks are filled daily. It has a pressurized pumping system. This big borewell operated by the water department established by the state government. Its maintenance, cleanliness is the responsibility of the employees of the concerned water department, who Deployed on duty by the department.

Because of sound water use planning, the campus is almost self-sufficient when it comes to clean water.

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Lead Assessor

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Water consumption

Water from water tanks goes to various water coolers/chillers, taps daily and is used, so the average water consumption of the institute can be considered as 22,000 litters per day. (as per secondary data)

Note: Total water consumption estimation was not under the scope of this audit.

There are no glasses for drinking water on water filters except in international school premises. Steel glasses should be kept on the filters.

Water Harvesting Potential

There is a huge potential for rain water harvesting on the roof. The total roof area is estimated to have a water harvesting capacity of about 11,22,43 litres.

As reported by the management staff, in summer usually 15000 to 20000 litres are required to meet the daily water needs for one and a half months.

In the backdrop of water scarcity during the summer season, harnessing this rooftop water potential would be extremely beneficial.

- C. Waste Generation & Management
- 1. Waste water Generation and Treatment

| Sr. No. | Waste category | Method of disposal |
|---------|---------------------------------|-------------------------|
| 1 | From toilets | Closed drainage system |
| 2 | From Canteens & other buildings | Closed drainage systems |

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Sewerage water in the form of waste water mainly comes from college premises, canteens and toilets. All this water goes without stopping through the sewerage installed by the local municipal corporation. A committee has also been formed for proper management of water.

2. Solid Waste

| Sr. No. | Waste category | Method of disposal |
|---------|----------------------------|---|
| 1 | Dry Waste | Disposed off in bins and taken away by MC |
| 2 | Wet waste and Garden waste | Composting in the campus |
| 3 | Biomedical waste | Disposed in separate bins and taken away by MC |
| 4 | E waste | No considerable E-waste has been generated as the institution took shape recently |

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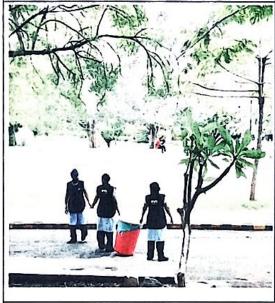
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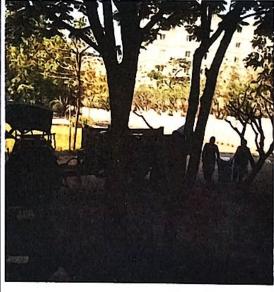






Separate Dustbins for wet and dry waste





Garbage Collection

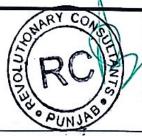
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Lead Assessor

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Compost Pit

Observations -

- 1. Separate dust bins for dry waste and wet waste have been kept on all appropriate locations in campus like in each classroom, administrative building, and library buildings and in toilets. These small dust bins are emptied daily in bigger dust bins kept on each floor near toilet blocks. The waste from big sized dustbins are taken alternate days by MC. Cleanliness is satisfactorily maintained in the campus. Cleaning is properly and regularly done by appointed contractor's worker team.
- 2. A machine for destroying used sanitary napkins was arranged in the women's common room on the ground floor. All instructions are given on how to use this machine. Additionally, small rectangular dustbins are also provided for disposal of sanitary napkins, although they are not labeled as such.
- 3. They should be labeled indicating the dustbin for disposal of sanitary napkins.

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D. Biodiversity

Name of Trees in SUS Govt. College Sunam

| S. No | Common Name | Botanical Name | Counting |
|----------|-------------------|--------------------------|----------|
| 1 | Safeda | Eucalyptus lanceolatus | 20 |
| 2 | Banayan | Ficus benghalensis | 05 |
| 3 | Sacred Fig | Ficus religiosa | 08 |
| 4 | Neem | Azadirachta indica | 35 |
| 5 | Chinaberry | Melia azadirachta | 118 |
| 6 | Weeping fig | Ficus benjamina | 03 |
| 7 | Indian Bael | Aegle marmelos | 04 |
| 8 | Kanak Champa | Pterospermum acerifolium | 01 |
| 9 | Gulmohar | Delonix regia | 14 |
| 10 | Neli gulmohar | Jacaranda mimosifolia | 03 |
| 11 | Mulberry | Morus alba | 22 |
| 12 | Sukhchain | Pongamia pinnate | 06 |
| 13 | Drumstick | Moringa oleifera | 11 |
| 14 | Arjun | Telminalia arjun | 22 |
| 15 | Kachnar | Bauhinia variegata | 02 |
| 16 | Curry Patta | Murraya koenigii | 04 |
| 17 | Royal Bottle Palm | Roystonea regia | 21 |
| 18 | Fish Palm | Caryota urens | 04 |
| 19 | Amaltas | Cassia fistula | 14 |
| 20 | Sagwan | Tectona grandis | 03 |
| 21 | Kassod | Senna siamea | 04 |
| 22 | Indian Rosewood | Dalbergia sisso | 68 |
| 23 | Gular | Ficus racemasa | 01 |
| 24 | Sausage Tree | Kigelia africana | 01 |
| 25 | Amla | Phyllanthus emblica | 08 |
| 26 | Monkey Puzzle | Araucaria | 05 |
| 27 | Lemon | Citrus limon | 01 |
| 28 | Guava | Psidium guajava | 06 |
| 29 | Bamboo | Bambusa vulgaris | 01 |
| 30 | Kaner | Thevetia peruviana | 08 |
| 31 | Bottle Brush | Callistemon | 06 |
| 32 | Tecoma | Tecoma stans | 19 |
| 33 | Mehndi | Lawsonia inermis | 02 |
| 34 | China Rose | Hibiscus rosa sinensis | 09 |

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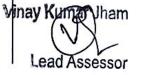


| 35 | Haar Shingar | Nyctanthes arbortristis | 03 |
|----|-----------------|----------------------------|-----|
| 36 | Jamun | Syzygium cumini | 02 |
| 37 | False Ashoka | Polyalthia longifolia | 20 |
| 38 | Rubber Plant | Ficus elastica | 01 |
| 39 | Frangipani | Plumeria | 02 |
| 40 | Indian Redwood | Chuk rasia tubularis | 18 |
| 41 | Kamini | Murraya paniculata | 02 |
| 42 | Jujjube(Ber) | Zizypus | 09 |
| 43 | Kikar | Acacia wlotica | 07 |
| 44 | Date Palm | Phoenix roebelenii | 14 |
| 45 | Diesel Plant | Zatropha | 03 |
| 46 | Silver Oak | Grevillea robusta | 01 |
| 47 | Elaichi Palm | Alpinia zerumbet5 | 10 |
| 48 | Rose | Rosa indica | 55 |
| 49 | More Pankh | Thuja | 65 |
| 50 | Kangi Palm | Cycas | 05 |
| 51 | Snake Plant | Dracaena | 01 |
| 52 | Flame of Forest | Butea monosperma | 03 |
| 53 | Siris | Albizia lebbeck | 02 |
| 54 | Ashwgandha | Withania somnifera | 08 |
| 55 | Lemon Grass | Cymbopogom | 01 |
| 56 | Akk | Calotropis procera | 01 |
| 57 | Haldi | Curcuma longa | 02 |
| 58 | Pathar Chatth | Bryophyllum | 10 |
| 59 | Aloe vera | Aloe vera | 08 |
| 60 | Guldaudi | Crysanthemum | 40 |
| 61 | Insulin Plant | Chamaecostus | 03 |
| 62 | Devil Tree | Alstonia scholaris | 13 |
| 63 | Crepe Jasmine | Tabernaemontana divaricata | 20 |
| 64 | Boat lily | Tradescantia | 03 |
| 65 | Rain lily | Zephyranthes | 05 |
| 66 | Mexican lily | Hippeastrum reginae | 05 |
| 67 | Peacock Flower | Caesalpinia pulcherrima | 01 |
| 68 | | Total | 802 |

Apart from this, some other plants are also in progress and many other aspects related to greenery are also present.

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Birds

List of birds at SUS Govt. College

| SN | Common Name | Scientific Name |
|----|----------------------------|----------------------------|
| 1 | Red Collared Dove (M / F) | Streptopelia tranquebarica |
| 2 | Laughing Dove (M / F) | Spilopelia senegalensis |
| 3 | Green bee eater | Merops orientalis |
| 4 | Black Crowned Night heron | Nycticorax nycticorax |
| 5 | Common Tailor Bird (M) | Orthotomus sutorius |
| 6 | Purple Sunbird (M/F) | Leptocoma zeylonica |
| 7 | Purple Rumped Sunbird | Leptocoma zeylonica |
| 8 | Common Myna | Acridotheres tristis |
| 9 | Red vented Bulbul | Pycnonotus cafer |
| 10 | Red whiskered Bulbul | Pycnonotus jocosus |
| 11 | Ashy Prinia | Prinia socialis |
| 12 | Plain Prinia | Prinia inornata |
| 13 | Common Kingfisher | Alcedo atthis |
| 14 | Scaly breasted munia | Lonchura punctulata |
| 15 | House sparrow | Passer domesticus |
| 16 | Jungle Crow | Corvus culminatus |
| 17 | Common Swift | Apus apus |
| 18 | Eurasian Collared Dove | Streptopelia decaocto |
| 19 | Spotted Owlet | Athene brama |
| 20 | Indian Robin | Copsychus fulicatus |
| 21 | Yellow-wattled Lapwing | Vanellus malabaricus |
| 22 | Jungle Babbler | Argya striata |
| 23 | Asian Green Bee-eater | Merops orientalis |
| 24 | Yellow-footed Green Pigeon | Treron phoenicopterus) |
| 25 | Indian Peacock | (Pavo cristatus |
| 26 | Indian Hoopoe | Upupa epops |
| 27 | Parrot | Psittaciformes |

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Insects

List of insects at SUS Govt. College

| Sr. No. | Common Name | ne Scientific Name | |
|------------|--|--|--|
| | Butterflies | | |
| 1 | Mottled Emigrant | Catopsilia pyranthe | |
| 2 | Common Crow | Euploea core | |
| 3 | Common tiger | Danaus genutia | |
| 4 | Common Pierrot | Castalius rosimon | |
| 5 | Common grass yellow | Eurema hecabe | |
| 6 | Lemmon Pancy | Junonia lemonias | |
| | Flies | | |
| 1 | Ditch Jewell | Brachythemis contaminata (Fam – Libillulidae) | |
| 2 | Ruddy marsh skimmer | Crocothemis servilia (Fam –Labillulidae) | |
| 3 | Wandering glider / Common Globe skimmer | Pantala flavescens (Fam – Libillulidae) | |
| 4 | Crimson marsh glider | Trithemis aurora (Fam – Libillulidae) | |
| 5 | Slender blue skimmer | Orthetrum luzonicum (Fam –Libillulidae) | |
| | Millipede | | |
| 1 | Yellow spotted millipede | Harpaphe haydeniana (Fam Xystodesmidae) | |



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Reptiles

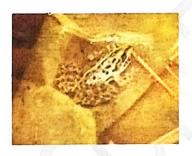
List of reptiles at SUS Govt. College

| Sr. No. | Common Name | Scientific Name |
|---------|----------------------|-------------------------|
| 1 | Common Indian Skink | Lampropholis guichenoti |
| 2 | Common garden lizard | Calotes versicolor |

Mammals

List of mammals at SUS Govt. College

| Sr.No. | Common Name | Scientific Name | |
|--------|--------------------------------|---------------------|--|
| 1 | Three striped Palm Squirrel | Funambulus palmarum | |
| 2 | Indian flying fox (Vatavaghul) | Pteropus giganteus | |







Scarlet marsh glider

Yellow spotted millipede

Common Indian skink

Vinay Kumar Lead Assessor

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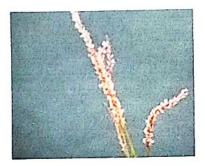
Common Pierrot



Plain Tiger



Baya Nest colony



Persicaria glabra



Santalum album



Lantana sp

F. Sanitation management

- Refreshment Units were all observed clean and neat
- A small separate dustbin has been kept for disposal of sanitary napkins however they are not labeled depicting 'dustbins for sanitary napkins disposal'

Observations

Regular cleaning of college campus and toilets is done by the cleaning staff.

This involves dusting, floor cleaning and toilets cleaning. Garden and parking area is also kept clean.

Vinay Kumar Tham

Lead Assessor

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Cleaning equipment's and washing liquids is provided to the cleaning staff monthly.





Safety gears have been provided to cleaning staff



A separate bin for sanitary waste disposal

G. Health and Safety Management

- 1. Fire extinguishers have been installed at various places in the campus. No incident of fire has been reported so far. Students should be trained to use a fire extinguisher.
- 2. The facility of first aid kit has been ensured under Red Cross in the campus.
- 3. The cleaning staff of the girls' toilet reported that they had found used sanitary napkins in the commode a couple of times. Therefore, girls should be encourage to destroy sanitary napkins.

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Lead Assessor

Vinay Kumar aham



Water management

- Waste water should be recycled for flushing and sweeping purposes with proper treatment.
- To increase the seepage of rain water into the ground, leak proof drains should be constructed along the paved ground area.

Waste management

- While composting for garden waste has been adopted, there is still a need for quantification and proper practices for waste composting to ensure recovery of compost from waste management.
- Waste water should be used for flushing and cleaning purposes.
- Discarded furniture, wires etc. should be audited and handed over to the scrap dealer.
- Discarded furniture etc. has been stored, but the area should be labeled as "Scrap Yard".
- Students are explained about waste management at the time of orientation. This should be done regularly as an induction programme.
- Disposable thermocol plates which are non-biodegradable are not used for college events. Since events are regular in the college, washable steel plates, Melamine crockery and biodegradable leaf plates (Patravali) are used keeping in mind a green sustainable practice.
- Adequate dustbins were kept for dry waste. For paper and plastic they should be labelled separately as both can be recycled.
- 3. Sanitation management
 - Doormats should be put on toilet doors to avoid rooms getting dust and muck

Separate bins kept for disposal of sanitary napkins should be labelled

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Vinay Kumat



Green practices by college management

- 1. Boards displaying green messages like 'Save every drop of water' and 'Keep the campus clean' have been pasted at relevant places.
- 2. Traditional rain water harvesting practices adopted in the campus for ground water recharge.
- 3. Campus Movement has taken steps towards carbon neutrality in the main campus by prohibiting any vehicle facility from going beyond the parking facility.
- 4. Non-conventional energy sources like solar energy were promoted in the campus.
- 5.Leading to proper solid waste separation and disposal facilities in the premises.
- 6. Buildings have adequate amount of natural light and ventilation.
- 7. Separate dustbins have been kept for disposal of sanitary napkins. This is a good initiative towards separating biomedical synthetic waste. Although there should be such a label on the box.
- 8. Drip irrigation has been installed to water the plants.
- 9. Very good cleanliness is maintained in all the institutional college buildings. Cleaning has been outsourced and a stringent cleaning regime is maintained

Chapter 5

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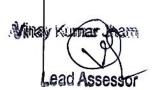
- 4. Health and safety management
- Along with updating the safety sign boards, mock drills should be conducted.
- Drinking water filters are kept away from toilets.
- Staff and students should be trained to use fire extinguishers.
- In the event of an accident, emergency exits in the building should be directed.
- SOPs of fire safety equipment have been displayed at appropriate places but their number should be increased.
- 5. Biodiversity
- Plantation of exotic bushes was observed for beautification of the campus. However some species of this exotic variety are weeds and can dominate the growth of local varieties.
- More importance should be given to the use of indigenous trees for landscaping the campus. Native trees host a variety of birds, insects and will help other native species thrive. Planting native trees with large canopies can also provide shade while keeping the area comparatively cooler.
- The institute campus has a rich animal diversity, especially of birds. To maintain and increase this diversity of birds and insects, the number of native fruit and flowering trees should be increased.
- 6. Other recommendations
 - Green Roofs: College has a huge roof top area. Composted garden
 waste can be utilized for greening roofs. Roofs can be utilized for
 growing fruits and vegetables. This will not only provide food,
 aesthetic value but also will have cooling effect.
 - The work of water harvesting systems should be completed soon to conserve rain water in the college campus.

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- To further reduce the pollution caused by the use of generators, the smoke silencer should be made higher.
- Green initiative should be continued continuously.



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Waste Management

Waste Management:

| Quarter No. | Solid Waste | Liquid Waste | Biomedical Waste | E- Waste |
|-------------|--------------------------|---------------------------|------------------|----------|
| Quarter 1 | 40.5 KG/DAY (Approx.) | 4000 LIT/DAY (Approx.) | | 2 |
| Quarter 2 | 41.2 KG/DAY (Approx.) | 4000 LIT/DAY (Approx.) | | 1 |
| Quarter 3 | 42.3 KG/DAY (Approx.) | 1200 LIT/DAY (Approx.) | | 3 |
| Quarter 4 | 48.4 KG/DAY (Approx.) | 3000 LIT/DAY (Approx.) | | 2 |

(Quarters- Q1- June- Aug, Q2- Sept-Nov., Q3-Dec-Feb, Q4-March-May) (Data in [KG & Litres] approximate average)

Composition

The composition of garbage in India indicates lower organic matter and high ash or dust contents. It has been estimated that recyclable content in solid wastes varies from 13 to 20% and combustible material is about 80-85%.

A typical composition of municipal solid waste is given below.

| Description | Percent by weight | | |
|------------------|-------------------|-----------|--|
| Leaves/Vegetable | 20.15 | (Approx.) | |
| Grass | 3.8 | (Approx.) | |
| Paper | 1.81 | (Approx.) | |
| Plastic | 0.62 | (Approx.) | |
| Glass, ceramics | 0.44 | (Approx.) | |
| Metal | 0.64 | (Approx.) | |
| Stones, ashes | 2.81 | (Approx.) | |
| Miscellaneous | 9.73 | (Approx.) | |

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PAPER WASTE MANAGEMENT:

Being an academic institution, waste paper is one of the main solid wastes generated in the premises. College has taken steps to minimize and avoid paper usage.

- a) Prints and photocopies are taken on both sides of the paper to avoid excess paper usage. Rather than photocopy, digitalization (scanning) is practiced.
- b) College has one floor library with 30K+ books; journals, magazines, newspapers are also available in the library. Library has an e-book facility having 2000+ e-journals. Four computers are provided in the library to access online services.
- c) Internal notices and communications are through e-mail/ WhatsApp.
 College has a Learning Management System (LMS) where notices are sent, exam results are displayed.
- d) Paper recycled is used for laboratory work. Remaining paper waste is sent to local vendor for recycling. The dissertation reports, journals and answer papers are stored as per the University.

PLASTIC WASTE:

College strictly follows the guidelines regarding plastic usage and has prohibited the use of single use plastic e.g. carry-bags, glasses, spoons etc., in the campus. staff members always conduct the awareness program to use only jute bags.

b) As per the College guidelines, Canteen Contractor is prohibited to use plastic cutlery, instead paper plates and wooden spoons are used.

ENVIRONNEMENTAL MONITORING: Environmental Awareness Course: This is compulsory course introduced by SUS Govt. College, Sunam for second year students for all faculties. Under this course students learn to be environmentally friendly. They are made aware of

- Renewable and Non-renewable energy sources.
- ☐ Energy conservation.
- ☐ E-waste management.

AIR MONITORING: - Air quality in the academic institute is very important for health of the students, faculty and staff of the institute. The air pollution sources in the college campus are wind, pollen grains, natural dust, vehicular

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emissions, and laboratory fumes etc. The air pollutants monitored are Ozone, Carbon monoxide, Sulphur dioxide (SO2). Ammonia. Oxides of Nitrogen as NO2, Particulate Matter (PM)

Monitoring for: Air Monitoring Report (Near Main Gate)

| $\mu g/m^3$ | | |
|-------------|--------------------------|---------|
| minimum | Maximum | Average |
| 15 | 31 | 23 |
| 13 | 339 | 238 |
| 4 | 30 | 16 |
| 2 | 88 | 82 |
| 73 | 66 | 49 |
| 33 | | |
| | 15 13 4 2 73 | minimum |

NOISE POLLUTION:

Noise pollution in an institute refers to the excessive, unwanted, or disruptive sound levels within an educational or academic institution, such as a school, college, university, or research facility. It is a form of environmental pollution that can have various negative effects on students, teachers, and staff, as well as the overall learning and working environment. Here are some key aspects of noise pollution in an institute:

Sources of Noise: Noise pollution in institutes can originate from various sources, including:

Classroom activities: Noise generated by students, teachers, and equipment during lectures, discussions, and practical sessions.

Construction and maintenance work: Noise from ongoing construction or renovation projects within or near the institution.

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Outdoor sources: Traffic, industrial activities, and neighbouring establishments can contribute to noise pollution if they are in close proximity.

Recreational areas: Noise from sports facilities, playgrounds, or social gatherings can affect the learning environment.

Effects on Learning and Productivity: Excessive noise can disrupt the learning process and reduce concentration levels among students. It can also affect the productivity of teachers, researchers, and administrative staff, making it challenging to carry out their duties effectively.

Health Impacts: Prolonged exposure to high levels of noise pollution can lead to various health issues, such as stress, anxiety, hearing impairment, sleep disturbances, and even cardiovascular problems. These health issues can affect both students and staff.

Regulatory Measures: Many countries have regulations and guidelines in place to limit noise levels in educational institutions. These regulations often specify acceptable noise levels for different areas within the institution, such as classrooms, libraries, and outdoor spaces.

Mitigation Strategies: To address noise pollution in institutes, several mitigation strategies can be employed, including:

Soundproofing: Installing acoustic materials, such as sound-absorbing panels, carpets, and curtains, to reduce noise levels in classrooms and other spaces.

Scheduling: Planning construction and maintenance work during noninstructional hours to minimize disruption.

Education: Raising awareness among students and staff about the importance of reducing noise and practicing good noise etiquette.

Noise barriers: Erecting physical barriers or green spaces to shield the institution from external noise sources.

Technology: The use of technology, such as noise-cancelling headphones and acoustically designed classrooms, can also help mitigate the impact of noise pollution.

In summary, noise pollution in an institute refers to the adverse effects of excessive noise levels on the educational and working environment. It can have a significant impact on the well-being and performance of students, teachers,

im -

and Assessor

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and staff, making it important to implement measures to reduce and manage noise pollution within educational institutions.

SUS college is located in the beyond the main link road and there is no nearby railway station / bus stand / factory / theatre / playground / market / malls / banquet / marriage palace etc. So there is no much noise pollution.

Vinay Kumar Jham Lead Assessor

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Photographs of Environmental Consciousness:

The photographs are also a part of Report. This covers green area, utilities installed in the campus, Solar panels, Greenery, Safety Slogans, Environment Awareness Slogans, Green Policy, infrastructure, Outsourced process, Sports Facilities & etc.

| | | - | | |
|------|-------|----|-----|-----|
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| | ~ *** | ~~ | | |

Acceptance By the College

| Confirmation | | | | |
|--|---|--|--|--|
| Provide confirmation on accomplishment of Audit Criteria and Audit Objective | The Audit is completed as per objective and audit criteria. | | | |
| Assessment of Other Shifts (if applicable) or Review of Other Shift Records | NA | | | |
| Capture Temporary Site Details with proper Objective Evidence | NA | | | |
| (Can be a part of Production sheet as well) | | | | |

Viriay Kumar Iham

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ASSESSMENT COMMENTARY

Positive points:

- 1) Personnel involved in green audit are well-versed with the subject.
- 2) The infrastructure of the institute is excellent.
- 3) Adequate greenery is seen in the college campus.
- 4) Top management is committed to implementing all recommendations
- 5) The college has done a lot of work on event management to maintain environmental awareness.
- 6) It is a good idea to involve villages in increasing environmental awareness.
- 7) Botanical and herbal garden is a good concept.
- 8) The organization is working on green initiatives.

Vinay Kuman Jham
Lead Assessor

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Website: www.revolutionary.co.in; Contact: 7888752963 / 9988064638





Catha

Mr. Vinay Kumar Jham

16.02.2022

Mr. Ankur Singla

16.02.2022

Vinay Kamar Jham Lead Assessor

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THANK YOU...!

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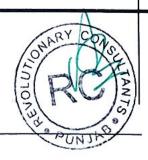
Contact: 7888752963 / 9988064638

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Website: www.revolutionary.co.in; Contact: 7888752963 / 9988064638









BSCIC

CERTIFICATE OF TRAINING

QUALITY MANAGEMENT SYSTEMS

This is to certify that: ANKUR SINGLA

Hereby issued the Certificate Number: BTQ/C119/01:0115

Subsequent to the Successful Completion and Passing the Examination of the Quality Management Systems Auditor/Lead Auditor Training Course based on ISO 9001:2008 Standard

Held on 06^{th} - 10^{th} December, 2014

Originally Issued: 10th January 2015

FOR BSCIC CERTIFICATIONS PVT. LTD.:



Sanjay Seth Managing Director Page: 1 of 1

Certificate of Successful Completion is valid for 3 years for meeting the training requirements for certification as an IRCA Auditor.

Course Number A17581 is registered by International Register of Certificated Auditors (IRCA)

BSCIC Head Quarters: Hnd Floor, SCO 150, Sector-21 C, Farklabad 121001, Haryana, INDIA, www.bsc-rec.com, +91 129 4012505



CERTIFICATE OF ACHIEVEMENT

This is to certify that

Ankur Singla

(CQI Unique Delegate Number: 144140)

successfully completed the CQI and IRCA certified

ISO 9001:2015 Lead Auditor

(Quality Management Systems) Training Course

CQI Course Id: 1722

Dates: 12 November, 2018 - 16 November, 2018



CERTIFIED COURSE

Head,

Training and Development

Monta

Certificate Number: EDU/QMS/LA/18/03915

Date of Issue: 13 December, 2018

vsed for Suran

This certificate is valid for five years from the date of last day of the course for the purpose of registering as an auditor

Edullence, CQL and IRCA Approved Training Partner | www.edullence.com | info@edullence.com | CQL and IRCA | 2nd Floor North, Chancery Exchange, 10 Furnival Street, London EC4A 1AB, United Kingdom.



PR357: ISO 45001:2018 Lead Auditor (Occupational Health & Safety Management Systems) Veed for SUS. Cort College i

Training Course

Certificate of Achievement

Mr. Ankur Singla

has successfully completed the above mentioned course and examination.

27th - 31st March 2019

DELHI, INDIA

Certificate No. 35243707 04

Delegate No. 171165

NORD CERT GmbH

Essen, 2019-04-18

The course is certified by CQI and IRCA (Certification No. 1892). The learner meets the training requirements for those seeking certification under the IRCA OHSMS Auditor certification scheme.

TÜV NORD CERT GmbH

Langemarckstraße 20

45141 Essen

www.tuev-nord-cert.com





PR315: ISO 14001:2015 Lead Auditor (Environmental Management Systems) Training course

Certificate of Achievement

Mr. Ankur Singla

Vsed for SVS Crot College; Synam

has successfully completed the above mentioned course and examination.

15th - 19th April 2019

DELHI, INDIA

Certificate No. 35244844 03

Delegate No. 171165

for TU NORD CERT GmbH

Essen, 2019-05-20

The course is certified by CQI and IRCA (Certification No. 18125). The learner meets the training requirements for those seeking certification under the IRCA EMS Auditor certification scheme.

TÚV NORD CERT GMbH

Langemarckstraße 20

45141 Essen

www.tuev-nord-cert.com



CERTIFICATE OF TRAINING

Hereby awarded to

| lor SVS chans | Ankur Singla | of |
|---------------|-------------------|--------------|
| Jack Called 1 | DNVGL | for |
| completing | g the employee se | ensitisation |
| and aw | areness course fo | or 2019 |

as mandated by The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013.

July 13, 2019

Date

dnvgl252404



Vishal Kedia, Founder & Director





CERTIFICATE OF PARTICIPATION

This certificate is awarded to

ANKUR SINGLA

Used for College 1 for participating in the online training on

ISO/TS 22163 - IRIS Certification - Railway_QMS Introduction

organized by

National Board for Quality Promotion (NBQP), Quality Council of India

on

22 October 2020

Alok Jain Director & Head, TCB

Cert No.TCB/QCI/221020/01-011

