Environment Audit Report Session:- 2019-20



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Environment Audit Report S.U.S. Government College, Sunam, (Punjab)

Certificate Date:

The Environment Audit of SUS Government College, Sunam, (Punjab) was carried out under the supervision of the undersigned. The help provided by the Principal SUS Government College, faculty and staff members is highly appreciated. Environment Audit Report session 2019-2020 has been done.

Members of the Audit Team:-

- Dr. Harbans Singh Associate Professor and Head (Department of Botany Govt. Mohindra College Patiala -147001- External)
- 2) Dr.Neelam Mukhi (Department of Zoology, Govt. Ripudaman College, Nabha-External)
- 3) Prof.Jagmeet Singh (Department of Geography, Govt. Ripudaman College, Nabha-External)
- 4) Mr. Harmeet Singh (Forest Range Officer, Block Sunam-External)
- Prof.Renu Aggarwal retired from Department of Chemistry from S.U.S. Govt. College Sunam (External)

ENVIRONMENT AUDIT REPORT Session 2019-20



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1. Introduction:

In the early 1970s Environmental safety and health auditing began to develop with a focus on companies operating in environmentally-intensive sectors such as oil and chemicals. Since then, the process has been expanding rapidly, passing through various stages of development corresponding to the approaches and techniques adopted. The essential objective of an environmental audit is to systematically examine the environmental performance of an organization's current operations. Some organizations maintain that "environmental audit" addresses only environmental matters, while others use the term to refer to audits of health, safety, and environmental matters. If it is to be said that it is a type of management tool that involves a systematic, documented periodic and objective assessment of how well environmental organizations, management and equipment are performing with the objective of helping to protect the environment, then perhaps Wouldn't be wrong. Keeping many such things in the center, if we talk about Shaheed Udham Singh Government College Sunam, then we know that Recognizing the importance of environmental protection, many works have been carried out continuously by this institution. For the past few years, the organization's willingness to do environmental self-assessment, analyze environmental policies and act on the suggestions received also underlines the organization's sincere efforts and responsible approach towards environmental protection. Always believing in and following the standards made by the organization in the matter of awareness of environmental protection, characterizes its responsible behavior for the protection of the environment.

2. About Institute:

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 with 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 NAAC Accreditation - Grade B. One of its specialties is that it strives to increase the participation of village students in the field of higher education. Its efforts are directed at providing holistic education that encourages critical and independent thinking. Adequate infrastructure facilities like class rooms, offices, library, laboratories, playground, auditorium etc. are available in the college. The college has been striving for the all round development of the students by conducting various extra-curricular activities for them apart from the regular teaching learning activities. The college is making steady progress in fulfilling its aims and objectives. It also offers undergraduate and some postgraduate courses in Arts, Commerce and Science.

3. Objectives of Environment Audit:

The main objectives of environmental audit are as follows:-

- i) The overall objective of environmental auditing is to help protect the environment.
- ii) To reduce the risk of health problems caused by the environment.
- iii) Establish goals, vision and mission for environmental practices on campus.
- iv) Continuous evaluation and suggestions for improving performance in the environment.
- v) To inspire to protect the environment through green initiatives.
- vi) Taking appropriate steps for waste management.
- vii) To facilitate management control of environmentally related practices.
- viii) To anticipate the energy requirements of the college and encourage the use of renewable energy resources.

The main objective of this audit is to reduce the risks to the health of humans, animals, birds and animals in the present time and to create maximum awareness to handle the environment.

4. Methodology

The environmental audit included physical inspection of the premises, observation etc. along with documentation review and data analysis. The study specifically covered the study of the following areas to assess the status of environment management in the campus:-

- 4.1 Energy Conservation Management.
- 4.2 Water Management.
- 4.3 Air Hygiene Management.
- 4.4 Waste Management.
- 4.5 Green Area Management.

4.1 Energy Conservation Management

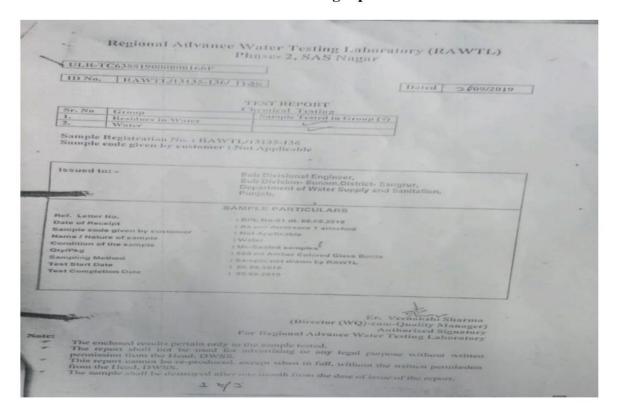
The building structure (classrooms, labs and offices) of the institution is basically designed keeping in mind good lighting and airy environment, as a result of which this structure is proving very helpful in electricity conservation. The faculty members and students switch off lights, fans and other electrical appliances when not required as a strategy given the importance of energy conservation by the institution. From time to time, students are told about the strategy of energy conservation and are also motivated to follow it. The organization is fully conscious of energy conservation and has made many such activities a part of its daily routine, which reduce the consumption of electricity.

4.2 Water Management

Water conservation is a key activity as the availability of water impacts all areas of campus development. Keeping this approach in mind the water conservation activity is carried out. Water is drawn from ground water by the Punjab Water Supply Department to meet the water requirement of the college campus. At present, there is 01 big borewell here,

which is operated by the water department established by the state government. A big tank has been made here, where water is stored. Its maintenance, cleanliness is the responsibility of the employees of the concerned water department, who deployed on duty by the department. To provide clean drinking water in the college, 04 water cooler chillers and one drinking water tank at different places in the campus (near girls common room, near seminar hall, near HEIS department, in canteen and tank near HEIS department)) are available. The suitability of drinking water is checked from time to time. Monitoring and cleaning of water cooler chiller's functioning is managed. Sewerage water in the form of waste water mainly comes from the college campus, canteen and toilets. All this water goes through the established sewerage without stopping to the sewage set up by the local municipal corporation. A committee has also been constituted for the proper management of water.

Water testing reports:



O/o Quality Manager-cum- Director (Water Quality), Regional Advance Water Testing Laboratory, DWSS Phase-2, SAS Nagar, Punjab

> Tel: 0172-2274605 (O) Email: rawtlmohali@yahoo.com rawtlmohali@gmail.com

To

Sub Divisional Engineer, Sub Division - Sunam, Distt. Sangrur, Department of Water Supply and Sanitation Punjab

ਉਪ ਮੰਡਲ ਇੰਜਨੀਅਰ ਜ/ਸ ਅਤੇ ਕ੍ਰੀਟੇਸ਼ਨ ਉਪ ਮੰਡਲ ਸਨਾਪ

No. 1708

Date: 26/09/19.

Subject :-

Test Reports of water samples.

Please find the enclosed here with the report no. Paki.7.4/13/135-13 () 1180 dated ... 26/29/13... samples received on 06.09.2019. You are requested to fill the Phase 2, SAS Nagar, Mohali

D/A Test Report

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But 27-09-19

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Quality Manager-cum-Director (WQ) RAWTL, DWSS, Punjab

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4.3 Air Hygiene Management:-

In order to minimize air pollution in the college campus, the number of plants has been continuously increased. All the vehicles are stopped in the college parking lot so that there is no pollution in the campus. Waste is managed and no waste is burnt. Students are specially involved in the plantation drive.

4.4 Waste Management:

Waste management includes the following processes and actions:-

4.4.1 Keeping in view the objective of making natural manure by the institution, the green waste collected in the campus in the form of leaves falling from the trees, vegetable peels from the college canteen, etc. is deposited in separate compost pits. And it is also used after the process of composting.

Compost Pit





- 4.4.2 Use of plastic bags is prohibited (Say NO to Plastic) and posters have been put up in the college campus to promote plastic free environment.
- 4.4.3 The waste water from AC and RO is used for watering the plants. During drinking, waste water has been managed to be dumped in nearby lawns or in sewerage.
- 4.4.4 Keeping in mind the concept of bio-degradable and non-biodegradable, colored dustbins have been arranged at different places for solid waste.

4.5 Green Area Management

The total area of S.U.S. Government College Sunam is around 21.6 acres. The total built up area is 81982 square ft which includes Administrative Block, Science Block, Commerce Block, Arts Block, HEIS Block, Post Graduation History Department, Library, Girls Common Room, Auditorium, Bathroom and Canteen. Along with this, the area of ongoing construction of Post-Graduation Punjabi Department is also included. The total open area is 858914 square ft which includes lawn, playground, stage and roads. In addition to five big lawns and two small lawns and an open green ground in front of the main stage, botanical gardens and many other place like lawn are also available in the college campus. All these are shown in the pictures below:-

Principal Office Front Lawn



Administrative Block and Girl Common Room opposite Lawn



Near Staff Room Lawn



NSS Girls Unit Lawn



Youth Red Cross Lawn



Near Science Block Lawn



Near Fine Arts Lab Lawn



Botanical Garden



History Department Lawn



Main Stage Lawn



Near Main Stage Lawn



Main water tank Lawn



4.5.1 Plants in the College Campus

The college campus has a variety of trees, plants, vines, shrubs and herbs.

The details of the plants are given below:

S.	Common Name	Botanical Name	Counting
No			
1	Safeda ਸਫੈਦਾ	Eucalyptus lanceolatus	20
2	Banayan ਬੋਹੜ	Ficus benghalensis	05
3	Sacred Fig ਪਿੱਪਲ	Ficus religiosa	08
4	Neem (ਨਿੰਮ)	Azadirachta indica	35
5	Chinaberry (ਡੇਕ)	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	11
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	03
17	Royal Bottle Palm	Roystonea regia	16
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	06
26	Monkey Puzzle	Araucaria	05
27	Lemon	Citrus limon	01
28	Guava	Psidium guajava	06
29	Bamboo	Bambusa vulgaris	01
30	Kaner	Thevetia peruviana	06
31	Bottle Brush	Callistemon	05
32	Tecoma	Tecoma stans	19
33	Mehndi	Lawsonia inermis	02
34	China Rose	Hibiscus rosa sinensis	07
35	Haar Shingar	Nyctanthes arbortristis	02
36	Jamun	Syzygium cumini	02
37	False Ashoka	Polyalthia longifolia	18
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	08
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	08
48	Rose	Rosa indica	42
49	More Pankh	Thuja	56
50	Kangi Palm	Cycas	04
51	Snake Plant	Dracaena	01
52	Flame of Forest	Butea monosperma	03
53	Siris	Albizia lebbeck	02
54	Ashwgandha	Withania somnifera	05
55	Lemon Grass	Cymbopogom	01
56	Akk	Calotropis procera	01
57	Haldi	Curcuma longa	02
58	Pathar Chatth	Bryophyllum	06
59	Aloe vera	Aloe vera	06
60	Guldaudi	Crysanthemum	20
61	Insulin Plant	Chamaecostus	03
62	Devil Tree	Alstonia scholaris	13
63	Crepe Jasmine	Tabernaemontana divaricata	10

	(2000) 1 (2000)	120/2010/03
	Total	704
	10141	701

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

5. Environmental Audit - Questionnaire

i) What is the total permanent population of the Institute during the session 2019-2029?

Student:-

3. Toilet

5. Laboratory

4. Garbage or waste storage yard

Male	1584
Female	1273
Total	2857

Total	2857	
ii) Estimated number of visitors (per day) =		250 to 300
iii) Waste minimization and recycling		Yes
iv) Green Initiatives		Yes
v) Energy Conservation		Yes
vi) Water Conservation		Yes
vii) clean air		Yes
viii) Animal and bird welfare		Yes
ix) Environmental Legislation		Yes
x) General Practice		Yes
xi) Which of the following is available in your in	astitute?	
1. Garden Area		Available
2. Playground		Available

Available

Available

Available

6. Canteen	Available
7. Guest House	Not available
8. Hostel	Not available
9. Botanical Garden	Available
10. Herbal Garden	Not available
11. Generator	Available
12. Noise pollution of generator	There are auto generators,
	noise pollution is not
	generated.
xii) Which of the following is found near your institute?	
1. Gram Panchayat Dump Yard?	
Ans:- Not around the institute.	
2. Garbage Pile?	
Ans:- No garbage dump.	
3. Public facility?	
Ans:- Yes, water facility, playground is available.	
4. Sewer line?	
Ans:- There is sewer line inside the premises.	
5. Stagnant water?	
Ans:- No stagnant water.	
6.Open drainage?	
Ans:- No.	
7. Industry-(specify type)?	

Ans:- No.

8.Bus/Railway Station?

Ans:- No.

9.Market/Shopping Complex/Public Hall?

Ans:- No.

6. Waste minimization and recycling

1. Does your organization generate any waste?

Ans:- Yes, solid waste, canteen waste, paper, plastic, horticulture waste etc.

2. What is the approximate amount of waste generated daily? (in kg/month) (approx.)

Weight:- 100 kg

- 3. How is the waste generated in the Institute managed? (By)
- 1. Fertilizer (yes)
- 2. Recycling (yes)
- 3. Reuse (yes)
- 4. Do you use recycled paper in the institute?

Ans:- Yes, we do reuse the paper printed on one side for internal use.

5. How will you spread the message of recycling to others in the community? Have you taken any initiative? If yes, please specify.

Ans:- Yes, while promoting various programs (such as NSS programs and Swachh Bharat Abhiyan), interacting with the local people while carrying out cleanliness activities and conveying this message to them.

6. Can you achieve zero waste in your institution? if so, how?

Ans:- Yes, different types of waste are classified and used like:- Jar waste is released in public sewerage. Maximum waste is given to municipal dustbin vehicles. Two types of dustbins have been provided in the campus for biodegradable and non-biodegradable waste. Horticulture waste is dumped in compost pits.

7. Suggestion:-

- 1) Water harvesting systems can be made to conserve rain water in the college campus.
- 2) Green initiative can be continued continuously.
- 3) The pollution caused by the use of generators can be further reduced.
- 4) More efforts can be made for environmental protection awareness.
- 5) More dustbins can be installed.
- 6) Paper suitable for printing can be reused from the other side.
- 7) More efforts can be made for the welfare of animals and birds.
- 8) A policy related to environmental protection can be made.

Epilogue

The mission, vision and objectives of Shaheed Udham Singh Government College Sunam is to love nature and give importance to the conservation of the environment. The college conducts green activities inside and outside the college campus to make the whole environment human and animal friendly. Organizes systematic programs for proper management of waste as well as energy conservation. There is greenery in the campus.

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Certificate

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- 5) Prof.Renu Aggarwal retired from Department of Chemistry from S.U.S. Govt. College Sunam

IQAC Co-ordinator SUS Govt. College

Sunam