

NATIONAL INSTITUTE OF SPEECH & HEARING

(An autonomous organisation under the Social Justice Department, Government of Kerala)

Accredited as Excellent Institution by RCI | ISO 9001:2015 Certified | Accredited by NAAC with A Grade

QUALITY AUDITS ON ENVIRONMENT AND ENERGY FOR GREEN CAMPUS INITIATIVES

The Institute appreciates and takes initiative in creating environmental awareness among staff and students by implementing various activities inside the Campus. The environment in the institute provides a conducive atmosphere for student development. Various measures are taken to make the campus environment friendly. Environmental awareness amongst students is inculcated through the constitution of various committees and its active initiatives. The Institute has done its first green audit in the year 2021.

The various initiatives under the green campus concepts in the Institute are as below.

- Implementation of Green Protocol Green Protocol Compliance Committee
 had been formulated to implement green protocol initiative of Haritha Kerala
 Mission Government of Kerala.
- Campus Clean Drive An initiative by the staff and students to clean out their work space, equipment, building and premises in one day annually. Staff and students participate in the clean drive very enthusiastically.
- Installation of Solar Panels, Solar water heater, LED bulbs, Biogas plants,
 Office automation, tree planting and landscaping, preserving ponds, etc. are some of the Green initiatives of the Institute.
- Bhoomithrasena Club –The club was formed under the State Plan Scheme for the colleges for strengthening the commitments of the student towards environmental protection. The club organizes activities like tree plantation, clean drive both within and outside the campus, etc.

Some photographs of various activities are given below.

NATIONAL INSTITUTE OF SPEECH & HEARING

(An autonomous organisation under the Social Justice Department, Government of Kerala)

Accredited as Excellent Institution by RCI | ISO 9001:2015 Certified | Accredited by NAAC with A Grade



Planting of Trees Image 1



Planting of Trees Image 2

NATIONAL INSTITUTE OF SPEECH & HEARING

(An autonomous organisation under the Social Justice Department, Government of Kerala)

Accredited as Excellent Institution by RCI | ISO 9001:2015 Certified | Accredited by NAAC with A Grade



Planting of Trees Image 3



Planting of Trees Image 4

NATIONAL INSTITUTE OF SPEECH & HEARING

(An autonomous organisation under the Social Justice Department, Government of Kerala)

Accredited as Excellent Institution by RCI | ISO 9001:2015 Certified | Accredited by NAAC with A Grade



Planting of Trees Image 5



Planting of Trees Image 6

Annexures

Energy Audit

Outdoor Li	ghting							
Sl. No.	Location	Tree cover*	No. of light point	Type of light#	Power Rating (W)	Units used per day	Units used per week	Units used per year

^{*} Rich/ Moderate/ Poor

[#] CFL/ LED/ Tube light/ Filament light

Indoor L	ighting						
Sl. No.	Type*	No. of light point	Type of light#	Hours of per day	Units used per day	Units used per week	Units used per year

^{*} Classrooms/ Halls/ Library/ Laboratory/ Canteen/ Hostels # CFL/ LED/ Tube light/ Filament light

Electrical gadg	Electrical gadgets and their energy use										
Sl. No.	Туре	Equipment*	Power Rating (W)	Average hourly use per week	Units used per day	Units used per week	Units used per year				

^{*} Laptops/ Ceiling fan/ Emergency light/ Table fan/ Computer/ Projector/ Cooler/ Speaker/ Fridge/ Grinder/ Purifier/ Iron box/ Stabilizer/ Mike/ Amplifier/ Printer/ Photostat Machine/ AC/ TV etc.

Indoor Li	ighting						
Sl. No.	Type*	No. of light point	Type of light#	Hours of per day	Units used per day	Units used per week	Units used per year
·							

Electrical gada	gets and their ene	rgy use					
Sl. No.	Туре	Equipment*	Power Rating (W)	Average hourly use per week	Units used per day	Units used per week	Units used per year

Indoor L	ighting						
Sl. No.	Type*	No. of light point	Type of light#	Hours of per day	Units used per day	Units used per week	Units used per year

Electrical gadş	gets and their ener	rgy use					
Sl. No.	Туре	Equipment*	Power Rating (W)	Average hourly use per week	Units used per day	Units used per week	Units used per year

Indoor L	ighting						
Sl. No.	Type*	No. of light point	Type of light#	Hours of per day	Units used per day	Units used per week	Units used per year

Electrical gadg	gets and their ener	gy use					
Sl. No.	Туре	Equipment*	Power Rating (W)	Average hourly use per week	Units used per day	Units used per week	Units used per year

Sl. No.	Type*	No. of light point	Type of light#	Hours of per day	Units used per day	Units used per week	Units used pe year

Sl. No.	Туре	Equipment*	Power Rating (W)	Average hourly use per week	Units used per day	Units used per week	Units used per year
1							
2							
3							
4							

Sl. No.	Type*	No. of light point	Type of light#	Hours of per day	Units used per day	Units used per week	Units used per year
Electrical	gadgets and thei	r energy use					
Sl. No.	Туре	Equipmen	Power Ratin (W)	g Average hou use per wee	7	Units used per week	Units used per ye

1				
2				
3				
4				
				-

Indoor Li	Indoor Lighting							
Sl. No.	Type*	No. of light point	Type of light#	Hours of per day	Units used per day	Units used per week	Units used per year	

Electrical gadg	Electrical gadgets and their energy use							
Sl. No.	Туре	Equipment*	Power Rating (W)	Average hourly use per week	Units used per day	Units used per week	Units used per year	
1								
2								
3								
4								

Indoor L	Indoor Lighting							
Sl. No.	Type*	No. of light point	Type of light#	Hours of per day	Units used per day	Units used per week	Units used per year	

Electrical gadg	Electrical gadgets and their energy use							
Sl. No.	Туре	Equipment*	Power Rating (W)	Average hourly use per week	Units used per day	Units used per week	Units used per year	
1								
2								
3								
4								

Indoor L	Indoor Lighting								
Sl. No.	Type*	No. of light point	Type of light#	Hours of per day	Units used per day	Units used per week	Units used per year		

Electrical	l gadgets	and	their	energy	use
------------	-----------	-----	-------	--------	-----

Sl. No.	Туре	Equipment*	Power Rating (W)	Average hourly use per week	Units used per day	Units used per week	Units used per year
1							
2							
3							

Monthly Electricity Bill								
Sl. No.	Month	College	Ladies Hostel	Men's Hostel	Total			

Building Energy Consumption								
CL No.	Name of Duilding	Power Consumption	Daysantaga laad ahays					
Sl. No.	Name of Building	(kW)	Percentage load share					
1								
2								
3								
4								
5								
6								
7								
8								
9								
Total Power								

Details of U	Details of UPS								
SI No	Duilding	UPS rating in kVA							Total connected UPS
SI. NO.	Sl. No. Building	3	5	7.5	10	15	20	25	load
Total				•	•		•		

Details of LPG Consumption and Bio waste generated

Name of Hostel	Average LPG Consumption per month (no. of cylinders)	Average Quantity of Food/Vegetable Waste Available

Water audit

			Table 1. Total	Water Usage			
				Measurement of W	Vater use (Per day)	
Sl. No.	Fixtures	Rate of Discharge (litre/min)	Duration of use (min)	Average quantity per use (litre)	No. of Uses	Total Daily Uses (in litres)	Per Capita Daily Use (in litres)
1	Kitchen Tap						
2	Utility Taps						
3	Bathroom Faucet-1 (Ladies Hostel)						
4	Bathroom Faucet-2 (Men's Hostel)						
5	Bathroom Faucet-3 (College)						
6	Other Bathroom Faucet						
7	Shower-1 (Ladies Hostel)						
8	Shower-2 (Men's Hostel)						
9	Outside Tap						
10	Lab Taps						
11	Others						

Table 2. Consumption of Water in the College		
Particulars	Quantity of water (in litres)	
Total daily use of water		
Per capita daily use of water		

	Table 3. Storage capacity and frequency of filling water tanks in the college				
Sl. No.	Type of building with water tank	Capacity	Frequency of filling per day (depends upon usage-average)	Average amount of water usage (litres/day)	
1					
2					
3					
4					
	Total				

Table 4. Total loss of water per day due to leaking taps		
Item	Quantity	
No. of leaking taps		
Quantity of water loss per day through leaking taps		

Data sheet

Sl. No.	Type of building	Total number of people (on an average/ day)	Paper Waste (Kg/ day) non	Plastic Waste (Kg/ day) non	Glass waste (Kg/ month) non	Damaged Furniture (Kg/ month) non	Biodegradable Waste (Sweeping waste, food waste, crop waste) (Kg/day)	Construction Waste (Kg or volume /year)	E-waste (Kg/year	Hazardous waste (Kg/month) Batteries,-nor mal batteries, ups/inverter batteries, mobile phone batteries, solar batteries, CFL lamps	Other waste (sandals, clothes, etc., (Kg/ month)
1											
2											
3											
4											
5											
6											
7											
8		·			·	·					

Waste categories and their current disposal strategies

Sl No	Categ	ories of Waste	Particulars	Types of Disposal	
1			A4 Paper (Print out papers),		
			Newspapers,		
			Paper plates ∪︀ etc		
2			Pen, Refill, Plastic water bottles and		
			other plastic containers, wrappers etc		
3			Broken glass wares from buildings		
4			Furniture from different buildings		
5			Sweeping waste, food waste, crop waste		
6					
7			Computers, Printers, other electronic gadgets		
10			Waste water from Hostels, canteens, cafeteria, toilets		
11	Other waste	1. Sandals			
		2. Clothes			

Waste treatment units, quantity of waste treated and energy &manure production details

Sl. No	Waste treatment units	Total quantity treated (Kg/day)	Approximate quantity of gas generated in Volume per day/month basis (specify accordingly)	Any other related information regarding biogas
1	Biogas			
Sl. No	Waste treatment units	Total quantity treated (Kg/day)	Organic manure produced from vermi compost used for farming and horticulture. (Kg/month or Kg/year – specify accordingly)	Any other related information including the name of earthworms used for vermi composting
2	Vermi compost			
Sl. No	Waste treatment units	Total quantity treated (Kg/day)		
3	Incinerator			
Sl. No	Waste treatment units	Total quantity treated (Kg/day)	Quantity of fish harvested (kg/year)	Any other related information including the name of fishes used for farming

4	Fish farming		

Details regarding the Sewage Treatment Plant

Sl. No	Total quantity of water used (m³)	Total quantity of waste water generated	Total quantity of water treated

Biodiversity audit

	Floral Diversity of the Campus				
		(Trees & Medicinal	l plants)		
Sl. No	Scientific name	Malayalam Name	English Name	No.	Trees (T)/ Medicina I Plants (MP)

		Faunal Diversity of the Campus	
Sl. No	Scientific name	Malayalam Name	English Name
•			

Butteri	ly Diversity of the Campus

Sl. No	Scientific name	Malayalam Name	English Name
<u>. </u>			

Odonate Diversity of the Campus						
Sl. No	Scientific name	Malayalam Name	English Name			

NATIONAL INSTITUTE OF SPEECH & HEARING

(An autonomous organisation under the Social Justice Department, Government of Kerala)

Accredited as Excellent Institution by RCI

ISO 9001:2015 Certified

Accredited by NAAC with A Grade

Minutes of the GPCC (Green Protocol Compliance Committee) Meeting

Date & Time: 11th May 2018, 10:00 hrs

Venue: Boardroom, NISH

Attendees

Dr. Samuel N Mathew, Dr. K.G Satheesh Kumar, (Director, CATI), Mr. Gopakumar G, (FO), Ms. Daisy Sebastian (Coordinator- Academics, Clinics & Intervention Programs), Ms. Rejitha L (Social Worker), Ms. Soja Oliver (Administrative Officer/Nodal Officer - GP),Mr Shaji S.V (System Administrator), Mr. Vikranth C.K (Physical Education Instructor), Mr. Prasanth R.L (Faculty, DHI), Ms. Maya G.S (EIP Teacher), Mr. Shiju R.V (Faculty, BFA), Ms. Veena Mohan (ASLP), Ms Arya S.S (ASLP)

Discussion points and decisions

Ms Soja, AO gave an introduction about the implementation of Green Protocol in NISH campus which is an initiative of Haritha Kerala Mission, Government of Kerala. In Order to achieve the Green Protocol Certification, a committee is formed as Green Protocol Compliance Committee of NISH. The present members were all selected with the primary responsibility of managing and ensuring the green protocol compliance in NISH campus. The committee was informed about the green protocol compliance activities to be carried out on a regular basis in NISH campus.

It has been decided to share the responsibility among the committee members as described in the table below. The members can work on their respective task, timely reporting and ensure corrective actions to be taken by the authorities in a timely manner. The committee members may take up their respective task at the earliest, can get a control over it and ensure to complete the task by the end of May 2018 so that a self declaration on GP compliance can be released before 5th June 2018. The task of overall coordination of the activities and GP compliance will be ensured by Mr Vikranth CK and Mr Prasanth RL.

Sl No	Task details - Actions to be taken	Task In charge	Timeline and follow up
	Ensure cleanliness in canteen and Amruth		
	building premises. Monitor & prohibit		Once in every month/As
1	adulteration of food items inside campus.	G. Gopakumar & Shiju	and when required

NATIONAL INSTITUTE OF SPEECH & **HEARING**

(An autonomous organisation under the Social Justice Department, Government of Kerala)

Accredited as Excellent Institution by RCI ISO 9001:2015 Certified Accredited by NAAC with A Grade

	Ensure cleanliness in Dhyan building premises through proper waste disposal		Once in every month/As
2	mechanisms and avoiding plastics	Veena Mohan & Arya SS	& when required
3	Ensure preparation of Green Protocol Do's & Don't list and display. Self declaration GP compliance board	Daisy Sebastian & Soja	Fourth week of May 2018 / As and when required
4	Conduct Clean drive and scrap removal. E-waste management and timely removal of the same.	Prasanth & Shaji	Clean drive -First week of October every year. Scrap removal - as and when required
.5	Ensure Green protocol compliance awareness classes, videos and PPTs among all the stakeholders of NISH. Organic farming, medicinal herbs initiatives, Bird friendly campus	Maya G.S & Rejitha	Fourth week of every month/as and when required
6	Ensure Cleanliness in Thejas building and premises. Water harvesting, water pollution control & waste disposal mechanisms.	Vikranth, Soja & Sabreen	Fourth week of every month/ as and when required
7	Ensure waste reduction and segregation at source. Prevention of air and sound pollution, necessary sign boards wherever required	Gandhian studies & Prasanth	Once in every month/ as and when required

A follow up meeting is scheduled on 25th May 2018, 10:00 at board room, Thejas to discuss on status of actions taken.

The meeting concluded with thanks to the members.

EXECUTIVE DIRECTOR National Institute of Speech & Hearing NISH Road, Sreekariyam P. O. Thiruvananthapuram - 695 017



No.39/19/NKM/D-Cell/TVPM

Collectorate, Thiruvananthapuram

Date: 16.7.2021

Phone- 0471-2731200,2731220,2731230

Extention No-2347

E-mail: navakeralatvpm@gmail.com

District Co-Ordinator
Haritha Keralam Mission

Executive Director

National Institute of Speech&Hearing NISH Road, Thiruvananthapuram-695017.

Sir,

Sub: Haritha Keralam Mission Thiruvananthapuram- NISH - Green Protocol observation – compaling – Grade intimating -reg.

Ref: 1) E-mail request of NISH dt.6.7.2021.

2) Field inspection conducted on 9.7.2021.

As per reference cited (1), the Executive Director, NISH reported that the institution has taken care for the Green Protocol norms in the various activities of the institution.

Vide reference cited (2), inspection conducted in the institution it is observed that the institution has camplaied the Green Protocol conditions in an excellent manner in the aspects of bio/non bio waste management including liquid waste, standard toilet facilities, disposal of unused furniture including E-waste, general cleanners and gardening. On the basis of verification the institution has been graded A level.

In the above circumstances your institution National Institute of Speech & Hearing will be treated as Haritha Office for observing Green Protocol norms.

Due certificate in this regard will be issued separately.

With regards

District

Haritha Keralam Mission

You<u>r'</u>s/faithfully