

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years (INR in Lakhs) (2)

2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
3.8056	3.7637	3.7415	3.758	3.7374

Year	Expenditure on green initiatives and waste management excluding salary component (INR in Lakhs)	Annual Expenditure excluding salary component of the institution
2013-2014	3.7374	Annual Expenditure (INR in Lakhs)
2014-2015	3.758	3.76124
2015-2016	3.7415	
2016-2017	3.7637	
2017-2018	3.8056	

ACCOUNTS OFFICER
Mohamed Sathak Engineering College
Kilakarai-623 806,
Ramanathapuram District

PRINCIPAL
MOHAMED SATHAK ENGINEERING COLLEGE
KILAKARAI 623 806





தமிழ்நாடு தமில்நாடு TAMIL NADU
27147 S.M.Mohamed yousuff CH-34
-3 SEP 2013

92AA 260762

T. SHANMUGAM
L. No. 9142/45/2012 Dt. 22-3-2012
No. 652, Anna Salai, Thousand Lights,
Chennai-600 008.

MEMORANDUM OF UNDERSTANDING

AGREEMENT made on this 15th Day of Sep 2013 between M/s.NACSS, 2/173, 2nd Cross street, 1st Main Road, Gomathipuram, Madurai -625 020. Ph:0452-2587194 (Hereinafter called Contractor) and The Chairman, Mohamed Sathak Engg. College, East Coast Road, Sathak Nagar, Kilakarai, Ramanathapuram - 623806 on the other Part.

Whereas the Contractor submitted a proposal in the form of quotation expressing their willingness to provide Housekeeping service to Mohamed Sathak Engg. College, East Coast Road, Sathak Nagar, Kilakarai, and accordingly mutually agreed on the following terms and conditions.

The contract shall initially be valid for a period one year and may be extended for a further period of one year on mutual consent subject to satisfactory performance, on the same terms and conditions at the sole discretion of the college.

The contractor is required to deploy Two supervisors and 25 housekeeping workers at the site. The number of requirement may increase or decrease depends upon the requirement and the decision of the chairman in this regard is final.

The works engaged in your campus will follow the Regulation of the college.

All Workers will be wear uniform / ID card during the working hours.

The Contractor agrees for providing Housekeeping service to Mohamed Sathak Engg. College, East Coast Road, Sathak Nagar, Kilakarai. for the following rates :- Which was accepted by the chairman and accordingly mutually agreed on the following terms and conditions.

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PRINCIPAL
MOHAMED SATHAK ENGINEERING COLLEGE
KILAKARAI 623 806

Places to be Cleaned:

S.No	Areas to Clean	Workers
1.	Main Block, Main entrance, Ground, Ist, IInd Floors.	6
2.	New Library block ground, Ist, IInd Floors.	3
3.	New block Ground, Ist, IInd Floors.	3
4.	B. Architect Department.	1
5.	Civil Department Ground, Ist, IInd Floors.	3
6.	Aero Lab.	1
7.	Gents hostel (Senior & Junior blocks).	6
8.	Seminar Hall No.1,2,3 , Chemical Dept, Lab, Classrooms, EEE, IT Depts.	2
9.	Supervisor for Gents Hostel	1
10	Supervisor for College Campus and Departments	1
	Total	27

Details Of Work:

Sweeping	Class rooms, Labs, Verandas, Roads inside Campus, Hostel rooms, All Departments.	Daily
Mopping	Chairman, Principal, Main Corridor, Office Room, Reception Area.	Daily
Toilet Cleaning	Above Mentioned places	Daily
Cob-web removal	Above Mentioned places	fortnightly

Nk



20/11/20
PRINCIPAL
MOHAMED SATHAK ENGINEERING COLLEGE
KILAKARAI 623806

UNIT RATE for Housekeeping service with material for 6 hrs. duty;

Sl. No	Category	No. of workers	Rate Per Head/ per Month	Total Amount
1.	Female	18	Rs.7,000/-	Rs.1,26,000/-
2.	Male	7	Rs.8,000/-	Rs. 56,000/-
3.	Supervisors	2	Rs.9,000/-	Rs. 18,000/-
	TOTAL			Rs . 2,00,000/-

Terms and Conditions:

1. Our quoted rates are inclusive of Wages, EPF, ESI, Deepavali Complements, Cleaning materials, Uniforms, Administrative charges etc
2. We will supply our own product of cleaning materials. (Exmol, Bombay Brooms, Coconut Brooms, Scrubber, Mop with Stick, Toilet Brush, Super wash, cleaning Powder, Emery Sheet, Naphthalene Balls, Urinal cubes, etc.)
3. Holidays: All Sundays & Govt. Holidays for Housekeeping workers
4. Payment shall be paid in the name of "Neat And Clean Service Squad" on or before 5th of every month.
5. The price fixed for this contract will be valid for one year from the date of Commencement.
6. Our manpower should not be encouraged in your role.

As per the instruction given by Chairman, we will commence our House Keeping Services w.e.f 15th May 2013

We can assure you sir, our NACSS Team will provide best services to you at all times.

Please send us the duly signed copy of the document as token of acceptance

Terms & Conditions agreeable
For Neat and Clean Service Squad

N. GANESAN
VICE PRESIDENT



For Mohammed Sathak Engineering College




PRINCIPAL
MOHAMED SATHAK ENGINEERING COLLEGE
KILAKARAI 623 806



NACSS - நாக்ஸ்

Neat And Clean Service Squad

ISO 9001 : 2015 Certified

Regd. Office: 2/173, 2nd Cross Street, 1st Main Road, Gomathipuram, MADURAI - 625 020. Ph : 0452 - 2587194

MD's C.G. HOUSE : D.No. 4, Subbaraya Nagar 1st Main Road, 2nd Right Cross Street, Thirunermalai Road, Chrompet, Chennai - 600 044. Cell : 82200 42008

E - mail : svpathy@hotmail.com www.4cleaning.in

INVOICE

The Principal, Mohamed Sathak Engg. College,
Keelakarai.

W.O Ref.:	Year:2014	GSTIN:33ACWPP2983R1ZE
No. 238		ESI 57-00-020572-000-10001

EPF CODE No. MD/MDU/57360

	Description		Qty.	Rate	Total Amount
1	EXNOL	LTRS.	300	350	105600
2	SOAP OIL	LTRS.	360	60	21600
3	HARPIC	LTRS.	360	70	25800
4	ACID	LTRS.	240	45	10800
5	ROOM SPRAY	LTRS.	300	50	15600
6	BOMBAY BROOMS	NOS.	420	80	33600
7	COCONUT BROOMS	NOS.	360	30	10800
8	BLEACHING POWDER	KGS.	240	50	12000
9	CLEANING POWDER	KGS.	240	19	4560
10	TOILET BRUSH	NOS.	240	70	16800
11	MOP WITH STICK	NOS.	300	150	45000
12	WIPER WITH STICK	NOS.	120	180	21600
13	SANI CUBES	PKTS.	180	42	7560
14	NAPHTHALINE BALLS	KGS.	18	250	4500
15	EMERY SHEET	NOS.	600	21	12600
16	DUSTING CLOTH	NOS.	360	12	4584
17	HAND GLOVES	NOS.	240	30	7200
18	IRON SCRUBBER	NOS.	240	10	2400
19	SPADER	NOS.	180	40	7200
20	PEDAL BROOM		24	250	6000
TOTAL					375804

N. GANESAN
VICE PRESIDENT-NACSS

OUR SPECIAL SERVICES ARE : Garbage Cleaning - Solid Waste Management - Toilets, Urinals, Floor Cleaning - Oil Mopping
Cobweb Removal - Vacuum Cleaning - Office Cleaning Maintenance - Garden Maintenance - Plastic Bottle Recycling - Security Service -
Temple Maintenance - Messenger Services - Hospital Maintenance - etc.
NTF-NACSS Task Force (Mechanised Cleaning Service)



NACSS - நாக்ஸ்

Neat And Clean Service Squad

ISO 9001 : 2015 Certified

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EPF CODE No. MD/MDU/57360

	Description		Qty.	Rate	Total Amount
1	EXNOL	LTRS.	300	350	105000
2	SOAP OIL	LTRS.	360	60	21600
3	HARPIC	LTRS.	360	70	25200
4	ACID	LTRS.	240	45	10800
5	ROOM SPRAY	LTRS.	300	50	15000
6	BOMBAY BROOMS	NOS.	420	80	33600
7	COCONUT BROOMS	NOS.	360	30	10800
8	BLEACHING POWDER	KGS.	240	50	12000
9	CLEANING POWDER	KGS.	240	19	4560
10	TOILET BRUSH	NOS.	240	70	16800
11	MOP WITH STICK	NOS.	300	150	45000
12	WIPER WITH STICK	NOS.	120	180	21600
13	SANI CUBES	PKTS.	180	42	7560
14	NAPHTHALINE BALLS	KGS.	18	250	4500
15	EMERY SHEET	NOS.	600	21	12600
16	DUSTING CLOTH	NOS.	360	12	4320
17	HAND GLOVES	NOS.	240	30	7200
18	IRON SCRUBBER	NOS.	240	10	2400
19	SPADER	NOS.	180	40	7200
20	PEDAL BROOM		24	250	6000
TOTAL					373740


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NACSS - நாக்ஸ்

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INVOICE

The Principal, Mohamed Sathak Engg. College,
Keelakarai.

W.O Ref.:	Year:2017	GSTIN:33ACWPP2983R1ZE
No. 238		ESI 57-00-020572-000-10001
EPF CODE No. MD/MDU/57360		

Sl.No.	Description		Qty.	Rate	Total Amount
1	EXNOL	LTRS.	305	352	107360
2	SOAP OIL	LTRS.	360	57	20520
3	HARPIC	LTRS.	363	70	25410
4	ACID	LTRS.	250	48	12000
5	ROOM SPRAY	LTRS.	300	50	15000
6	BOMBAY BROOMS	NOS.	480	80	38400
7	COCONUT BROOMS	NOS.	330	28	9240
8	BLEACHING POWDER	KGS.	245	50	12250
9	CLEANING POWDER	KGS.	239	19	4541
10	TOILET BRUSH	NOS.	240	69	16560
11	MOP WITH STICK	NOS.	301	150	45150
12	WIPER WITH STICK	NOS.	122	177	21594
13	SANI CUBES	PKTS.	177	43	7611
14	NAPHTHALINE BALLS	KGS.	19	250	4750
15	EMERY SHEET	NOS.	600	22	13200
16	DUSTING CLOTH	NOS.	358	12	4296
17	HAND GLOVES	NOS.	238	30	7140
18	IRON SCRUBBER	NOS.	238	10	2380
19	SPADER	NOS.	179	40	7160
20	PEDAL BROOM		24	250	6000
TOTAL					380562


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VICE PRESIDENT-NACSS


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Temple Maintenance - Messenger Services - Hospital Maintenance - etc.
NTF-NACSS Task Force (Mechanised Cleaning Service)

INVOICE

The Principal, Mohamed Sathak Engg. College,
Keelakarai.

W.O Ref.:	Year:2016	GSTIN:33ACWPP2983R1ZE
No. 238		ESI 57-00-020572-000-10001
EPF CODE No. MD/MDU/57360		

Sl.No.	Description		Qty.	Rate	Total Amount
1	EXNOL	LTRS.	301	345	103845
2	SOAP OIL	LTRS.	360	57	20520
3	HARPIC	LTRS.	363	70	25410
4	ACID	LTRS.	250	48	12000
5	ROOM SPRAY	LTRS.	300	50	15000
6	BOMBAY BROOMS	NOS.	480	80	38400
7	COCONUT BROOMS	NOS.	330	28	9240
8	BLEACHING POWDER	KGS.	245	50	12250
9	CLEANING POWDER	KGS.	239	19	4541
10	TOILET BRUSH	NOS.	240	69	16560
11	MOP WITH STICK	NOS.	301	150	45150
12	WIPER WITH STICK	NOS.	122	177	21594
13	SANI CUBES	PKTS.	177	43	7611
14	NAPHTHALINE BALLS	KGS.	18	250	4500
15	EMERY SHEET	NOS.	600	21	12600
16	DUSTING CLOTH	NOS.	363	12	4356
17	HAND GLOVES	NOS.	240	30	7200
18	IRON SCRUBBER	NOS.	240	10	2400
19	SPADER	NOS.	180	40	7200
20	PEDAL BROOM		24	250	6000
TOTAL					376377


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INVOICE

The Principal, Mohamed Sathak Engg. College,
Keelakarai.

W.O Ref.:	Year:2015	GSTIN:33ACWPP2983R1ZE
No. 238		ESI 57-00-020572-000-10001
EPF CODE No. MD/MDU/57360		

	Description		Qty.	Rate	Total Amount
1	EXNOL	LTRS.	300	350	105000
2	SOAP OIL	LTRS.	360	57	20520
3	HARPIC	LTRS.	360	70	25200
4	ACID	LTRS.	250	45	11250
5	ROOM SPRAY	LTRS.	300	50	15000
6	BOMBAY BROOMS	NOS.	430	80	34400
7	COCONUT BROOMS	NOS.	360	30	10800
8	BLEACHING POWDER	KGS.	245	50	12250
9	CLEANING POWDER	KGS.	240	19	4560
10	TOILET BRUSH	NOS.	240	70	16800
11	MOP WITH STICK	NOS.	300	150	45000
12	WIPER WITH STICK	NOS.	120	180	21600
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14	NAPHTHALINE BALLS	KGS.	18	250	4500
15	EMERY SHEET	NOS.	600	21	12600
16	DUSTING CLOTH	NOS.	360	12	4320
17	HAND GLOVES	NOS.	240	30	7200
18	IRON SCRUBBER	NOS.	240	10	2400
19	SPADER	NOS.	180	40	7200
20	PEDAL BROOM		24	250	6000
TOTAL					374160

N. Ganesan
N.GANESAN
VICE PRESIDENT-NACSS

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NTF-NACSS Task Force (Mechanized Cleaning Service)

MOHAMED SATHAK ENGINEERING COLLEGE

GREEN AUDITING

ACKNOWLEDGEMENT

We would like to thank our Management and Principal, Dr.J.Abbas Mohaideen for his consent to conduct this audit. We would like to sincerely thank all the Departments, students, teaching and nonteaching staff for their kind cooperation with us during this survey. We would also like to specially thank the Laboratory Assistants who helped us a lot in furnishing this information.

Objectives of this green audit

1. Verifying compliance: Verifying compliance with standards or best available techniques.
2. Identifying problems: Detecting any leakage, spills or other such problems with the operations and processes.
3. Formulating environmental policy: Formulating the organization's environmental policy if there is no existing policy.
4. Measuring environmental impact: Measuring the environmental impact of each and every process and operation on the air, water, soil, worker health and safety and society at large.
5. Measuring performance: Measuring the environmental performance of an organization against best practices.
7. Confirming environmental management system effectiveness: Giving an indication of the effectiveness of the system and suggestions for improvement.
8. Providing a database: Providing a database for corrective action and future plans.
9. Developing the organization's environmental strategy: Enabling management to develop its environmental strategy for moving towards a greener corporate and Performance culture.
10. Communication: Communicating its environmental performance to its stakeholders though reporting will enhance the image of the company.

General steps

1. Systematic and comprehensive data collection
2. Documentation with physical evidences
3. Independent periodic evaluation with regulatory requirements and appropriate standards
4. Systematic and comprehensive improvement and management of existing system

Green Audit Assessment Team

The following are the members of the Green Audit Team.

S.No	Name	Designation
1.	Dr.Vadivel	Assistant Professor
2.	Dr.J.Rajesh	Assistant Professor
3.	Mr.Lenin Prabhu	Assistant Professor
4.	Mr.Jaiganesh	Assistant Professor

The audit process:

The present audit is a Preaudit to collect the details required for external auditing.

Preaudit activities

The preaudit activities include the following:

1. The sites / area /division that are to be audited need to be determined and selected.
2. The auditee were informed of the date of the audit enabled them to adjust and become used to the concept.
3. The audit scope were identified. The auditee were consulted when establishing the scope.
4. The audit plan was designed in such a way that it accommodated changes based on information gathered during the audit and effective use of resources.
5. Audit team and assignment of responsibility were established.
6. The chosen working papers were collected. This facilitated the auditors' investigations on the sites.
7. The background information on the site's historical uses, and the location of soil and groundwater contamination were collected.
8. The preaudit questionnaire was informed to auditee

Onsite audit activities

The onsite audit includes:

1. The opening meeting is the first step between the audit team and auditee. In this meeting the purpose of audit, the procedure and the time schedule were discussed.
2. Site inspection is the second step for onsite activity. In this step the audit team discovered matters which are important to the audit but which were not identified at the planning stage.
3. Onsite phase of the audit developed a working understanding of how the facility manages the activities that influence the environment.
4. Assessed strengths and weaknesses of the auditee's management controls and risks associated with their failure were established.

5. Gathering audit evidence ie, collecting data and information using audit protocol.
6. Communicated with the staff of the auditee to obtain most information.
7. Evaluated the audit evidence against the objectives established for the audit.
8. An exit meeting to explain the audit findings

PROCEDURE FOLLOWED

The students were divided into four groups, and under the guidance of the teaching staff of the Department of Chemical and Applied Science and Humanities, each group collected data on the assigned topics. The assigned topics were as follows :

1. Analysis of Air Quality and Biodiversity
2. Analysis of Water quality and usage
3. Analysis of Energy consumption and costs
4. Analysis of waste generation and disposal

All the data were united and based on these, a report was formulated.

REPORT

1. Analysis of Air quality and biodiversity

In total, based on our data collected, there are 1500 plants in the college campus. This plant in our college contributes to the Oxygen supply that we utilize. Based on our calculation, the different sources of carbon dioxide emitted to our college are:

1. Vehicles
2. Refrigerator
3. Air conditioners
4. Burning
5. Water coolers

A.Vehicles

On the days of data collection, there were 10 cars, 7 bikes in our campus, which in turn proves us that these vehicles may contribute to high carbon dioxide emission. There are 2 refrigerators, 6 air conditioners in our campus. The students, teaching and nonteaching staff and the visitors also contribute to carbon dioxide emission. The food papers are collected from the classes are burnt outside the campus

2. Analysis of Water quality and usage

The college campus possesses many water outlets. Our students have counted the total number of taps, rain water harvesting plant. We have found that in total, there are 200 taps, 9 rain water harvesting plants worth 50,000 litres and a well.

3. Analysis of Energy consumption and costs

The college is well equipped with electricity supply. Each department possess computers, printers, fans, plug points, bulbs, etc. We are solely replacing conventional bulbs with LEDs which can reduce energy consumption as well as costs.

4. Analysis of Waste generation and disposal

Wastes cannot be avoided in any environment. Wastes can be classified as Biodegradable and Non- biodegradable wastes. Biodegradable wastes include food wastes; which can be easily decomposed by the bacteria in soil. But non biodegradable wastes are those which cannot be degraded by any organism and remain as such for many years. Much amount of waste is generated from the college campus.

1. CANTEEN – The food waste generated from the canteen is collected and disposed in proper way. Plastic waste is generally less generated from the canteen.
2. LIBRARY - The most generated waste is paper waste. It is taken for recycling.
3. STORE- Not much waste is generated.
4. OFFICE- Paper waste generated are recycled and reused.
5. GARDEN-Plastic and paper waste is comparatively less.
6. AUDITORIUM -The wastes are collected after each programme and are burned.
7. BATHROOM-The wastes are collected and burned out
8. CLASSROOMS-Paper Wastes are collected in the waste basket and recycled.
- 8 LABORATORY-The broken glass wastes and the useless instruments are disposed for recycling after thorough washing.
10. COLLEGE PREMISES-Plastic waste generated is usually less.



Latitude: 9.234881
Longitude: 78.759701
Elevation: 5.17m
Accuracy: 4.3m
Time: 28-12-2018 16:21
Note: campus

GREEN INITIATIVES BY THE COLLEGE



In collaboration with Kalam Foundation a Target with one Lakh Tree Plantation(in and around our District) is initiated by The famous Comedian of Tamil Film Industry Actor Vivek. Generally trees absorb odors and pollutant gases (nitrogen oxides, ammonia, sulfur dioxide and ozone) and filter particulates out of the air by trapping them on their leaves and bark. In one year an acre of mature trees can provide enough oxygen for 18 people.



STP PLANT

Our college has Sewage Treatment Plant Which is used to recycle the waste water from our college hostel.



RAIN WATER HARVEST

Rainwater harvesting (RWH) is implemented in our college. The collected rainwater is stored and utilised in different ways or directly used for recharge purposes. With depleting groundwater levels and fluctuating climate conditions, RWH can go a long way to help mitigate these effects. Capturing the rainwater can help recharge local aquifers, reduce urban flooding and most importantly ensure water availability in water-scarce zones.

