

## Saranathan College of Engineering

## Department of EEE

## Cost saving achieved through solar energy NACC 7.1.2

S.No	Academic year	Utility electricity units consumption	Gross utility bill amount/annum in Rupees	Electricity units produced through solar PV plant	Cost of solar units produced in Rupees	Annual saving achieved through renewable energy in Rupees	Reduction of emission of CO <sub>2</sub> in tons
1	2015(june)-2016(May)	368461.8	3991256	9091.5	60640.31	60640.305	9.0915
2	2016(June)-2017(May)	604720.8	6358504.2	15463	103138.2	103138.21	15.463
3	2017(June)-2018(May)	573730.4	6122661	26444.8	197594.7	197594.686	26.444
4	2018(June)-2019(May)	628490.4	6369951	33491	262182.8	262182.8	33.491
5	2019 (June)-2020 (May)	548362.6	5850462	26818	214132.8	214132.84	26.818
Total	2015(june) To 2020(May)	2723766	28692834.2	111308.3	837688.8	837688.841	111.3075

Solar PV plant commissioned date: September 2017(20.16kW)& November 2013(10kW)

Capital cost of the plant: (20.16kW)Rs. 14,40,000/- + (10kW) Rs.10,50,000 =Rs. 24,90,000/-

Installed capacity of the plant: 20.16kW + 10 kW

## Cost saving achieved through BIO GAS energy

S.No	Year	Total Bio-gas produced in cubic meter	Total Number of LPG cylinder equally conserved	Cost of LPG saved in Rupees
1	from 2016 (May)- to 2020(June)	4889.43	129 Numbers(commercial cylinder -19 kg)	1,78,020

Bio- gas plant commissioned date: May 2016

Capital cost of the plant: Rs. 6,00,000/-

capacity of the plant: 30 Cubic Meter

**SARANATHAN COLLEGE OF ENGINEERING, TIRUCHIRAPPALLI – 12**

**DEPARTMENT OF CHEMISTRY**

Office Note

03-05-2016

**Submitted to the Principal:**

**Sub:** Water treatment report for college purposes for the academic year 2015-16– reg.

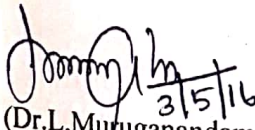
Our Chemistry Department is analysing the water samples from various places such as Girls hostel, Boys hostel, Electrical and Maintenance department of our college. The analysis has been done by Mr.B.Balaprasad, AP/Chemistry for this academic year. The test reports are provided for your kind perusal.

**Analysis report of water sample received from Girls Hostel, Alundur.**

S.NO	DATE	PARAMETER	REPORT
1	13-08-2015	Hardness	CH = 110 ppm NCH = 36 ppm TH = 146 ppm
2	13-08-2015	Alkalinity	$\text{CO}_3^{2-}$ = 26 ppm $\text{OH}^-$ = 12 ppm $\text{HCO}_3^-$ = 0 ppm
3	13-08-2015	Dissolved Oxygen (D.O.)	8.0 ppm
4	13-08-2015	Chloride	98 ppm
5	13-08-2015	pH	7.12 ppm

**Analysis report of water sample received from Maintenance department**

S.NO	DATE	PARAMETER	REPORT
1	18-03-2016	Hardness	CH= 90 ppm NCH= 36 ppm TH= 126 ppm
2	18-03-2016	Alkalinity	$\text{CO}_3^{2-}$ = 20 ppm $\text{OH}^-$ = 10 ppm $\text{HCO}_3^-$ = 0 ppm
3	18-03-2016	Dissolved Oxygen (D.O.)	6.9 ppm
4	18-03-2016	Chloride	106 ppm
5	18-03-2016	pH	7.06 ppm

  
(Dr.L.Muruganandam)  
HOD/Chemistry



**SARANATHIAN COLLEGE OF ENGINEERING, TIRUCHIRAPPALLI – 12**

**DEPARTMENT OF CHEMISTRY**

Office Note

21-04-2017

**Submitted to the Principal:**

**Sub:** Water treatment report for college purposes for the academic year 2016-17– reg.


Our Chemistry Department is analysing the water samples from various places such as Girls hostel, Boys hostel, Electrical and Maintenance department of our college. The analysis has been done by Ms.G.Thulasi, AP/Chemistry for this academic year. The test reports are provided for your kind perusal.

Analysis report of water sample received from Girls Hostel, Alundur.

S.NO	DATE	PARAMETER	REPORT
1	03-08-2016	Hardness	CH = 106 ppm NCH = 34 ppm TH = 140 ppm
2	03-08-2016	Alkalinity	$\text{CO}_3^{2-}$ = 24 ppm $\text{OH}^-$ = 16 ppm $\text{HCO}_3^-$ = 0 ppm
3	03-08-2016	Dissolved Oxygen (D.O.)	7.2 ppm
4	03-08-2016	Chloride	90 ppm
5	03-08-2016	pH	7.12 ppm

Analysis report of water sample received from Maintenance department

S.NO	DATE	PARAMETER	REPORT
1	30-12-2016	Hardness	CH= 80 ppm NCH= 30 ppm TH= 110 ppm
2	30-12-2016	Alkalinity	$\text{CO}_3^{2-}$ = 24 ppm $\text{OH}^-$ = 0 ppm $\text{HCO}_3^-$ = 10 ppm
3	30-12-2016	Dissolved Oxygen (D.O.)	6.5 ppm
4	30-12-2016	Chloride	104 ppm
5	30-12-2016	pH	7.08 ppm

  
(Dr.L.Muruganandam)  
HOD/Chemistry

  
21/4/17

**SARANATHIAN COLLEGE OF ENGINEERING, TIRUCHIRAPPALLI – 12**

**DEPARTMENT OF CHEMISTRY**

**Office Note**

**27-04-2018**

**Submitted to the Principal:**

**Sub:** Water treatment report for college purposes for the academic year 2017-18– reg.

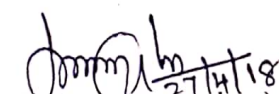
Our Chemistry Department is analysing the water samples from various places such as Girls hostel, Boys hostel, Electrical and Maintenance department of our college. The analysis has been done by Dr.V.Balamurugan, AP/Chemistry for this academic year. The test reports are provided for your kind perusal.

**Analysis report of water sample received from Girls Hostel, Alundur.**

S.NO	DATE	PARAMETER	REPORT
1	30-08-2017	Hardness	CH = 106 ppm NCH = 32 ppm TH = 138 ppm
2	30-08-2017	Alkalinity	$\text{CO}_3^{2-}$ = 20 ppm $\text{OH}^-$ = 12 ppm $\text{HCO}_3^-$ = 0 ppm
3	30-08-2017	Dissolved Oxygen (D.O.)	7.4 ppm
4	30-08-2017	Chloride	94 ppm
5	30-08-2017	pH	7.14 ppm

**Analysis report of water sample received from Maintenance department**

S.NO	DATE	PARAMETER	REPORT
1	21-11-2017	Hardness	CH= 72 ppm NCH= 34 ppm TH= 106 ppm
2	21-11-2017	Alkalinity	$\text{CO}_3^{2-}$ = 16 ppm $\text{OH}^-$ = 12 ppm $\text{HCO}_3^-$ = 0 ppm
3	21-11-2017	Dissolved Oxygen (D.O.)	6.8 ppm
4	21-11-2017	Chloride	105 ppm
5	21-11-2017	pH	7.06 ppm

  
(Dr.L.Murugahandam)  
HOD/Chemistry

  
27/4/18



**SARANATHAN COLLEGE OF ENGINEERING, TIRUCHIRAPPALLI – 12**  
**DEPARTMENT OF CHEMISTRY**

Office Note

23-04-2019

**Submitted to the Principal:**

**Sub:** Water treatment report for college purposes for the academic year 2018-19– reg.

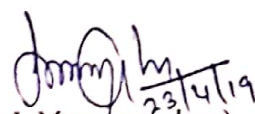
Our Chemistry Department is analysing the water samples from various places such as Girls hostel, Boys hostel, Electrical and Maintenance department of our college. The analysis has been done by Dr.S.Priyarega, AP/Chemistry for this academic year. The test reports are provided for your kind perusal.

**Analysis report of water sample received from Girls Hostel, Alundur.**

S.NO	DATE	PARAMETER	REPORT
1	28-08-2018	Hardness	CH = 94 ppm NCH = 36 ppm TH = 130 ppm
2	28-08-2018	Alkalinity	$\text{CO}_3^{2-}$ = 22 ppm $\text{OH}^-$ = 10 ppm $\text{HCO}_3^-$ = 0 ppm
3	28-08-2018	Dissolved Oxygen (D.O.)	8.1 ppm
4	28-08-2018	Chloride	92 ppm
5	28-08-2018	pH	7.10 ppm

**Analysis report of water sample received from Maintenance department**

S.NO	DATE	PARAMETER	REPORT
1	12-11-2018	Hardness	CH= 76 ppm NCH= 32 ppm TH= 108 ppm
2	12-11-2018	Alkalinity	$\text{CO}_3^{2-}$ = 18 ppm $\text{OH}^-$ = 10 ppm $\text{HCO}_3^-$ = 0 ppm
3	12-11-2018	Dissolved Oxygen (D.O.)	7.0 ppm
4	12-11-2018	Chloride	102 ppm
5	12-11-2018	pH	7.04 ppm

  
(Dr.L.Muruganandam)  
HOD/Chemistry

  
23/4/2019

## Office Note

Submitted to the Principal:

Sub: Water treatment report for college purposes for the academic year 2019-20- reg.

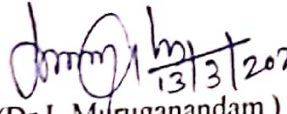
Our Chemistry Department is analysing the water samples from various places such as Girls hostel, Boys hostel, Electrical and Maintenance department of our college. The analysis has been done by Mr.A.Lakshmanan, AP/Chemistry for this academic year. The test reports are provided for your kind perusal.

Analysis report of water sample received from Girls Hostel, Alundur.

S.NO	DATE	PARAMETER	REPORT
1	31-07-2019	Hardness	CH = 98 ppm NCH = 38 ppm TH = 136 ppm
2	31-07-2019	Alkalinity	$\text{CO}_3^{2-}$ = 18 ppm $\text{OH}^-$ = 8 ppm $\text{HCO}_3^-$ = 0 ppm
3	31-07-2019	Dissolved Oxygen (D.O.)	7.9 ppm
4	31-07-2019	Chloride	97 ppm
5	31-07-2019	pH	7.10 ppm

Analysis report of water sample received from Maintenance department

S.NO	DATE	PARAMETER	REPORT
1	22-11-2019	Hardness	CH= 76 ppm NCH= 28 ppm TH= 104 ppm
2	22-11-2019	Alkalinity	$\text{CO}_3^{2-}$ = 14 ppm $\text{OH}^-$ = 6 ppm $\text{HCO}_3^-$ = 0 ppm
3	22-11-2019	Dissolved Oxygen (D.O.)	7.4 ppm
4	22-11-2019	Chloride	100 ppm
5	22-11-2019	pH	7.14 ppm

  
(Dr.L.Muruganandam)  
HOD/Chemistry

  
13/3/2020