

## ST. GREGORIOS MEDICAL MISSION HOSPITAL

(AN NABH ACCREDITED HOSPITAL)



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No-058/21

Dated 16.04.2021

Environmental Engineer Central Pollution Control Board NisargaBhavan, Thimmaiah Road, 7<sup>th</sup> D Main Road, Shivanagar, Bengaluru, 560079

Dear Sir,

Sub: Six monthly Progress Report (April 2020 to September, 2020) on Environmental Clearance in respect Mls St. Gregorios International Cancer Centre, Parumala P.O., Thiruvalla, Pathanamthitta District - 689626, Kerala

Ref: EC order No F. No. 23-65/2018-IA-III Government of India, MoEF & CC dt 8/04/2019

With reference to the above we are here by submitting the six monthly compliance report for the period from April 2020 to September, 2020 on Environmental Clearance in respect of M/s St. Gregorios International Cancer Centre, Parumala P.O., Thiruvalla Pathanamthitta, District - 689626, Kerala.

Thanking You,

Yours Faithfully

Fr. M.C Poulose

Chief Executive Officer

Encls: As above



## Remediation plan & budgetary provisions and compliance during October 2019 to March-2020

S. No.	Particulars	Revised Budget Allocation (in Rs.)	Compliance
1.	Air Environment	1. The dust suppression and water sprinkling system consists of water sprinkler nozzles (about '7 dozen @ Rs. 1,000 per nozzle i.e. Rs. 6,000), Online twin filtration system (Rs. 15,000), Booster pump (1 HP (@ Rs. 10,000)), Water distribution pipeline (LS Rs. 10,000) and water storage tank (5,000 Itr @ Rs. 25,000.). Labour cost of Rs. 10,000. The total cost on water sprinkling and dust	1.In consultation with the secretary, Kadapra Grama Panchayath, installed dust suppression and water sprinkling system consists of water sprinkler nozzles with total cost Rs. 76,000.The completion certificate is attached as Annexure-1
		suppression system is Rs. 76,000.  2. Wind breakers / barricades in the periphery of project site (3m. height GI sheet) (Rs. 1,00,000).	2.In consultation with the secretary, Kadapra Grama Panchayath, installed Windbreakers / barricades in the periphery of project site (3m. height GI sheet) (Rs. 1,00,000). The completion certificate is attached as Annexure-2
		3. Vehicle check up camp (@ Rs. 10,000 per camp andRs.20,000 annual).	3. In association with Motor Vehicle Department, Thiruvalla, carried out Vehicle checkup camp on 4 <sup>th</sup> march,2020. The news is Published in March 6 <sup>th</sup> edition of Malayala manorama and is attached as Annexure 3
		4. Ambient air quality monitoring in sensitive areas (@ Rs. 5,000 per month x 12 months i.e.Rs.60,000x2 locations=Rs. 1,20,000).  Total cost on remediation measures on Air Environment isRs. 3,16,000/-	4.Monthly Ambient air quality monitoring were carried out from two sensitive areas of Kadapra Grama panchayath(Taluk hospital compound and Govt.HSS compound)by Standard Environmental and analytical Laboratories, Ernakulam and the reports are annexed as Annexure-4

		T.	T
2.	Ecological Environment	1. Plantation with native species of flowering and fruit bearing trees to compensate the removal of trees. 560 trees within the surrounding area are proposed for plantation at a cost of @ Rs. 1,100 per plant which includes maintenance for three years.	1.As per the direction of District forest department, planted 500 trees in ten locations of Kadapra panchayath, list of locations for plantations are annexed in Annexure number
		The total cost estimate for tree plantation is 560 trees x Rs. 1100 = Rs.6,16,000.	2. Noted and will be complied
		2. Cost of development of butterfly garden is Rs. 1,64,000 (L.S. estimate). Cost of development of medicinal garden is Rs. 1,60,000 (L.S. estimate). Noted and will be complied	3.Noted and will be complied
		3. Rs. 50,000/- for development of panchayat park / avenue plantation towards habitat compensation.	
		Total cost on remediation measures on Ecological Environment is Rs.9,90,000/-	
3.	Water Environment	Rs. 50,000/- for restoration of abandoned wells(Rs.10,000 x 5 wells) + Rs. 50,000/- for water sampling and monitoring (Rs. 5,000 x 10samples). (Rs.10,000 x 5 wells) + Rs. 50,000/- for water sampling and monitoring (Rs. 5,000 x 10samples)	Completed maintenance and improvement of wells in Valethu Colony of Kadapra grama panchayath, Parumala, The completion certificate is attached as Annexure-5
	monitoring (Rs. 5,000 x 10samples).  Total =Rs. 1,00,000/-		Water samples were collected and analyzed by Standard Environmental and analytical Laboratories, Ernakulam and the reports are annexed as Annexure-6
		I D 2 00 000 / for a shahilitation of illega	1. As per the direction of panchayath authorities, pond rehabilitation will be carried out as early as possible
		I. Rs. 2,00,000/- for rehabilitation of village pond.	II. Installed two units of portable toilet at site (1 for male and 1 for female) for Kannassa Smarakap Govt. Higher Secondary School, Kadapara during
		II. Rs. 60,000/- towards set up of 2 units of portable toilet at site (1 for male and 1 for female).	the month of November 2009. The completion certificate is attached as Annexure-7

			III. Noted and will be complied	
	<ul><li>III. Rs. 5,50,000 on setting up of an STP of 5 KLD capacity.</li><li>IV. Channelization of storm water (Rs.4,00,000).</li></ul>		IV. Discussed the matter with the panchayath Authorities and decided to carried out the work in Arikkapuram padam were storm water is directly discharged and also decided to start the work as early as possible	
		V. Frequent cleaning of the vicinity of site before monsoon(Rs.50,000).	V. Noted and will be complied	
		Total cost on remediation measures on Water Environment is Rs.13,60,000/-		
4.	Land Environment	1. Rs. 50,000/- for creating barriers to avoid erosion and to maintain its integrity so as to use it further for landscaping.	In consultation with the panchayath authorities, located the place for creation of barriers to avoid erosion and the work is in progress	
		2. Rs. 10,000 (LS) for printing & distribution		
		of leaflets.  3. Rs. 60,000/- for 20 bins (@Rs. 3,000 per bin).	3. Ten bins are purchased and utilized for the purpose of Covid campaign works	
		4. Secured intermediate leachate proof facility for storage (LS. Rs. 1,00,000).	4. Noted and will be complied	
		Total cost on remediation measures on Land Environment is Rs. 2,20,000/-		
5.	Noise Environment Providing Personnel protective equipment's (PPE) to the Health Department of the panchayat Rs. 50,000/- (LS.)		As per the direction of Health department the Personnel protective equipment's were provided to	
		Total cost on remediation measures on Noise Environment is Rs.50,000/-	primary health centre.details are Annexed in annexure No-13	
6.	Socio - Economic Environment	1. Providing first aid kits (5 nos.) to the construction sites (public works within the panchayat) [Rs. 10,000/- (@Rs. 2,000 permit].	Discussed the matter with Panchayath Authorities and will be complied	
		2. Providing a wheel chair (2 nos.) + to the primary health centre within the		

panchayat and in consultation. [Rs. 24,000 (@ Rs. 12,000 per wheelchair)	

### 6. Natural Resource Augmentation plan & budgetary provisions

S. No.	Activity	Revised Budget Allocation (in Rs.)	
		1 <sup>st</sup> year	Compliance
1.	Development of greenery in the surrounding area and road side plantation	25,000/-	Noted and will be complied
2.	Provision of drinking water facilities through construction of hand pumps / dug wells / tube wells. 5 hand pups / wells per year in the nearby villages with maintenance	50,000/-	Identified the well in Valeth colony and make provision for drinking water facility. The completion certificate is attached as Annexre-8
3.	Maintenance of village road, near the panchayath office or any other badly damaged road in consultation with panchayath (7 m. carriage way (1 km. length)	2,50,000/-	Completed the reconcreting work of Kottakkamalai road, ward No-9, Kadapra Grama panchayath . The completion certificate is attached as Annexre-9
4.	Construction of pipeline network in the village in association with Grama panchayat and water resource department (Kerala Water Supply Authority)	1,00,000/-	contacted office of Kerala Water Supply Authority and the work will be done as early as possible
5.	Provision of solar system in common areas through local administration	25,000/-	As per the direction of Panchayath authorities, installed the solar system to Public Health centre, Kadapra Grama panchayth . The completion certificate is attached as Annexre-10
6.	Rainwater harvesting and ground water recharge development	30,000/-	Noted and will be complied
7.	Construction of storm water' drainages in the nearby areas	20,000/-	Noted and will be complied

## > Community Resource Augmentation plan & budgetary provisions

Sl. No	Activity	Revised Budget Allocation (in Rs.)	
		1 <sup>St</sup> year	compliance
1.	Creation of irrigation facilities to the farmers supporting for irrigation	25000/-	Noted and will be complied
2.	Construction of sanitation facilities (toilet) in schools and villages (5 toilets each year)	25,000/-	Noted and will be complied
3.	Periodic medical check-up camp by appointing specialist doctor for eyes, skin, heart and dental twice in a year	50,000/-	Periodic medical checkup camps are conducted by appointing specialist doctor for eyes, skin, heart and dental The photos of medical checkup camps is attached as Annexure 11
4.	Free of cost distribution of medicine body check up tests in the area	25,000/-	Noted and will be complied
5.	Training to the farmers related to healthcare	10,000/-	Training programs will be conducted to the farmers in cooperation with Asha workers
6.	Assistance in development of technical skills and training to the children of farmers and fishermen	30,000/-	Noted and will be complied
7.	Assistance in providing study materials, uniform, books to the poor students located nearby area	30,000/-	Noted and will be complied
8.	Scholarship to the clever students for higher education	50,000/-	Noted and will be complied

## Year wise implementation of Remediation plan with budgetary provisions

Sl. No.	Activity	1 <sup>st</sup> Year and second year (2018-20)	Amount spent	% utilized
1.	Remediation measures on AirEnvironment	2,10,000.00	2,16,000.00	102.8
2.	Remediation measures on WaterEnvironment	9,00,000.00	1,15,000/-	25.55
3.	Remediation measures on LandEnvironment	1,40,000.00	30,000.00/-	5
4.	Remediation measures on NoiseEnvironment	30,000.00	50,000/-	100

5.	Remediation measures SocioEnvironment	on	22,000	22000/-	100
6.	Remediation measures Ecology Environment	on	6,60,000	5,50,000/-	0
	Grand Total		19,62,000.00	9,83,000.00/-	
		•			

## 6 Natural Resource Augmentation plan & budgetary provisions

		1st Year and second year			
S. No.	Activity	(2018-20)			
1101			Amount spent	% utilised	
1.	Development of greenery in the surrounding area and road side plantation	75,000	0	0	
2.	Provision of drinking water facilities through construction of hand pumps / dug wells / tube wells. 5 hand pups / wells per year in the nearby villages with maintenance	1,25,000.00	50,000/-	40	
3.	Maintenance of village road, near the panchayat office or any other badly damaged road and consultation with panchayat (7 m. carriage way (1 km. length)	6,00,000.00	2,60,000/-	43	
4.	Construction of pipeline network in the village in association with grama panchayat and water resource department (Kerala Water Supply Authority)	2,50,000	0	0	
5.	Provision of solar system in common areas through local administration	75,000	50,000/-	75	
6.	Rainwater harvesting and ground recharge development	60,000	60,000/-	100	
7.	Construction of storm water drainages in nearby areas	50,000	50,000/-	100	
	Total	12,30,000.00/-	4,70,000/-	38	

**▶** Community Resource Augmentation plan & budgetary provisions

	Community Resource Augmentation plan & budgetary provisions				
Sl. No	Activity	Total budgetary provision (Rs.)  1st Year and second year (2018-20)	Amount spent	% utilised	
1.	Creation of irrigation facilities to the farmers supporting for irrigation		0	0	
2.	Construction of sanitation toilets each year)	75,000	0	0	
3.	Periodic medical check-up camp by appointing specialist doctor for eyes, skin, heart and dental twice in a year	1 00 000	1,00,000	100	
4.	Free of cost distribution of medicine body check up tests in the area	75,000	75,000/-	100	
5.	Training to the farmers related to healthcare	30,000	0	0	
6.	Assistance in development of technical skills and training to the children of farmers and fishermen	60,000	0	0	
7.	Assistance in providing study materials, uniform, books to the poor students located nearby area	60,000	0	0	
8.	Scholarship to the clever students for higher education	1,00,000	0	0	
	Total	5,75,000	1,75,000/-	30	

i. Total budgetary provision with respect to Remediation plan and Natural &Community resource Augmentation plan is rupees 62,45,000/-. Therefore, project proponent shall be required to submit a bank guarantee of an amount of Rupees 62,45,000/- towards Remediation plan and Natural and Community Resource Augmentation plan with the

#### SPCB prior to the grant of EC.-

- a. Submitted a bank guarantee of an amount of Rupees 62,45,000/- as per Remediation plan and Natural and Community Resource Augmentation plan to SPCB
- ii. Remediation plan shall be completed in 3 years whereas bank guarantee shall be for 5 years. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.
  - a. For the successful implementation of the project Separate staff is appointed and all the work should be carried out as per the direction of local Govt. authorities
- iii. The PP shall submit the proof of credible action taken by the concerned state government/ state pollution control board under the provisions of the section 19 of the Environment Protection Act 1986 to the MoEF&CC- Noted and complied.
- iv. Fund allocation for Corporate Environment Responsibility (CER) of Rs. 1.922 crores (2% of project cost). Noted and complied
- v. Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.- Noted and complied.
- vi. The PP shall construct rain water storage tank of capacity 2,200 KL (equivalent to 11 days of daily fresh water requirement).
  - Constructed rain water storage tank of capacity 2,200 KL- constructed drain water storage tank of capacity 2,200 KL (equivalent to 11 days of daily fresh water requirement

#### 2. General conditions

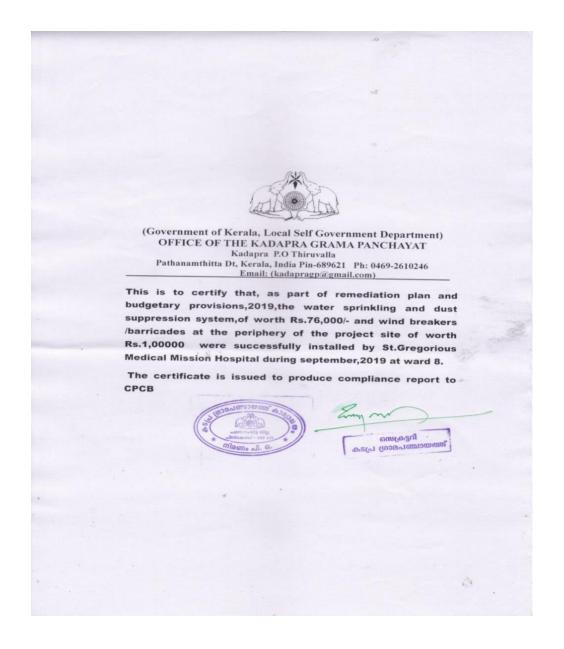
1.	The project authorities shall adhere to the stipulations made by the State Pollution Control Board, Central Pollution Control Board, State Government and any other statutory authority	Noted and complied
2.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Not conducted any further expansion or modifications
3	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as	Two locations are selected as per the direction, in two sensitive areas of Kadapara

	well as where maximum ground level concentrations are anticipated.	grama panchayath and air quality monitoring were carried out by Std Laboratories,Ernakulam ,details are annexed in annexure no-4
4	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16*h November, 2009 shall be followed.	Following the Standards of Natioanal Ambient Air quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16*h November, 2009
5	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time)and 70 dBA (night time).	Monitored the noise level and are within the limits of the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time)and 70 dBA (night time).
6	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve freshwater.	constructed rain water storage tank of capacity 2,200 KL- and also constructed drain water storage tank of capacity 2,200 KL (equivalent to 11 days of daily fresh water requirement
7	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	Noted and complied
8	The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of	Noted and complied

	environmental management, and risk mitigation measures relating to the project shall be implemented	
9	The company shall undertake all relevant measures for improving the socio- economic conditions of the surrounding area. ESC activities shall be undertaken by involving local villages and administration.	ESC activities are carried out as per the direction of local village and administration
10	The company shall undertake eco- developmental measures including community welfare measures in the project area for the overall improvement of the environment.	Activities are in progress for the improvement of eco- developmental measures including community welfare measures in the project area for the overall improvement of the environment
11.	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Constituted a separate Environmental Management Cell and appointed a staff for implementation of the project
12	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.	Noted and complied
13	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayath, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	Noted and complied
14	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status reports shall be posted on the website of the company.	First compliance report and second compliance reports for the months from April 2019 to September, and October 2019-March,2020 were uploaded in CPCB,,SPCB, Parivesh portal and also in website of the company.
15	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board	Noted and complied, details are annexed in Annexure No-

	as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC bye-mail.	14
16	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at http://moef.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	Advertised news in daily news papers like Malayala manorama, Mathrubhumi, and in Hindu regarding environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at http://moef.nic.in. details are annexed in Annexure No-15
17	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	Noted and complied

Completion certificate for dust suppression system issued by Secretary, Kadapra Grama panchayath



Completion certificate for water sprinkling system issued by Secretary, Kadapra Grama panchayath



# Annexure No -3 Photos and March $6^{th}$ , 2020 edition Malayala Manorama Newspaper cutting regarding Vehicle check up camp

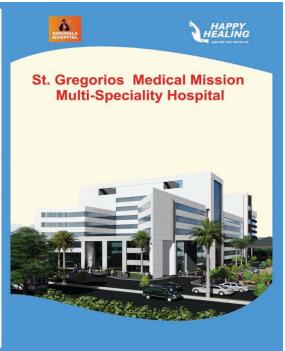




#### Brochure prepared for awareness of Environmental protection

- വാഹനങ്ങളിൽ നിന്നുള്ള CO വാതകത്തിന്റെ ബഹിർഗമനം ഒഴി വാക്കൂക. ഇതിനായി ലെഡ് ഇല്ലാത്ത പെട്രോൾ ഉപയോഗിക്കൂക.
- 7. ഓരോവീട്ടിലും ഓരോ അംഗങ്ങൾക്കും വാഹനം എന്നരീതി ഉപേ ക്ഷിക്കുക. കൂടുംബസേമതം യാത്രകൾ ശീലമാക്കുകവഴി ട്രാഫിക് പ്രശ്നങ്ങളും അതുവഴിയുണ്ടകുന്ന അപകടങ്ങളും ഒഴിവാക്കുക.
- സ്വന്തം കൃഷിരീതി, അടുക്കളത്തോട്ടം വഴി വിഷ രഹിതപച്ചക്കറി ഉല്പാദിപ്പിക്കുകയും മാരക രോഗങ്ങളെ പ്രതിരോധിക്കുകയും ചെയുക
- 9. മഴവെള്ള സംഭരണി ഓരോ വീട്ടിലും യാഥാർഥ്യമാക്കുക. വീട്ടുപ റമ്പിൽ ലഭിക്കുന്ന മഴവെള്ളം ഒലിച്ചുപോകാനനുവദിക്കാതെ പുരയി ടങ്ങളിൽ കെട്ടി നിർത്തി ഭൂഗർഭ ജലസ്രോതസ്സ് ഉയർത്തുവാൻ സാഹചര്യമൊരുക്കുക.
- 10. മണ്ണിന്റെനൈസർഗ്ഗിക ഗൂണനിലവാരം ഉയർത്തുവാൻ ജൈവവളം മണ്ണിര കമ്പോറ്റ് മുതലായവയുടെ ഉപയോഗം കൂട്ടുക. കീടനാശിനി കളുടെ ഉപയോഗം കുറയ്ക്കുക.
- 11. ഊർജ്ജ സ്രോതസ്സിനായി സൗരോർജ്ജം, കാറ്റ് മുതലായവപരാമാ വധി ഉപയോഗിക്കുക.
- 12. മൺപാത്രങ്ങളുടെ ഉപയോഗം ശീലമാക്കുക.
- വാഹനങ്ങൾക്ക് കൃത്യമായ അറ്റകുറ്റപണികൾ നടത്തുക. വാഹന നിർമാതാക്കൾ നിർദേശിച്ച പ്രകാരം കൃത്യമായി വാഹനസർവ്വീസ് നടത്തുക

Anesthesiology - Ayurvedic Medicine Child & Adolescent Psychiatry Clinical & Rehabilitation Psychology • Clinical Pharmacology Critical Care - Dentistry, Dermatology • Emergency Medicine • ENT Endocrinology • Garscrate & Laparoscopic Surgery General Medicine • Radiology • Urology • Nephrology • Neurology Neurosurgery • Nuclear Medicine • Nutrition & Dietetics• Obstetrics & Gynaecology • Oncology (Medical, Surgical, Radiation) • Ophthalmology Orthopedics • Pediatrics• Pathology • Physiotherapy• Plastic Surgery Psychiatry • De-Addiction & Rehabilitation Pulmonology.



അന്നരീക്ഷത്തിൽലെ പുകയും വിഷവാതകങ്ങളും മറ്റു രാസപദാർത്ഥങ്ങളും കലരുന്നതുമുലം ഉണ്ടാകുന്ന മലിനീകര ണമാണ് അന്തരീക്ഷ മലിനീകരണം. മനുഷ്യനോ ആവാസവൃവ സ്ഥയ്ക്ക് തന്നെയോ ഹാനികരമായി ബാധിക്കുന്ന വായുവിലെ പദാർത്ഥങ്ങളാണ് അന്തരീക്ഷമലിനീകാരികൾ. ഇവ പലപ്പോഴും നൈസർഗ്ഗികമോ മനൂഷ്യ നിർമ്മിതമോ ആയ ഖര പദാർത്ഥങ്ങളോ ദ്രാവക തുള്ളികളോ വാതകങ്ങളോ ആണ്. മലിനീകാരികളെ പ്രധാ നമായും പ്രാഥമിക മലിനീകാരികൾ, ദ്വിതീയ മലിനീകാരികൾ എന്നും രണ്ടായി തിരിച്ചിരിക്കുന്നു. മാലിനൃങ്ങൾ കത്തിക്കുന്ന ചാരങ്ങളായും , വാഹനങ്ങളിൽ നിന്നുള്ള കാർബൺ മോണോക് സൈഡ് വാതകമായും ഫാക്ടറികളിൽ നിന്നും സൾഫർ ഡയോക് സൈഡ് സംയുക്തമായും പ്രാഥമിക മലിനീകാരികൾ അന്തരീക്ഷ ത്തിൽ എത്തിച്ചേരുന്നു. ഇവ അന്തരീക്ഷത്തിലുള്ള മറ്റ് രാസവസ്തു ക്കളുമായി സൂര്യ പ്രകാശത്തിന്റെ സാന്നിധ്യത്തിൽ സംയോജിച്ചാണ് ദിതീയ മലിനീകാരികൾ ഉണ്ടാകുന്നത്. ഇന്ത്യയിലെ മൊത്തം മലിനീ കരണത്തിന്റെ 65 % വും വാഹനങ്ങൾ മൂലമുണ്ടാകുന്നതാണ്. ഇ തിൽ പകുതിയിലധികം ഇരുചക്രവാഹനങ്ങൾ മൂലമാണ്. ഇന്ത്യയിൽ ഓരോ വർഷവും വായു മലിനീകരണം മൂലം നാൽപ്പതിനായിര ത്തോളം പേരാണ് മരിക്കുന്നത്. ഹരിതവാതകങ്ങളായ Co² മീഥേൻ, നൈട്രസ് ഓക്സൈഡ്, ക്ലോറോ ഫ്ളൂറോ കാർബണുകൾ എന്നിവ യുടെ അമിതമായ ഉൽപാദനം മൂലം ഓസോൺ പാളികളിൽ വിള്ള ലുണ്ടാവുകയും സൂരൂനിൽ നിന്നും ഉത്സർജിക്കപ്പെടുന്ന അപകട കാരിളായ ആൾട്രാവയലറ്റ് രശ്മീകൾ വർദ്ധിച്ച തോതിൽ ഭൗമോപരി തലത്തിൽ പതിക്കുകയും ഇത് അർബുദം, തിമിരം, രോഗപ്രതി രോധ ശക്തിശേഷണംസസ്യങ്ങളുടെ ഉല്പദനക്ഷമതയിൽ ശോ ഷണംസൂക്ഷമസസ്യങ്ങളുടെ നാശം ഇവയിലുണ്ടാകുന്നതു കു ടാതെ അന്തീരിക്ഷതാപനിലയിലുള്ള ഉയർച്ച ധ്രുവഹിമപാളികളും ഹിമാനികളും ഉരുകി സമുദ്ര ജലനിരപ്പ് ഉയരുകയും പല ദ്വീപുകളും സമുദ്ര തീരപ്രദേശങ്ങളും ഇതോടെ കടലിനടിയിലാകുകയും ചെയ്യും

ഇപ്രകാരം തുടരുകയാണെങ്കിൽ 2040 ഓടെ ആഗോളതാപനിലയിൽ 20 മുത 50 ശതമാനം വരെ വർദ്ധനയുണ്ടാകും

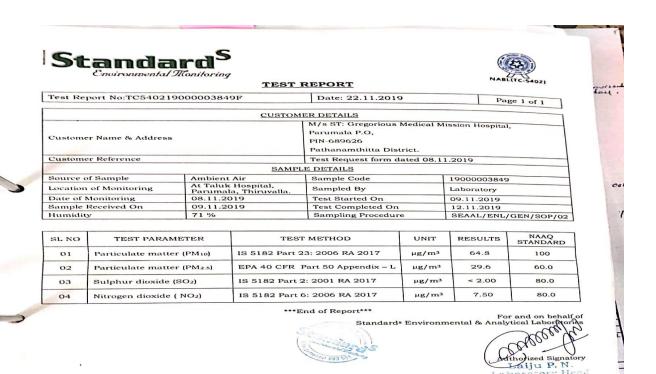
പ്രകൃതി ദുരന്തങ്ങൾ മാറി മാറി വരുന്ന ഈ കാലയളവിൽ, മനുഷ്യൻ തന്റെ ഭാവി തലമുറയുടെ സാമ്പത്തിക ഭദ്രയയ്ക്കായി നെട്ടോട്ടമോടുന്നത് എത്രത്തോളാ പ്രാർത്തികമാകും എന്ന് ചിന്തി ക്കേണ്ട കാലം അത്രക്രമിച്ചിരിക്കുന്നു. വെള്ളപ്പൊക്കവും, കൊടും വരൾച്ചയും ശൈത്യവും താങ്ങാനാവാതെ മുരടിച്ചുപോകുന്ന നമ്മുടെ തലമുറയെ സംരക്ഷിക്കുവാനും, ജൈവ സമ്പത്ത് സംരക്ഷി ക്കുവാനും നമുക്ക് അണിചേരാം, കൈകോർക്കാം, പ്രവർത്തിക്കാം

#### ചില മാർഗ്ഗനിർദ്ദേശങ്ങൾ

- മരങ്ങൾ വെച്ചുപിടിപ്പിക്കുക, സംരക്ഷിക്കുക വഴി ഹരിത ഗ്രഹ വാതകമായ കാർബൺഡൈ ഓക്സൈഡിന്റ് അളവ് ഗണ്യ മായി കുറയ്ക്കുവാനും, അന്തരീക്ഷ താപനില കുറയ്ക്കുവാ
- നും മണ്ണൊലിപ്പ് തടയുവാനും സാധിക്കുന്നു.
  2. വീടുകളിലെ ജൈവ അജൈവ മാലിനൃങ്ങൾ വേർതിരിക്കുക മാലിനൃങ്ങൾ പൊതു നിരത്തുകളിലും നദികളിലും കുളങ്ങളിലും വലിച്ചെറിയാതിരിക്കുക.
- . ചപ്പുപവറുകൾ കരിയിലു മറ്റുടെവേ മാലിനുങ്ങൾ എന്നിവ കത്തിക്കാതിരിക്കുക. അതിന്റെ സ്വാഭാവികമായ അഴുകൽ മൂലം വളമായിമാറുവാൻ അനുവദിക്കുക. അങ്ങനെ മണ്ണിന്റെ സ്വാഭാവിക വളക്കൂറ് വീട ദുക്കുക. 4. ച്ലാസ്റ്റിക്കിന്റെ ഉപയോഗം കുറയ്ക്കുക. ഉപയോഗിക്കുന്ന
- പ്ലാസ്റ്റിക്കിന്റെ ഉപയോഗം കൂറയ്ക്കുക. ഉപയോഗിക്കൂന്ന പ്ലാസ്റ്റിക്ക് വലിച്ചെറിയാതെ പൂനരുപയോഗത്തിന് വിധേയമാ ക്കുക.
- പ്ലാസ്റ്റിക്കുകൾ കത്തിക്കുന്നതുമുലമു ാകുന്ന വിഷവാത കങ്ങളായ NO2, SO2, ഡൈഓക്സിനുകളുടെ ബഹിർഗമനം ഒഴി വാക്കുക.

Some Photos and analysis Reports of Ambient Air Quality monitoring in two sensitive areas by Standard Environmental and analytical Laboratories, Ernakulum





The results are related only to the samples submitted for analysis and this test report shall not be reproduced except in full, without the written approval of the laboratory

Standard<sup>S</sup> Environmental & Analytical Laboratories

Accreditation and Approval: NABL as per ISO 17025: 2017 & "A" Grade Laboratory of KSPCB

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43

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## TEST REPORT

Date: 06.03.2020	Page 1 of 1
TOMER DETAILS	
Test Request form dated 01.03.	2020

## SAMPLE DETAILS

Date: 06.03.2020

I to blent his	Sample Code	19000005762
Parumala, Thiruvalla,	Sampled By	Laboratory
Contract of the Street of the	Test Started On	02.03.2020
THE RESIDENCE OF THE PARTY NAMED IN COLUMN 2 IN COLUMN	Test Completed On	06.03.2020
with the same of t	Sampling Procedure	SEAAL/ENL/GEN/SOP/02
	Ambient Air At Taluk Hospital, Parumala, Thiruvalla. 01.03.2020 02.03.2020 66.%	At Taluk Hospital, Parumala, Thiruvalla.  O1.03 2020  Test Started On  O2.03 2020  Test Completed On  Sampling Procedure

SL NO	TEST PARAMETER	TEST METHOD	UNIT	RESULTS	NAAQ STANDARD
01	Particulate matter (PM10)	IS 5182 Part 23: 2006 RA 2017	μg/m³	67.9	100
02	Particulate matter (PM2.5)	EPA 40 CFR Part 50 Appendix - L	μg/m³	25.3	60.0
03	Sulphur dioxide (SO2)	IS 5182 Part 2: 2001 RA 2017	μg/m³	< 2.00	80.0
04	Nitrogen dioxide ( NO2)	IS 5182 Part 6: 2006 RA 2017	μg/m³	5.40	80.0

\*\*\*End of Report\*\*\*

For and on behalf of Standard Environmental & Analytical Laboratories

Rija Joseph Technical Manager

Page 1 of 1





#### TEST REPORT

Test Report No:TC540219000003850F	Date: 22.11.2019	Page 1 of 1
	TOMER DETAILS	
	M/s ST: Gregorious Medical Mi	ssion Hospital,
	Parumala P.O.	

		WI/ S DI. G. B			
	Parumala P.O, PIN-689626		Parumala P.O,		
Customer Name & Addres					
		Pathanamthitta District.			
Customer Reference		Test Request form dated 08.11.2019			
Customer Reference	SAMPI	E DETAILS			
			10000000000		
Source of Sample	Ambient Air	Sample Code	19000003850		
Location of Monitoring	At Govt. Primary School,	Sampled By	Laboratory		
Location of Monitoring	Kadapra,Parumala.	Test Started On	09.11.2019		
Date of Monitoring	08.11.2019		12.11.2019		
	09.11.2019	Test Completed On			
Sample Received On	71 %	Sampling Procedure	SEAAL/ENL/GEN/SOP/02		
Humidity	71.70				

OL NO	TEST PARAMETER	TEST METHOD	UNIT	RESULTS	NAAQ STANDARD
SL NO	Particulate matter (PM10)	IS 5182 Part 23: 2006 RA 2017	μg/m³	59.6	100
01		EPA 40 CFR Part 50 Appendix - L	μg/m³	25.4	60.0
02	Particulate matter (PM2.5)	IS 5182 Part 2: 2001 RA 2017	μg/m³	< 2.00	80.0
03	Sulphur dioxide (SO <sub>2</sub> )		μg/m³	6.40	80.0
04	Nitrogen dioxide (NO2)	IS 5182 Part 6: 2006 RA 2017	рв/ по	5,10	

\*\*\*End of Report\*\*\*

For and on behalf of Standard's Environmental & Analytical Laboratories

Authorized Signatory

Laiju P. A. Laboratory Head

CS\$canned with CamScanner

FSC: SBIN0010667 eneficiary Name: Standards Environmental & Analytical Laboratories

CSScanned with CamScanner

Completion certificate of maintenance and improvement of wells in Valethu Colony of Kadapra gramapanchayath, Parumala,



#### **Annexure No-6**

Some photos and Analysis report of the water sample collection by Standard Environmental and analytical Laboratories, Ernakulam



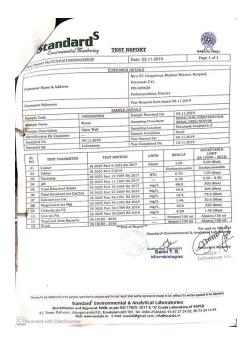






Test Report No:TC54021900	CUSTOM	-	22.11.2019	,	Page 1 of 1
	CUSTOM				
			-23		
Customer Name & Address			M/s ST: Gregorious Medical Mission Hospital, Parumala P.O. PIN-689626 Pathanamthitta District.		Hospital,
ustomer Reference		Test Re	equest form	dated 09.11.2019	
		E DETAILS			
ample Code	19000003852		e Received O		
ample Name	Water	Sample	ing Procedus	e SEAAL/E	NL/GEN/BOP/GIAL BL/SOP/O6
imple Description	Open Well	Sampli	ing Location	Taluk Ho	pital, Thiruvalla
entification By Customer	***		Condition	Good	
mpled On	09.11.2019		arted On	09.11.20	
mpled By	Laboratory	Test Ce	empleted On	12.11.20	19
L TEST PARAMETER	TEST METHO	D	UNITS	RESULT	ACCEPTABLE LIMIT (IS 10500 - 2012)
1 Colour	18 3025 Part 4:1983 R	A 2017	Hazen	1.00	5.00 (Max)
2 Odour	IS 3025 Part 5:2018			Unobjectionable	Unobjectionable
3 Turbidity	18 3025 Part 10:1984	RA 2017	NTU	< 0.10	1.00 (Max)
t pH	18 3025 Part 11:1983	RA 2017		5.87	6.50 - 8.50
Total Dissolved Solids	IS 3025 Part 16:1984	RA 2017	mg/L	142	500 (Max)
Total Hardness (as CaCO	J IS 3025 Part 21:2009	RA 2019	mg/L	82.0	200 (Max)
Calcium (as Ca)	IS 3025 Part 40:1991		mg/L	27.2	75.0 (Max)
Magnesium (as Mg)	18 3025 Part 46:1994 I		mg/L	2.92	30.0 (Max)
Chloride (as Cl)	IS 3025 Part 32:1988 I		mg/L	41.7	250 (Max)
Iron (as Fe)	IS 3025 Part 53:2003 I	RA 2019	mg/L	< 0.10	1.00 (Max)
Total Coli form Bacteria	18 15185 : 2016			Absent/100 m	
E coli	IS 15185 : 2016	of Report*		Absent/100 m	Absent/100 ml
W.		Co all	Authorized	do 1	For and on behalf of Analytical Labor Ories of Control









#### TEST REPORT

o19000005763F	Date: 06.03.2020	Page 1 of 1		
219000005763F	ISTOMER DETAILS			
M/s St. Gregorious Medical Mission Hospital Parumala , Pathanamthinta District. Test Request form dated 28.12.2019				
	28.12.2019			
	SAMPLE DETAILS			
Ambient Air	Sample Code	19000005763		
4+ Gent Primary So	hool, Sampled By	Laboratory		
Kadapra, Parumala	Test Started On	02.03.2020		
01.03.2020	Test Completed On	06.03.2020		
02.03.2020 66 %	Sampling Procedure	SEAAL/ENL/GEN/SOP/02		

		TOUT	PESULTS	NAAQ STANDARD
PARAMETER	TEST METHOD	0.11.1		STANDARD
	IS 5182 Part 23: 2006 RA 2017	$\mu g/m^3$	69.6	100
		pg/m <sup>3</sup>	22.9	60.0
matter (PM2.5)			2.00	80.0
oxide (SO <sub>2</sub> )	IS 5182 Part 2: 2001 RA 2017	µg/m³	< 2.00	00.0
	IS 5182 Part 6: 2006 RA 2017	$\mu g/m^3$	5.10	80.0
	PARAMETER  matter (PM10)  matter (PM2.5)  coxide (SO2)  coxide (NO3)	matter (FM1s)   IS 5182 Part 23: 2006 RA 2017	matter (PM16)   15 5182 Part 23: 2006 RA 2017   mg/m <sup>3</sup>   matter (PM26)   EPA 40 CFR Part 50 Appendix - L   mg/m <sup>3</sup>   motion (PM26)   IS 5182 Part 2: 2001 RA 2017   mg/m <sup>3</sup>   mg/m <sup>3</sup>	PARAMETER         1EST NETHOD           matter (PMus)         IS 5182 Part 23: 2006 RA 2017         μg/m³         69.6           matter (PMus)         EPA 40 CFR Part 50 Appendix – L         μg/m³         22.9           cmide (SOs)         IS 5182 Part 2: 2001 RA 2017         μg/m³         < 2.00

\*\*\*End of Report\*\*\*

For and on behalf of Standard's Environmental & Analytical Laboratories

Standard Standard

Authorized Signatory

Rija Joseph Technical Manager

Standard<sup>5</sup> Environmental & Analytical Laboratories

Accreditation and Approval: NABL as per ISO 17025: 2017 & "A" Grade Laboratory of KSPCB

| Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43

Web: www.sealabs.in, E-mail seaalab@gmail.com







The completion certificate of two units of portable toilets at site (1 for male and 1 for female) for Kannassa Smaraka Govt. Higher Secondary School, Kadapara

GOVT. HIGHE	NASSA SMARAKA ER SECONDARY SCHOOL lapra, Valanjavattom P. O. alla - 4, Tel : 0469 - 2611602
No.	Date:
From, The Principal	
CER	TIFICATE
Remediation pl two units of and one to	certify that, as post of lan on water environment 2019, postable toelets one for make tende of worth \$60000/- were netalled by St. Gregorious with Parumala during the month 2019.
Hisher C	801
Bhirvalla Barris	PRINCIPAL  Kannassa Smaraka Govt. Higher  Secondary School, Kadapra  Pathanamthitta  63005

Photos of inauguration and Completion certificate for the provision of drinking water facility for Valethu Colony, Kadapra Panchayath, Parumala







Photos of inauguration and completion certificate of Re concreting work at Kottakkamalai road, ward No-9, Kadapra Grama panchayath







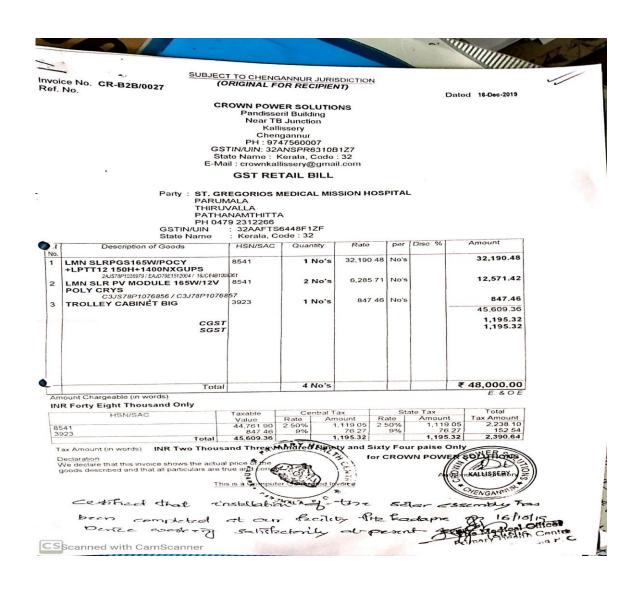




Inaugurated by H.G. Dr. Yuhanon Mar Chrisostomos Metropolitan.



Proof regarding solar system installed in Public Health centre, Kadapra Grama panchayth.



#### Photos of Periodic medical checkup camps



2x5













Cancer awareness class by Dr. Anto Baby

Location of trees planted as Part of Environmental Clearance Remediation Plan and Natural Resource Augmentation Plan,2019-2020

Sl No	Location	Number of trees planted	Location Coordinates
110			Latitude Longitude
1.	Straw board factory, Thikkapuzha, Kadapra	6	9.33232 76.53903
2.	Govt.UP School,Kadapra	60	9.343 76.53
3.	KVUP School, Pulikeezhu, Kadapra	60	9.357 76.5395
4.	Govt Ayurveda Hospital ,Randamkurisu, Kadapra	64	9.323 76.53904
5.	SH-6 Road side at Kadapra	20	9.356 76.5395
6.	St.Gregorious hospital ,Parumala	60	9.3266 76.53935
7.	Nursing College, Parumala	30	9.32 76.53
8.	DB Pampa College, Parumala	50	9.322 76.532
9.	Syntex Rose High School, Thikkapuzha, Kadapra	150	9.33 76.53





















## ST. GREGORIOS COLLEGE OF NURSING



(Affiliated to Kerala University of Health Sciences, Thrissur)
Parumala P.O., Pathanamthitta Dist, Kerala-689 626, India
Tel: 0479-2310393, Fax No. 2310390.

E-mail: sgconp@gmail.com, Web Site: www.sgcon.in

Date: 26/03/2021

SGCON:01/26032021

To Rev. Fr. M.C. Poulose CEO SGMMH Parumala

Respected Father,

#### Sub: Issuance certificate reg:

This is to certify that, as part of Environmental Clearance Remediation Plan and Budgetary provisions, Natural and Community Resource Augmentation Plan, 2019-2020, plantation of 50 trees were carried out at the compound of St. Gregorios College of Nursing, Parumala, Kadapra by St.Gregorios International Cancer care centre, Parumala, Thiruvalla during June, 2020-

The certificate is issued to produce compliance report to CPCB ·

ORIOS COLLEGE OF THE PROPERTY OF THE PROPERTY

Thanking You
Yours faithfully

Principal

Principal. Rt. Gregorious College of Marsins Paramete. This is to be tify that, as Part of Environmental Clearance Remediation Plan and Budgetary provisions, Natural and Community Resource Augmentation Plan,2019-2020, plantation of 65 trees were carried out at the compound of Govt. Ayurveda hospital, Parumala, Kadapra by St. Gregorious International Cancer care centre, Parumala, Thiruvalla during the month of July,2020

The certificate is issued to produce compliance report to CPCB

THE DA DISSIPLY OF THE PARTY OF

MEDICAL OFFICER
GOVT. AYURVEDA DISPEN

## Kesava Vilasom Upper Primary School

Valanjavattom P. O., Thiruvalla - 4 Phone: 9496266449

Ref. 139/20-21

Date: 22/3/2021...

Headmistress

To,

CERTIFICATE

This is to certified Mat, as past of Environmental Clearance Remediation and Natural and Community Resource Augmentation plan 2020 by St. Gregorios International Cancer Care Centre Parumala, Plantation of 60 trees were carried out of the Compound of KVUP School Valarjavattom (Kadapra) during the morth of June 2020



AR. M

ASHA. M.

Headmistress

K.V.U.P. SCHOOL, VALANJAVATTOM



## SYNDESMOS PUBLIC SCHOOL

(Affiliated to C. B. S. E., Delhi) (Senior Secondary Institution Managed by Mar Gregorios Educational & Charitable Society)

Gregorian Nagar, Parumala., Pin - 689626, Phone: 0479 - 2314331 E-mail: syndesmosschool@gmail.com

Date 15- 10-2021

Principal

This is to certify that, as Part of Environmental Clearance Remediation Plan and Budgetary provisions, Natural and Community Resource Augmentation Plan, 2019-2020, plantation of 150 trees were carried out at the compound of Syndesmos Public school, Parumala by St. Gregorious Medical Mission Hospital, Parumala, during the month of June, 2020.

The certificate is issued to produce compliance report to CPCB

PRINCIPAL Brideshoa Public School (CBSE) PARUMALA- 689 626, THIRUVALLA E-mail:syndesmosschool@gmail.com

PH: 0479 - 2314331

Photos and certificate regarding the provision of Personnel protective equipment's to primary health centre

#### **Issuance Certificate**

This is to certify that, as part of Environmental Clearance Remediation plan and budgetary provisions,2020, Personnel Protective Equipment (2000 masks and 250 Hand sanitizer) of worth Rs.50,000/- were given to Public Health Centre, Kadapra Grama Panchayath, Parumala, by M/s St.Gregorious International Cancer Care Centre ,Parumala,Thiruvalla during the month of September,2020

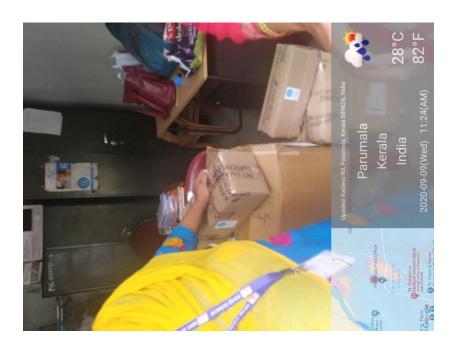
The certificate is issued to produce compliance report to CPCB

Place: Kadapia

Date : 9.09.20

THEALTH CENTRAL THE SECOND SEC

The Medical Offices
Primary Health Centre
Cadapra, Parumala P. G.





Env	ironmental Audi	FORM (See ru Report for the Finan	1 – V lle 14) cial year ending the 31	st March <u>2019</u> .		
		PART	$\Gamma - \Lambda$	2		
1,		ess of the owner/ industry, operation	T-A  THE CHIEF EXECUTIVE OFFICER,  ST GREGORIOS MEDICAL MISSION HOSPITA  PARUMALA P.O., PATHANAMTHITTA - 689			
2.	Industry categor Code), Secondar		RED			
3.	Production Cap	•				
4.	Year of establish	nment	SEPT 1978			
5.	Date of la statement	st environmental	NA ·			
		PAR	Т-В.			
1	Water Consum	ption m <sup>3</sup> /day process				
	Cooling			10 m3		
	Domestic			10 m <sup>3</sup>		
	Name of Products		Water consumption During the previous financial year (1)	per unit of products  During the current financial year (2)		
1.	Open	Well	A A	10800 m3		
2.	Open,	Well	NA	25200 m³		
2		rial Consumption	Consumption of Raw Material Per unit of output			
Name of Raw Materials Name of Products		During the previous financial year	During the current financial year			
	Diesel	Generators	60,000. Un	72,000 LAN		
	Blesci	Pollution	RT – C 1 Generated ied in the consent issue	d)		
	P	ollutants	Quantity of pollution generated	Percentage of variation from prescribed standards with		



			reasons
a.	Water		
b.	Air		
- 1	as specified under Hazardous Waste	ART – D es (Management & Hand	iling) Rules, 1989]
	Hazardous Wastes	Total Quantity (in Kg)	
	Por D	During the previous financial year	During the currer financial year
a.	From Process	NA	21.72 100
b.	From Pollution Control Facilities	NA	Nil
		RT – E d Wastes	
1		Total Q	During the curre
		During the previous financial year	financial year
a	From process	NA.	103.53 40
	From pollution control facility	NA	
c	Quantity recycled or re-utilized.	NA .	40.53-10
hese	PA se specify the characteristics (in ardous as well as solid wastes and its categories of wastes.  A W disposed through IMF PAI act of pollution control measures equently on the cost of production.	indicate disposal practi DEMAGE, Plastic RT-C	ce adopted for bo
ddit pol	PAF tional investment proposal for envi llution.	RT – H ronmental protection i	ncluding abateme
ddit pol	tional investment proposal for envi llution.  The Environment (P PAI	ronmental protection i Protection) Rules, 1986 RT – I	ncluding abateme
	tional investment proposal for envi llution.  The Environment (P PAI	ronmental protection i Protection) Rules, 1986 RT – I	

of the

#### Annexure No-15 Advertisement of news in daily news papers like Malayala manorama, Mathrubhumi, and in Hindu regarding environmental clearance

