



सत्यमेव जयते

**File No: 140/2025/IFRA/EC/Z1/SEIAA**  
**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**(Issued by the State Environment Impact Assessment**  
**Authority(SEIAA), KERALA)**

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Date 20/05/2026



To,

Dr N. K. Pillai  
M/s Kerala Enviro Infrastructure Ltd.  
M/s Kerala Enviro Infrastructure Ltd., Inside FACT - CD Campus, Ambalamedu, Ernakulam, Kerala -  
682303  
drnkpillai@gmail.com

**Subject:** Grant of prior Environmental Clearance (EC) to the proposed project under the provision of the EIA Notification 2006 -regarding.

**Sir/Madam,**

This is in reference to your application submitted to SEIAA, Kerala vide proposal number SIA/KL/INFRA2/554395/2025 dated 08/10/2025 for grant of prior Environmental Clearance (EC) to the proposed expansion project of Common Bio-medical Waste Treatment Facility under the provision of the EIA Notification 2006 and as amended thereof.

2. The particulars of the proposal are as below :

<b>(i) EC Identification No.</b>	EC25B3301KL5172514N
<b>(ii) File No.</b>	140/2025/IFRA/EC/Z1/SEIAA
<b>(iii) Clearance Type</b>	Fresh EC
<b>(iv) Category</b>	B1
<b>(v) Project/Activity Included Schedule No.</b>	7(da) Bio-Medical Waste Treatment Facilities
<b>(vii) Name of Project</b>	Expansion of Common Bio-Medical Waste Treatment Facility of M/s Kerala Enviro Infrastructure Ltd.
<b>(viii) Name of Company/Organization</b>	M/s Kerala Enviro Infrastructure Ltd.
<b>(ix) Location of Project (District, State)</b>	Ernakulam, Kerala
<b>(x) Issuing Authority</b>	SEIAA, Kerala
<b>(xi) Applicability of General Conditions as per EIA Notification, 2006</b>	Yes

In view of the particulars given in Para 1 above, the project proposal, inter alia, including Form-1 (Part A, B &C) were submitted to the Ministry for an appraisal by the State Environment Impact Assessment

Authority (SEIAA), Kerala, under the provision of EIA notification 2006 and its subsequent amendments.

The above-mentioned proposal has been considered by the State Expert Appraisal Committee (SEAC) in its 194<sup>th</sup> meeting held on 27<sup>th</sup> January 2026 and the SEIAA in its 163<sup>rd</sup> meeting held on 12<sup>th</sup> and 13<sup>th</sup> March 2026. The minutes of the meeting and all the Application and documents submitted (viz. Form-1 Part A, Part B) are available on PARIVESH portal, which can be accessed by scanning the QR Code above.

The brief about project details, the Environmental Management Plan and Corporate Environment Responsibility (CER) to be implemented or followed are annexed to this EC.

The SEAC, in its 194<sup>th</sup> meeting, based on information & clarifications provided by the project proponent and after due appraisal, recommended EC for 10 years subject to certain Specific Conditions in addition to the General Conditions as detailed in Annexure.

The SEIAA examined the proposal in its 163<sup>rd</sup> meeting in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto, and decided to accept the recommendation of 194<sup>th</sup> SEAC meeting and to issue Environmental Clearance in favour of M/s Kerala Enviro Infrastructure Ltd. for the proposed expansion of the Common Biomedical Waste Treatment Facility at Block No. 37, Survey No. 205 in Puthenkuriss Village, Kunnathunad Taluk, Ernakulam.

**Environmental Clearance is hereby accorded to M/s Kerala Enviro Infrastructure Limited, Common TSDF Project, Inside FACT CD Campus, Ambalamedu, Kochi, for the proposed 20% expansion of the Common Biomedical Waste Treatment Facility at Block No. 37, Survey No. 205 in Puthenkuriss village, Kunnathunad Taluk, Ernakulam, Kerala, for a period of 10 (Ten) years, subject to the Specific Conditions in addition to the General Conditions as detailed in Annexure.**

Validity of the Environmental Clearance will be for **10 (Ten) years**, subject to the earlier review by SEAC in case of violation or non-compliance of conditions or genuine complaints from residents within the project area.

Violation of any of the Specific & General Conditions annexed, as applicable to the particular case, will entail cancellation of the Environmental Clearance, in addition to legal action under the provisions of the Environment (Protection) Act, 1986. Non-compliance, if any, shall be reported to the District Collector, Ernakulam, or SEIAA, Kerala.

The Ministry / SEIAA, Kerala, reserves the right to modify and/or stipulate additional conditions if found necessary.

The EC to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.

This issues with the approval of the Competent Authority.

**Copy To**

MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E&F Wing, II Block, Koramangala, Bangalore-560034

The Secretary to Government, Environment Department, Government of Kerala.

The Director, Directorate of Environment & Climate Change, 4<sup>th</sup> Floor, KSRTC Bus Terminal, Thampanoor, Thiruvananthapuram, Kerala- 695 001.

The District Collector, Ernakulam

The Member Secretary, Kerala State Pollution Control Board.

The District Town Planner, Ernakulam

The Environment Engineer, KSPCB, Ernakulam

The Tahsildhar, Kunnathunad Taluk, Ernakulam

The Chairman, SEIAA, Kerala.

The Secretary, Vadavucode-Puthencruz Grama Panchayat, Ernakulam.

Website.

S/F/O/C

## Annexure 1

### Specific EC Conditions for (Bio-medical Waste Treatment Facilities)

#### 1. Site Specific Conditions

S. No	EC Conditions
1.1	All conditions stipulated in the previous Environmental Clearance (EC) issued on 28.11.2022 must be strictly complied with.
1.2	The comments and stipulations furnished by the State Pollution Control Board (SPCB), in pursuance of the Ministry's Notification dated 12.11.2024 and Office Memorandum dated 14.01.2025, shall be strictly adhered to and complied with in toto by the Project Proponent.
1.3	The KSPCB and Project Proponent to ensure that the guidelines for CBWTF issued by CPCB are followed scrupulously with due care for ensuring proper treatment and disposal of biomedical waste.
1.4	A Local Monitoring Committee (LMC), under the chairmanship of the President of the Grama Panchayat and including the elected member of the GP from the locality, representative of the industrial park, official of the Pollution Control Board and the Project Proponent should be formed to monitor the activities of the proposed plant on a regular basis to ensure that all the safeguards are intact.
1.5	Green belt shall be maintained minimum at a rate of 1 tree per every 80 sq. m as stated in the Appendix XIV of EIA Notification 2006 (SO 3099 (E) dated 09.12.2016).
1.6	The measures proposed to ensure the prevention of any accidental spill of the waste/ leachate should be monitored on a daily basis and safeguards ensured.
1.7	Appropriate number of wells within 1 km radius of the project site towards downstream side of the site should be identified through the LMC and weekly monitoring of water quality should be carried out for six months, initially, and monthly monitoring should be carried out subsequently by a NABL accredited laboratory. The results should be placed in the LMC and should be made available at the

S. No	EC Conditions
	gate of the plant for public to refer.
1.8	Monitoring well should be maintained as recommended in the hydrogeological study and the groundwater quality should be monitored periodically by engaging NABL accredited Lab.
1.9	Surface outflow and groundwater outflow from the project area should be monitored periodically by engaging NABL accredited Lab.
1.10	All the assurances and the mitigation measures committed by the Project Proponent as per the environmental management plan and suggested in response to the complaints raised should be complied with scrupulously.
1.11	All the measures recommended in the hydrological and hydrogeological study should be complied with and reported to the LMC
1.12	Rotary type of incinerator should be installed as it has better thermal efficiency, air mixing in the burning chamber and operational efficiency with improved emission quality.
1.13	The onsite storage facility for storage of ETP sludge, ash, and mercury waste should have adequate storage capacity and the Proponent should ensure weekly removal and disposal of this waste in the treatment, storage and disposal facility (TSDF) for Hazardous Waste, currently located at Amabalamedu, Ernakulam.
1.14	Project Proponent should install Ultra Filtration (UF)/RO facility in addition to Pressure Sand Filter and Pressure (PSF) and Pressure Carbon Filter (PCF) for enabling and ensuring recycling/reusing of tertiary treated wastewater to achieve zero discharge.
1.15	The recommendations of the engineering feasibility study and hydrological and hydrogeological study should be implemented strictly
1.16	The surface water drainage system comprising of drains, channels, catch drains, culverts etc. should be implemented prior to the commissioning of the plant and it should be maintained properly and periodically.
1.17	Harness maximum solar energy, to meet partial power requirement and providing post type, solar yard lighting system, within and adjoining areas.
1.18	Rain water falling on active tipping areas should be collected separately and it should be collected through the leachate collection drain and leachate collection sumps and finally lead to the leachate treatment for treatment and disposal/ reuse.
1.19	Green belt should be developed all around the compound using indigenous species of trees, herbs and climbers prior to the commissioning of the plant.
1.20	Compensatory afforestation plan should be implemented using indigenous species of plants, herbs and climbers prior to the commissioning of the plant and the progress of implementation of the plan and its maintenance should be submitted in the half-yearly compliance report along with geo-tagged photographs.

S. No	EC Conditions
1.21	Disinfection and cleaning arrangements for the vehicles should be maintained at the entry and exit gates
1.22	The Corporate Environment Responsibility Plan should be implemented during the first two years of the project and it should be operated and maintained during the rest of the period of EC.
1.23	The CER expenditure proposed and agreed by the Project Proponent should be expended through a separate bank account and the account statement and the beneficiary list should be uploaded along with Half Yearly Compliance Report.
1.24	There should be regular vigil on the safeguard measures installed for possible accidental spillage of contaminants to the water body in the downstream area and the findings should be recorded in a log book which should be placed in the LMC on a regular basis.
1.25	Adequate sources for water to meet the requirement during construction and operational phase is to be ensured and details should be given in HYCR.
1.26	The excavation of earth for construction should be limited to minimum and the activity should not affect the water sources of the nearby houses.
1.27	Climate responsive design as per Green Building Guidelines in practice should be adopted.
1.28	The green building criteria notified in the GO (Ms) No. 39/2022/LSGD dated 25.2.2022 should be adopted.
1.29	Appropriate greening measures should be adopted on the ground as well as over built structure such as roofs, basements, podiums etc.to reduce the urban heat effect of civil structures.
1.30	Exposed roof area and covered parking should be covered with material having high solar reflective index.
1.31	Construction work should be carried out during day time only.
1.32	All vehicles, including the ones carrying construction material of any kind, should be cleaned and wheels washed.
1.33	All vehicles carrying construction / waste materials should be fully covered and protected.
1.34	All construction / waste materials of any kind should not be dumped on public roads or pavements or near the existing facilities outside the project site.
1.35	Occupational health safety measures for the workers should be adopted during the construction & operation phases.
1.36	All vehicles during the construction / operation phase should carry PUC certificate.
1.37	D.G. set should be provided with adequate stack height and regular maintenance should be carried out before and after the construction phase and would be provided with an acoustic enclosure.

S. No	EC Conditions
1.38	Usage of energy saving 5 star rating equipment such as BLDC fans and LED lamps should be promoted as part of energy conservation. At least 20% of the energy requirement shall be met from solar power.
1.39	Adequate measures should be adopted to harvest the rainwater.
1.40	Adequate built-in composting facility should be set up for the treatment of biodegradable waste as the capacity of the local LSGD is inadequate.
1.41	Authority makes it clear that as per clause 8 (vi) of EIA notification 2006, deliberate concealment and/or submission of false or misleading information or data which is material to screening or scoping or appraisal or decision on the application shall make the application liable for rejection and cancellation of prior EC granted on that basis.
1.42	As per OM No F.No.22-65/2017-IA.III dated 30th September 2020, the follow-up action on implementation of the approved EMP and CER by the Authority shall be included in the Half Yearly Compliance Report which will be subjected to field inspection at regular intervals. A copy of the approved EMP shall be made available to the concerned Panchayat for information and implementation support.
1.43	The Project Proponent shall obtain all necessary clearances/ licenses/ permissions from all the statutory authorities issuing clearances/ licenses/ permission for the construction projects of this nature.
1.44	The Project Proponent is directed to install a CCTV camera and take all other essential measures to ensure that the project site is not used by antisocial elements for nefarious antisocial activities, which are detrimental to peaceful coexistence in the project region. In case such complaints are received, the EC given is likely to be cancelled after a police verification.
1.45	The violation of EC conditions may lead to cancellation of EC and penal action under the Environment (Protection) Act 1986.

## 2. Conditions Specified In The Earlier Ec

S. No	EC Conditions
2.1	Emissions from the stack should be constantly monitored to ensure that they are rendered harmless at the periphery.
2.2	Additional treatment facilities should ensure that the liquid goes out much below the permissible values, considering the proximity to the river.
2.3	Pits for the disposal of treated sharp needles to concrete lining of suitable thickness so as to prevent any type of contamination with groundwater.
2.4	Entire wastewater, including domestic wastewater, should be treated, and the treated water should be recycled.
2.5	Daily log of incoming and outgoing material should be maintained. The in house lab shall maintain

S. No	EC Conditions
	up to date the quality reports
2.6	All the vehicles that enter into this facility need a certain level of cleaning/disinfection when it is taken out
2.7	The Authority also insist that the on time display for monitoring of the effluents, particularly of each pollutant for the information of the public should be commenced

**Standard EC Conditions for (Bio-Medical Waste Treatment Facilities)**

**1. Statutory Compliance**

S. No	EC Conditions
1.1	The proponent should get authorizations and other statutory clearances from the Government Departments/agencies for the functioning as per rules.
1.2	The proponent shall maintain records related to the generation, collection, reception, storage, transportation, treatment, disposal and /or any form of handling of biomedical waste in accordance with rules.
1.3	The Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
1.4	The stipulations by Statutory Authorities under different Acts and Notifications should be complied with, including the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
1.5	The proponent shall submit half yearly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) and upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the respective Regional Office of MoEF, Govt. of India and also to the Directorate of Environment and Climate Change, Govt. of Kerala.
1.6	The proponent should provide notarized affidavit (indicating the number and date of Environmental Clearance proceedings) that all the conditions stipulated in the EC shall be scrupulously followed.

**2. Air Quality Monitoring And Preservation**

S. No	EC Conditions
2.1	Every time a vehicle is unloaded, the vehicle and empty waste containers shall be washed properly and disinfect.

S. No	EC Conditions
2.2	The proponent should take adequate measures to prevent the contamination of polluting gas/effluents/ashes to air, water and land.
2.3	Waste such as incineration ash generated in the process of incineration shall be stored in a separate area under the shed so as to avoid entry of rain water during the monsoon.

### 3. Water Quality Monitoring And Preservation

S. No	EC Conditions
3.1	Untreated biomedical waste shall be transported only in such vehicles as may be authorized for the purpose by the competent authority as specified by the government.
3.2	The base of the waste cabin shall be leak proof to avoid pilferage of liquid during transportation and the inner surface of the waste cabin shall be made of smooth surface to minimize water retention. The waste cabin shall be so designed that it is easy to wash and disinfect.
3.3	The equipment's used for the treatment should be cleaned everyday and the waste water should be treated before further usage.
3.4	No effluent should be discharged out of the premises.
3.5	Technology and capacity of the STP to be indicated with discharge point (if any) of the treated effluent.
3.6	Rain water harvesting capacity should be installed as per the prevailing provisions of KMBR/KPBR, unless otherwise specified elsewhere.

### 4. Noise Monitoring And Prevention

S. No	EC Conditions
4.1	Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.
4.2	An identification board of durable material and finish shall be displayed at the entrance to the facility. This shall clearly display the name of the facility, the name, address and telephone number of the operator and the prescribed authority, the hours of operation and the telephone numbers of the personnel to be contacted in the event of an emergency.
4.3	Necessary provision shall be made to prevent and control noise generated, if any, due to the activities at the site.
4.4	The details of Environmental Clearance should be prominently displayed in a metallic board of 3ft×3ft with green background and yellow letters of Times New Roman fond of size of not less than 40.

### 5. Energy Conservation Measures

S. No	EC Conditions
5.1	Adopt suitable design criteria for incinerators, Incinerator room and waste storage room for better performance.
5.2	Generation of solar energy to be mandatory for own use and/or to be provided to the grid.

## 6. Waste Management

S. No	EC Conditions
6.1	The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016.
6.2	The waste shall be treated and disposed of in accordance with Schedule I, and in compliance with the standards prescribed in Schedule V of Bio Medical Waste Management and handling Rules.
6.3	Bio-Medical Waste shall not be mixed with other wastes and the waste shall be segregated into labeled containers/bags at the point of generation prior to its storage, transportation, treatment and disposal.
6.4	Plastic wastes should be treated and disposed separately.
6.5	No treated bio-medical waste shall be kept stored beyond a period of 48 hours.
6.6	Measures shall be implemented to control pests and insects at the site.

## 7. Green Belt

S. No	EC Conditions
7.1	Greenbelt should be provided by using common local tree species around the project area.

## 8. Public Hearing And Human Health Issues

S. No	EC Conditions
8.1	High walls, fencing and guarded gates shall be provided at the facility to prevent unauthorized access to the site by humans and livestock.
8.2	Fire safety equipment such as sand buckets and fire extinguishers should be provided at all the salient points as per Fire and Safety Regulations.

## 9. Miscellaneous

S. No	EC Conditions
9.1	Provision for parking shall be made within the confines of the site for parking of required number of vehicles, loading and unloading of the vehicles meant for transporting waste to and from the

S. No	EC Conditions
	facility.
9.2	The conditions specified in the Companies Act, 2013 should be observed for Corporate Social Responsibility.
9.3	The Project Proponent should advertise in at least two local newspapers widely circulated in the region, one of which (both the advertisement and the newspaper) shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Department of Environment and Climate Change, Govt. of Kerala and may also be seen on the website of the Authority at www.seiaakerala.org. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.
9.4	A copy of the clearance letter shall be sent by the proponent to concerned Grama Panchayath/District Panchayath/Municipality/Corporation/Urban Local Body and also to the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The Environmental Clearance shall also be put on the website of the company by the proponent.

**Additional EC Conditions**

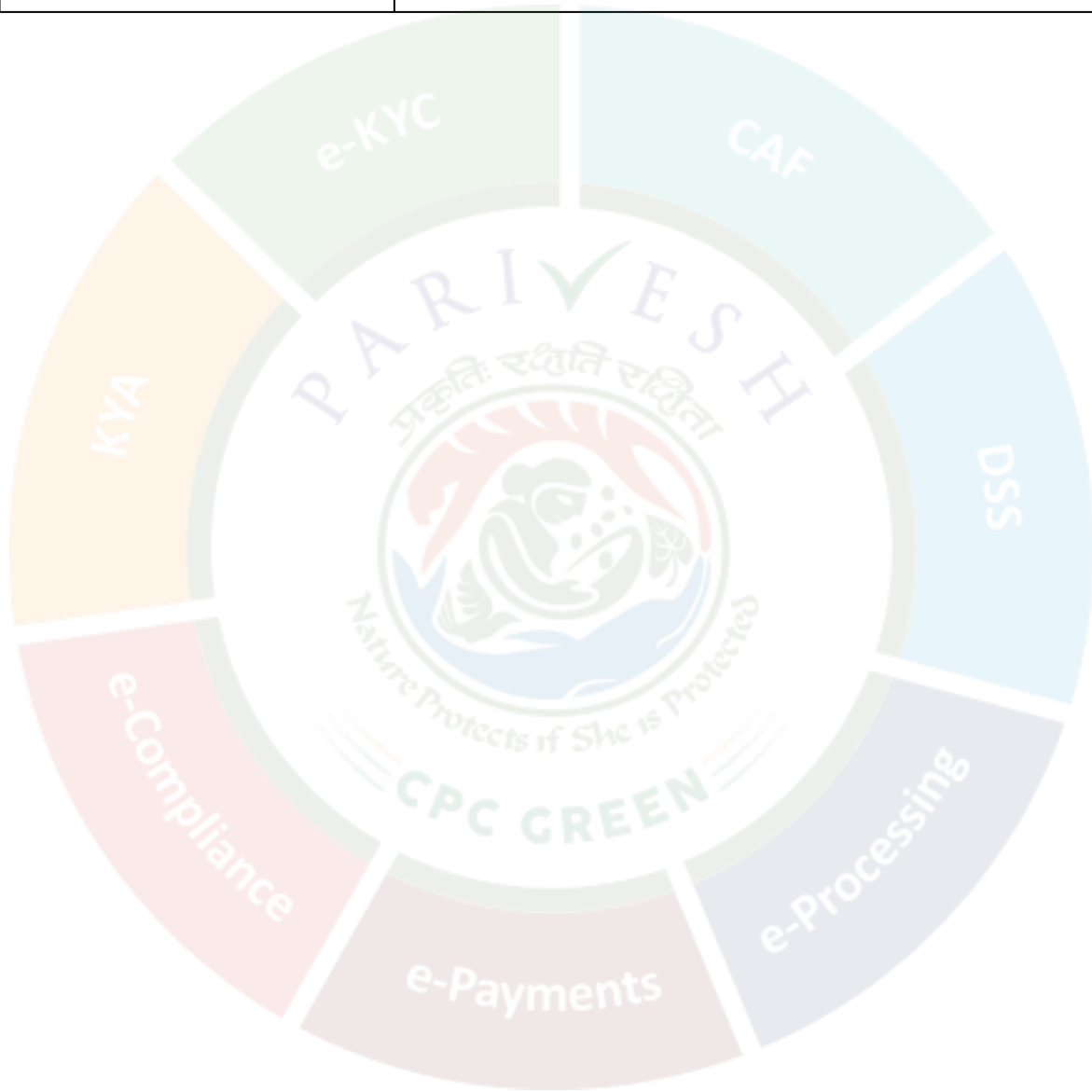
N/A

Annexure 2

**Details of the Project**

S. No.	Particulars	Details	
a.	Details of the Project	Expansion of Common Bio-Medical Waste Treatment Facility of M/s Kerala Enviro Infrastructure Ltd.	
b.	Latitude and Longitude of the project site	9.98195175340442,76.36162540200962 9.98365657520188,76.36298719703512	
c.	Land Requirement (in Ha) of the project or activity	<b>Nature of Land involved</b>	
		Non-Forest Land (A)	1.42
		Forest Land (B)	0
		Total Land (A+B)	1.42
d.	Date of Public Consultation	Public consultation for the project was held on	
e.	Rehabilitation and Resettlement	No	

S. No.	Particulars	Details
	(R&R) involvement	
f.	Project Cost (in lacs)	1595
g.	EMP Cost (in lacs)	31.5
h.	Employment Details	



## I. PROJECT DETAILS

Sl. No.	Particulars	Details
1.	Name & Address of the Project Proponent	Dr. N.K Pillai Chief Executive Officer Kerala Enviro Infrastructure Ltd. Common TSDF Project, Inside FACT CD Campus, Ambalamedu, Kochi - 682303
2.	Block No.	37
3.	Re- Sy No.	205
4.	Village	Puthenkurissu
5.	Taluk	Kunnathunad
6.	District	Ernakulam
7.	Total Plot Area	3.5 Acre
8.	Project Cost	72 Lakh for phase 1 expansion and 580 Lakh for Phase 2 expansion
9.	Facilities	20% increase in the capacity of the CBMWF in the first year & another 20% in the subsequent year
10.	Validity of EC	<b>10 (Ten) years</b>

## II. EMP Details

Sl. No.	Activities	Capital Cost	Recurring Cost
1.	Air Pollution Control & Online Monitoring Systems	22,00,000.00	5,00,000.00
2.	Landscaping, Green belt Development	2,00,000.00	50,000.00
3.	Monitoring of ambient Air, Water, Soil, Noise etc. (Including yearly Dioxin & Furan Monitoring by 3 <sup>rd</sup> Party)	--	8,00,000.00
4.	Occupational Health & Safety (Immunization, Health check-up, PPE)	--	18,90,000.00
5.	Provision of CCTV Camera & GPS monitoring system in transport vehicles	1,00,000.00	50,000.00
6.	Provision of cost for the transportation of hazardous waste (Incineration ash + ETP Sludge) to TSDF site	--	2,74,000.00
<b>Total</b>		<b>25,00,000.00</b>	<b>35,64,000.00</b>

## III. CER Details

Activities	Cost
Improvement of physical infrastructure in Anganawadis in Vadavukode- Puthenkurissu Gramapanchayat	<b>7,00,000.00</b>

