Recognized by NCTE/Affiliated to the Tamil Nadu Teachers Education University Re-Accredited by NAAC to the Company of the Co

# **Criterion VII**

**Key Indicator** – 7.1 **Institutional Values and Social Responsibilities.** 

Metric No: 7.1.2. Institution has a stated policy and procedure for implementation of waste management.

Any other relevant information

## **SAP CERTIFICATE**



# Certificate



This is to certify that Indhira College of Education, Thiruvallur, Tamil Nadu is now a Recognized Swachhta Action Plan Institution. The Institution has successfully formed the Swachhta Action Plan Committee and constituted the working groups Post COVID-19 for Sanitation & Hygiene, Waste Management, Water Management, Energy Management and Greenery along with the observation of two environment related days to inculcate in faculty, students and community, the practices of Swachhta and Reduction, Reuse and Recycling of Resources.

Dr. W G Prasanna Kumar Chairman

Mahatma Gandhi National Council of Rural Education Department of Higher Education, Ministry of Human Resource Development Government of India

No.:Cert.01/SAP/TN/TVR/35

Category of the Industry:

RED



CONSENT ORDER NO. 2204148882237

DATED: 27/12/2022.

PROCEEDINGS NO.T1/TNPCB/F.1632TLR/RL/TLR/W/2022 DATED: 27/12/2022

SUB: Tamil Nadu Pollution Control Board –CONSENT TO OPERATE –After CTE -M/s. INDIRA EDUCATIONAL AND CHARITABLE TRUST, S.F.No. 470/2,3, 471/2&3,464/2, 475, PANDUR Taluk and Tiruvallur District - Consent for the operation of the plant and villageTiruvallur discharge of sewage and/or trade effluent under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 as amended in 1988 (Central Act 6 of 1974) - Issued-Reg.

REF: 1.CTE Proc. No. T4/TNPCB/F.1632TLR/RL/TLR/W&A/2019 DATED: 04/10/2019

2. Unit's application for CTO dated 15.11.2022

3. IR.No: F.1632TLR/RL/AEE/TLR/2022 dated 28/11/2022

4. Minutes of 303rd CCC meeting held on 22.12.2022 vide agenda item no. 303-1

CONSENT TO OPERATE is hereby granted under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 as amended in 1988 (Central Act, 6 of 1974) (hereinafter referred to as "The Act") and the rules and orders made there under to

> Chairman & Managing Trustee, M/s . INDIRA EDUCATIONAL AND CHARITABLE TRUST S.F No.470/2,3, 471/2&3,464/2, 475, PANDUR Village, Tiruvallur Taluk, Tiruvallur District.

Authorising the occupier to make discharge of sewage and /or trade effluent.

This is subject to the provisions of the Act, the rules and the orders made there under and the terms and conditions incorporated under the Special and General conditions stipulated in the Consent Order issued earlier and subject to the special conditions annexed.

This CONSENT is valid for the period ending March 31, 2023

RAGHAVAN SARASAVAN 9COA serialNumbera2FF49903A3E2BEB 11BE32F925CF272F9762E65180 ARASAVAN Date: 2022.12.27 23.28.51 +05307

For Member Secretary, Tamil Nadu Pollution Control Board,

Chairman & Managing Trustee, M/s.INDIRA EDUCATIONAL AND CHARITABLE TRUST, 19, Govidan Street, Ayyavoo Colony, Aminjikarai, Chennai,

#### Pin: 600029

#### Copy to:

1. The Commissioner, POONDI-Panchayat Union, Tiruvallur

Taluk, Tiruvallur District.

- 2. The District Environmental Engineer, Tamil Nadu Pollution Control Board, TIRUVALLUR.
- 3. The JCEE-Monitoring, Tamil Nadu Pollution Control Board, Chennai.
- 4. File

#### SPECIAL CONDITIONS

This consent to operate is valid for operating the facility for the manufacture of products (Col. 2) at the rate (Col. 3) mentioned below. Any change in the products and its quantity has to be brought to the notice of the Board and fresh consent has to be obtained.

SI. No.	Description	Quantity	Unit				
Product Details							
1.	Hospital with 300 beds and with total builtup area	14443.16	Sq.mt.				

This consent to operate is valid for operating the facility with the below mentioned permitted outlets for the discharge of sewage/trade effluent. Any change in the outlets and the quantity has to be brought to the notice of the Board and fresh consent has to be obtained.

Outlet No.	Description of Outlet	Maximum daily discharge in KLD	Point of disposal			
Effluent Type: Sewage						
1.	Sewage - I	65.0	On land for gardening			
2.	Sewage - II	47.0	Utilizing for Toilet flushing			
Effluent Type: Trade Effluent						
1.	Trade effluent	5.0	After disinfection discharged to STP and combinedly treated effluent discharged on land for gardening			

The effluent discharge shall not contain constituents in excess of the tolerance Limits as laid down hereunder.

2

SI.	Parameters	Unit	TOLERANCE LIMITS - OUTLETS -Nos			
No.			Sewage	Trade Effluent		
			2	1		
1.	рН		5.5 to 9	5.5 to 9		
2.	Temperature	оС	-	shall not exceed 5°C above the receiving water temperature		
3.	Particle size of Suspended solids	-	-	shall pass 850 micron IS sieve		
4.	Total Suspended Solids	mg/l	30	100		
5.	Total Dissolved solids (inorganic)	mg/l	-	2100		
6.	Oil & Grease	mg/l	-	10		
7.	Biochemical Oxygen Demand (3 days at 27oC)	mg/l	20	30		
8.	Chemical Oxygen Demand	mg/l	-	250		
9.	Chloride (as Cl)	mg/l	-	1000		
10.	Sulphates (as SO4)	mg/l	-	1000	0.00	
11.	Total Residual Chlorine	mg/l	-	1		
12.	Ammonical Nitrogen (as N)	mg/l	-	50		
13.	Total Kjeldahl Nitrogen (as N)	mg/l	-	100		
14.	Free Ammonia (as NH3)	mg/l	-	5	R	
15.	Arsenic (as As)	mg/l	-	0.2		
16.	Mercury (as Hg)	mg/l	-	0.01		
17.	Lead (as Pb)	mg/l	-	0.1		
18.	Cadmium(as Cd)	mg/l	-	2		
19.	Hexavalent Chromium (as Cr+6)	mg/l	-	0.1`		
20.	Total Chromium (as Cr)	mg/l	-	2		
21.	Copper (as Cu)	mg/l	-	3		
22.	Zinc (as Zn)	mg/l	-	1		
23.	Selenium (as Se)	mg/l	-	0.05		
24.	Nickel (as Ni)	mg/l	-	3		
25.	Boron (as B)	mg/l	-	2		
26.	Percent Sodium	%	-	-		
27.	Residual Sodium Carbonate	mg/l	-	-		
28.	Cyanide (as CN)	mg/l	-	0.2	2	
29.	Fluoride (as F)	mg/l	-	2		
30.	Dissolved Phosphates(as P)	mg/l	-	5		
31.	Sulphide (as S)	mg/l	-	2		
32.	Pesticides	mg/l	-			
33.	Phenolic Compounds (as C6H5OH)	mg/l	-	1		
34.	Radioactive materials a) Alpha emitters	micro curie/ml	-	10-7		
35.	Radioactive materials b). Beta emitters	micro curie/ml	-	10-6		

36.	Fecal Coliform	MPN/100ml	-	-	

- All units of the sewage and Trade effluent treatment plants shall be operated efficiently and continuously so as to achieve the standards prescribed in \$1 No.3 above or to achieve the zero liquid discharge of effluent as applicable.
- The occupier shall maintain the Electro Magnetic Flow Meters/water Meters installed at the inlet of the water supply connection for each of the purposes mentioned below for assessing the quantity of water used and ensuring that such meters are easily accessible for inspection and maintenance and for other purposes of the Act.
  - a. Industrial Cooling, Spraying in mine pits or boiler feed.
  - b. Domestic purpose.
  - Process.
- The occupier shall maintain the Electro Magnetic Flow Meters with computer recording arrangement for measuring the quantity of effluent generated and treated for the monitoring purposes of the Act.
- Log book for each of the unit operations of ETP have to be maintained to reflect the working condition of ETP along with the readings of the Electro Magnetic Flow Meters installed to assess effluent quantity and the same shall be furnished for verification of the Board officials during
- 8. The occupier shall at his own cost get the samples of effluent/surface water/ground water collected in and around the unit by Board officials and analyzed by the TNPC Board Laboratory periodically.
- 9. Any upset condition in any of the plants of the factory which is, likely to result in increased effluent discharge and result in violation of the standards mentioned in Sl. No.3 above shall be reported to the Member Secretary / Joint Chief Environmental Engineer-Monitoring and the concerned District/Assistant Environmental Engineer of the Board by e-mail immediately and subsequently by Post with full details of such upset condition.
- The occupier shall always comply and carryout the order/directions issued by the Board in this Consent Order and from time to time without any negligence. The occupier shall be liable for action as per provisions of the Act in case of non compliance of any order/directions issued.
- 11. The occupier shall develop adequate width of green belt at the rate of 400 numbers of trees per Hectare.
- 12. The occupier shall provide and maintain rain water harvesting facilities.
- The occupier shall ensure that there shall not be any discharge of effluent either treated or untreated into storm water drain at any point of time.
- In the case of zero liquid discharge of effluent units, the occupier shall adhere the following conditions as laid under.
  - i). The occupier shall ensure zero liquid discharge of effluent, thereby no discharge of untreated / treated effluent on land or into any water bodies either inside or outside the premises at any point of
  - ii) The occupier shall operate and maintain the Zero liquid discharge treatment components comprising of Primary, Secondary and tertiary treatment systems at all times and ensure that the RO permeate/Evaporator condensate shall be recycled in the process and the final RO reject shall be disposed off with the reject management system ensuring zero liquid discharge of effluents in the premises.
  - iii) The occupier shall operate and maintain the reject management system effectively and recover the salt from the system which shall be reused in the process if reusable or shall be disposed off as ETP
  - iv) In case of failure to achieve zero discharge of effluents for any reason, the occupier shall stop its production and operations forthwith and shall be reported to the Member Secretary/Joint Chief Environmental Engineer-Monitoring and the concerned District/Assistant Environmental Engineer of the Board by e-mail immediately and subsequently by Post with full details of such upset condition. v) The occupier shall restart the production only after ascertaining that the Zero discharge treatment system can perform effectively for achieving zero discharge of effluents.

### **Special Additional Conditions:**

The unit shall obtain No Objection Certificate (NOC) from the Tamil Nadu Bio Diversity Board National Bio Diversity Authority if the unit is using any Biological resources or knowledge associated thereto as per the provisions of Biological Diversity Act 2002.

### **Additional Conditions:**

4 INDHIRA COLLEGE OF EDUCATION

PANDUR, TIRUVALLUR-631 203

1. The HCF shall operate and maintain the Sewage Treatment Plant of 150 KLD provided to treat the sewage generated in the HCF continuously and efficiently, so as to achieve the standards prescribed by the Board.

2. The HCF shall utilize the treated sewage for gardening (65 KLD) and for toilet flushing (47 KLD)

after achieving the standards prescribed by the Board.

3. The liquid waste generated due to infected secretions, aspirated body fluids, chemical liquid waste from laboratory, labour room, operation theatre, infected body secretions such as blood shall be collected and handed over to an industry or vendor authorised by TNPCB for the purpose of their utilization or shall be disinfected separately before treated in the ETP.

4. The HCF shall operate and maintain the Effluent Treatment Plants provided for the treatment of trade effluent continuously and efficiently so as to achieve the standards prescribed by the Board. 5. The HCF shall utilize the treated trade effluent of 5 KLD for gardening after achieving the standards prescribed by the Board.

6.The HCF shall provide UV disinfection system to disinfect the trade effluent before discharging into

7. The HCF shall operate and maintain the EMFM provided at STP inlet, STP outlet and ETP inlet and shall be connected with automated Computer recording system to monitor the flow.

8. The HCF shall install Electromagnetic flow meters connected with automated computer recording facility at the outlet of Effluent Treatment Plant & STP discharge point for HVAC to assess the flow.

9. The HCF shall not clean the STP tanks manually and it should be carried out only by mechanical

10. The HCF shall pre-treat the laboratory waste, microbiological waste, blood samples and blood bags through disinfection or sterilisation on-site in the manner as prescribed in the Bio-medical Waste Management (Amendment) Rules, 2018.

11. The HCF shall ensure to phase out use of chlorinated plastic bags, and gloves (excluding blood bags) as per Bio-medical Waste Management (Amendment) Rules, 2018.

12. The HCF shall provide training to all its health care workers and others involved in handling of bio-medical waste at the time of induction and thereafter at least once every year.

13. The HCF shall provide and maintain bar coding system for bags and containers containing BMW at

all times to be sent for the further treatment and disposal. 14. The HCF shall maintain log book in terms of types of BMW categories in Kgs for collection and disposal of bio medical waste for treatment to the common bio medical waste treatment facility y& disposal facility and the same shall be furnished during inspection.

15. The HCF shall maintain separate closed roof shed for storage of BMW in the unit premises.

16. The HCF shall make available the annual report on its website as per the Bio-medical Waste Management (Amendment) Rules, 2018.

17. The HCF shall comply with the provisions of Biomedical Waste Management Rules, 2016.

18. The HCF shall utilize the sludge generated from the STP as manure for gardening.

19. The bio degradable solid waste generated shall be treated in Bio gas plant provided and log book for operation of Bio Gas Plant, quantity of waste treated, Bio gas generated shall be maintained. 20. The HCF shall ensure that non bio degradable solid waste, STP sludge, etc., generated from the project activity shall be properly collected, segregated and disposed as per the provision of Solid waste

Management Rules, 2016.

21. The HCF shall not use "Use and throwaway plastics" irrespective of thickness such as plastic sheets used for food wrapping, spreading on dining etc., plastic plates, plastics coated tea cups, plastic tumbler, water pouches and packets, plastic straw, plastic carry bag and plastic flags within the premises. Instead the HCF shall encourage use of eco-friendly alternatives such as banana leaf, Arecanut palm plate, stainless steel, Glass, Porcelain plates/cups, Cloth bag, Jute bag etc.

22. The HCF shall develop adequate greenbelt complying the conditions stipulated in the Environmental Clearance dated 24.05.2017.

23. The HCF shall comply with the E-Waste Management Rules 2016. E Waste as listed in Schedule

-I, generated by them shall be channelized through collection centre or dealer of authorized producer or the dismantler or recycler or through designated take back service provider of the producer to authorized dismantler or recycler. The unit shall maintain records of e-waste generated by them in Form-2 and make such records available for scrutiny by the TNPCB. The unit shall file annual returns in Form -3, to the TNPCB on or before the 30th day of June following the financial year.

24.In case of revision of consent fee by the Government, the unit shall remit the difference in amount within one month from the date of notification. Failing to remit the consent fee, this consent order will be withdrawn without any notice and further action will be initiated against the units as per law.

> RAGHAVAN SARASAVANI

Digitally signed by RAGHAVAN SARASAVANI
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BOARD, 0=CHENNAI, postalCode=600032, s=Tamil
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serialNumber=2FF49903A3E28E81248E83485E6D99
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Date: 2022.12.27 23:29.29+05'30'

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For Member Secretary, Tamil Nadu Pollution Control Board, Chennai

#### **GENERAL CONDITIONS**

- The occupier shall make an application along with the prescribed consent fee for grant of renewal of
  consent at least 60 days before the date of expiry of this Consent Order along with all the required
  particulars ensuring that there is no change in Production quantity and change in sewage/Trade
  effluent.
- 2. This Consent is issued by the Board in consideration of the particulars given in the application. Any change or alteration or deviation made in actual practice from the particulars furnished in the application will also be ground for review/variation/revocation of the Consent Order under Section 27 of the Act and to make such variation as deemed fit for the purpose of the Act.
- 3. The consent conditions imposed in this order shall continue in force until revoked under Section 27(2) of the Act.
- 4. After the issue of this order, all the 'Consent to Operate' orders issued previously under Water (Prevention and Control of Pollution) Act, 1974 as amended stands defunct.
- The occupier shall maintain an Inspection Register in the factory so that the inspecting officer shall
  record the details of the observations and instructions issued to the unit at the time of inspection for
  adherence.
- 6. The occupier shall provide and maintain an alternate power supply along with separate energy meter for the Effluent Treatment Plant sufficient to ensure continuous operation of all pollution control equipments to maintain compliance.
- The occupier shall provide all facilities to the Board officials for inspection and collection of samples in and around the factory at any time.
- 8. The occupier shall display the flow diagram of the sources of effluent generation and pollution control systems provided at the ETP site.
- 9. The solid waste such as sweepings, wastage, package, empty containers, residues, sludge including that from air pollution control equipments collected within the premises of the industrial plant shall be collected in an earmarked area and shall be disposed off properly.
- 10. The occupier shall collect, treat the solid wastes like food waste, green waste generated from the canteen and convert into organic compost.
- 11. The occupier shall segregate the Hazardous waste from other solid wastes and comply in accordance with Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008.
- 12. The occupier shall maintain good house-keeping within the factory premises.
- 13. All pipes, valves, sewers and drains shall be leak proof. Floor washings shall be admitted into the trade effluent collection system only and shall not be allowed to find their way in storm drains or open areas.
- 14. The occupier shall ensure that there shall not be any diversion or by-pass of trade effluent on land or into any water sources.
- 15. The occupier shall ensure that solar Evaporation pans shall be constructed in such a way that the bottom of the solar pan is at least 1 m above the Ground level (if applicable).
- 16. The occupier shall furnish the following returns in the prescribed formats to the concerned District office regularly.
  - a) Monthly water consumption returns of each of the purposes with water meter readings in Form-I on or before 5th of every month.
  - b) Yearly return on Hazardous wastes generated and accumulated for the period from 1st April to 31st March in Form—4 before the end of the subsequent 30th June of every year (if applicable).
  - c) Yearly Environmental Statement for the period from 1st April to 31st March in Form -V before the end of the subsequent 30th September of every year(if applicable).
- 17. If applicable, the occupier has to comply with the provisions of Public Liability Insurance Act, 1991 to provide immediate relief in the event of any hazard to human beings, other living creatures/plants and properties while handling and storage of hazardous substances.
- 18. The issuance of this consent does not authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any natural watercourse or in Government Poromboke lands.
- 19. The issuance of this Consent does not convey any property right in either real personal property or any exclusive privileges, nor does it authorize any injury to private property or Government property or any invasion of personal rights nor any infringement of Central, State laws or regulation.

- 20. The occupier shall forth with keep the Board informed of any accident of unforeseen act or event of any poisonous, noxious or polluting matter or emissions are being discharged into stream or well or air as a result of such discharge, water or air is being polluted.
- 21. If due to any technological improvements or otherwise the Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any treatment system, either in whole or in part) the Board shall, after giving the applicant an opportunity of being heard, vary all or any of such conditions and thereupon the applicant shall be bound to comply with the conditions as so
- In case there is any change in the constitution of the management, the occupier of the new management shall file fresh application under Water (Prevention and Control of Pollution) Act, 1974, 22. as amended in Form-II alongwith relevant documents of change of management immediately and get the necessary amendment with renewal of consent order.
- 23. In case there is any change in the name of the company alone, the occupier shall inform the same with relevant documents immediately and get the necessary amendments for the change of name from the
- 24. The occupier shall display this consent order granted to him in a prominent place for perusal of the inspecting Officers of this Board.

**RAGHAVAN** SARASAVAN | Seign | SARASAVAN | Seign | SARASAVAN | SA

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For Member Secretary, Tamil Nadu Pollution Control Board, Chennai

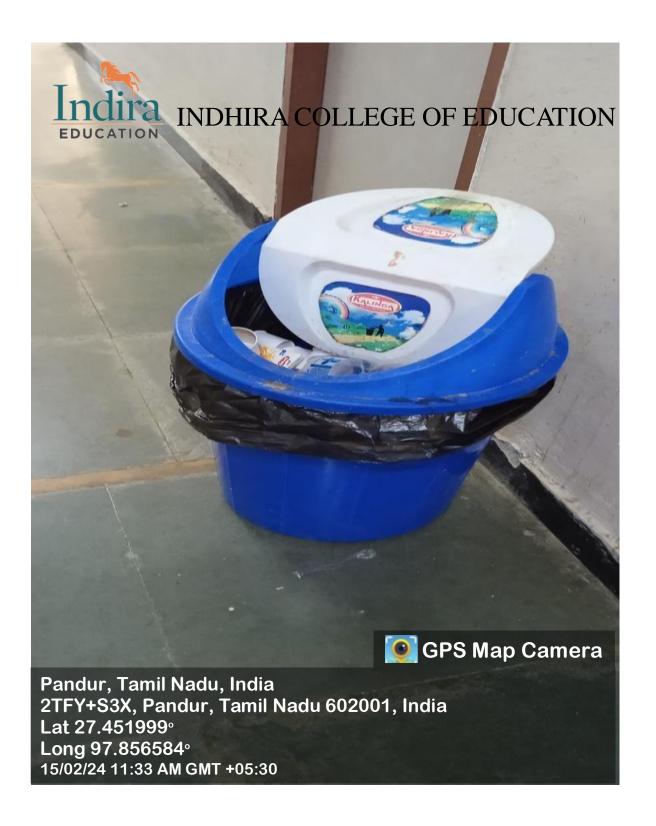
8 COLLEGE OF EDUCATION PANDUR, TIRUVALLUR-631 203

# 7.1.2. Any Other Relevant Information

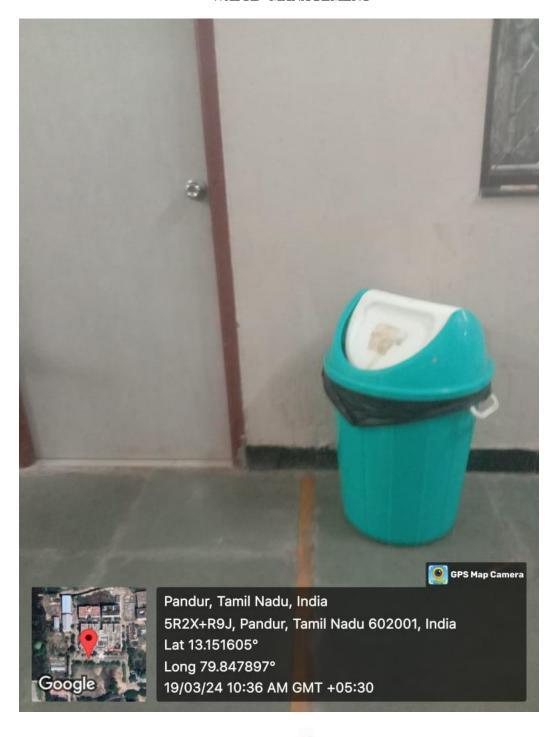
Waste management is the process of collecting, transporting, processing, recycling, and disposing of waste materials in a safe, efficient, and environmentally friendly manner. Here are some steps that can be taken in the institution and waste management can be effectively managed, leading to a cleaner and healthier environment in the campus.

# WasteManagement





### WASTE MANAGEMENT



# WASTE SEGREGATION



# WHEELED DUST BINS



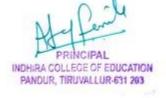
### **SEGREGATION OF DRY LEAVES**





Indhira College of Education has implemented wheeled dustbins for efficient garbage collection on campus. These bins are strategically placed across the premises, ensuring convenient disposal for students and staff. With sturdy wheels, they can be easily maneuvered, promoting cleanliness in every corner of the college. The bins come in various sizes to accommodate different types of waste, contributing to effective segregation and recycling efforts. This initiative not only enhances the aesthetic appeal of the campus but also fosters a culture of environmental responsibility among the college community. The introduction of wheeled dustbins signifies a proactive step towards maintaining a clean and sustainable environment at Indhira College of Education.





### WHEELED DUSTBINS IN INDHIRA COLLEGE OF EDUCATION

