

23 MAY 2019

No. KSPCB/RSEO/BNG-CITY/IR/2018-19/253

Dt:

**INSPECTION REPORT OF SRI R GURUMURTHY, SENIOR ENVIRONMENTAL OFFICER,  
BANGALORE CITY.**

Sl. No	Particulars	Details
1	Name & address of Hospital	M/s. Suryakanth Environmental Technologies, Sy.No.158, Haraginadoni Village, Bellary Taluk & District.
2	Officer accompanied	Sri.B.C. Shivamurthy, Environmental Officer, (I/C) Regional Office, KSPCB, Bellary.
3	Date of Inspection	18.05.2019.
4	Person Contacted	Sri.Irfan, Manager.
5	Category	Small-Red.
6	Consent status	The Consent for Operation was issued vide Board office letter no. AW-301365, Dated: 09.11.2016 which is valid up to 30-06-2021
7	BMW Authorization Status	BMW Authorization was issued vide Board office letter no.PCB/206/BMW-10/Reg.No.150944/OB/502, Dt:30.08.2018 and which is valid up to 30-06-2021.

**Ref:- Board Office Memo No.PCB/05/EGV-16/893, dated: 03.05.2019.**

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As per the directions of the Board Office vide reference, cited above, M/s. Suryakanth Environmental Technologies, Sy.No.158, Haraginadoni Village, Bellary Taluk & District, was inspected on 18.05.2019 as random inspection.

**This Common Bio-medical waste treatment facility is established during 2012 is an extent of 1.5 acres of land belongs to Bellary CMC adjacent to MSW Sites.**

The said facility engaged in Collection, transportation, storage Treatment and disposal of the Bio medical waste of about 840 Kg's per day from 436 No's bedded and 450 No's non bedded Health Care facilities from Hospet, Siriguppa, Agari Bommanahalli, Sandur, Bellary and Kudlagi Taluk of Bellary District.

The authorities have informed that, Harappanahalli Taluk is recently attached to Bellary District but they are not collecting the BMW from this Taluk. Earlier the collecting the BMW from Koppal district now they have stopped collecting the BMW due to non co-operation from Health care facility. In this regard, they have requested Board to intervene for collection of Bio medical waste from Harappanahalli Taluk of Bellary District and Koppal district.

  
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### WATER POLLUTION CONTROL STATUS:

The source of water supply is from Bore well . The total Water consumption is around 2.0 KLD

Sl. No.	Purpose	WC (KLD)	WWG (KLD)	Mode of disposal
1	Domestic	0.200	0.180	Septic tank followed by Soak pit
2	Industrial	2.000	2.000	The waste water generation is around 1000 liters/day from the Process (scrubbing) which is treated in effluent treatment plant.

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The ETP consisting of following units

1. Neutralisation tank - 1.0 m x 1.0 m x 1.5 m depth
2. Up flow filter - 2.0m x 2.0m x 1.5m depth.
3. Final collection tank - 1.0m x 1.0m x 1.5 m depth.

The final treated water is used for the scrubber and excess, shall be used for gardening in the premises.

**AIR POLLUTION CONTROL STATUS:** The sources of Air pollution and air pollution control measures provided by the industry are as follows.

Sl No.	Source	Chimney ht. with APC measures stipulated	Provided	Remarks
1	Double chamber Incinerator-100 Kg's/hr (HSD fired)	30mtrs AGL chimney with scrubber , followed by cyclone and mist control	30mtrs AGL chimney with scrubber followed by cyclone and mist control	Adequate
2	30 KVA DG set	3.0 m ARL with acoustic enclosures.	3.0 m ARL with acoustic enclosures.	Adequate

### Ash Disposal:-

The authorities have provided 3 No's concrete pit for size by  $10' \times 20'$  feet each storage of ash generated after incineration of the waste and the same shall be disposed to secured landfill site (TSDF). SO far, they have not handed over ash to TSDF.

*(10' x 10' x 20') R*  
*R*  
  
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They have engaged 7 Vehicles -Tata ACE and 01 Appe vehicle for collection of Bio-medical waste from above mentioned taluk's of Bellary District.

**Compliance to the CPCB Guidelines for design & construction of Incinerator and BMWCTF:-**

Sl.No	CPCB Guidelines	Compliance Status
1	The CTF shall be located at a place reasonably far away from residential and sensitive area.	The site is reasonably away from the residential and sensitive area, Nearest habitat village is about 1.5 Km away from the proposed site.
2	A CBMWTF setup on a plot size of not less one acre	1.5 acre land is taken on lease from the Government.
3	A CBMWTF shall not be allowed to cater HCE's situated beyond a radius of 150 Km	Complied

**As per CPCB guidelines, the check list of treatment facilities to be provided at the CTF are as follows:-**

Sl. No	CPCB guidelines	Compliance
1	Autoclave (Pre-vacuum horizontal feeding)/Hydroclave/Microwave	Autoclave of capacity 50 Kg/hr is provided
2	Incineration	Incinerator-100kg/hr capacity is provided.
3	Shredder	Shredder of capacity 50 Kgs/hr is provided
4	Sharp pit	Sharp pit is provided
5	Facility for bin washing, floor washing, vehicle washing	Vehicle washing facility provided and the washed effluent is diverted to ETP. Bin washing and floor washing effluent is connected to ETP.
6	Effluent Treatment Plant	Effluent Treatment Plant is provided
7	Until disposal to secured landfill Site (TSDF), space shall be earmarked within BMW CTF site for ash storage	Concrete pit for ash storage provided within the site.
8	Disinfection facility/tanks	Disinfection tanks provided

**The unit premises was inspected on 18.05.2019 and following observations were made during inspection.**

1. The unit was working and bio medical waste was segregated and incineration work is under progress.
2. Provided Separate Compartment as per colour code i.e Yellow, Red, Blue and Black.
3. ETP is operating by batch process.
4. The greenbelt development work is satisfactory and advised to plant more saplings with aromatic plants.

  
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5. The house keeping of the unit is satisfactory.
6. Log books provided for incineration of bio-medical waste. They are advised to update the logbook at site and submit the return to the Board from time to time
7. Logbook was maintained for the operation of ETP.
8. The BMW CTF has been established in the part of land belongs to Bellary City Municipal corporation which is earmarked for municipal waste processing & disposal, located outskirts of Bellary City at about 8km distance.
9. Fencing has been made to the boundary of the facility.
10. The authorities have installed Bio-medical waste incinerator of capacity 100 Kgs/hr having double chambered (Primary chamber & Secondary chamber) and designed on "Controlled-air Incineration" principle with minimum 100 % excess air, vioatilization of waste is achieved in primary chamber through the thermal combustion using a heat source of completely automatic monobloc oil fired burner (HSD), in built with blower to supply the controlled air required for the complete oxidation/destruction/combustion of waste.
11. The Products of combustion from the secondary chamber is fed to the Venturi Scrubber (Air Pollution Control Equipment) where flue gas is treated with caustic (to neutralize the cidic fumes) & Scrubbed. A recirculation pump is provided in the system for circulation of dilutes caustic inside the scrubbed column. The scrubber column consists of integrated components such as recirculation tank, venturithroat, main spray nozzles assembly, emergency spray nozzles assembly, packing tower and demister where in the moisture is removed from flue gas stream.
12. An ID fan is provided at the end of the scrubber to create a negative draught & exhaust out the gas to the atmosphere through a 30 mtrs height stack. The stack has been provided with port hole and platform to facilities stack emissions monitoring.
13. Glass bottle were stored in separate area.
14. Disinfection of syringes and needles and glucose bottles is done in a separate comportsments.
15. The facility provided with other infrastructure such as Office Building, temperature display panel to the incinerator, waste receiving rooms, sterilizer, concrete platform for vehicle wash, disinfection tanks, ETP, Ash storage concrete pit and sharp pit.
16. The unit has installed continuous emission monitoring system with sensor.

**Monitoring:-**

The Environmental Officer, Bellary has carried out the monitoring using mobile van on 15.05.2019. The results are enclosed for kind perusal.

The copies of the logbook, photos, Consent and other documents are herewith enclosed for your kind perusal.

  
**SENIOR ENVIRONMENTAL OFFICER**  
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BANGALURU CITY.  
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Karnataka State Pollution Control Board  
BANGALORE