

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI
IN**

**APPLICATION NO 43 of 2017 (SZ)
[SUO MOTO]**

Applicant : **The Tribunal on its own motion on the
Implementation of the Bio-Medical Waste
Management Rules, 2016 in Kerala**

Respondents : **The State of Kerala & Others**

**VOLUME 2
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Dated this the16th August 2021

Rema Smrithi, Advocate
ADDITIONAL STANDING COUNSEL FOR THE 5th RESPONDENT

Minutes of meeting convened by the Environmental Engineer, KSPCB, District Office-1, Ernakulam to discuss on the feasibility of utilizing the STP JLN stadium for the treatment of sewage generated in the Govt. Medical College Hospital, Ernakulam

Meeting convened on 14.07.2021 on 11.00 AM through video conference. Following are the list of Participants:

1. Smt. P.B Sreelakshmy, Environmental Engineer, KSPCB, District Office-1, Ernakulam
2. Sri. Abdul Malik, Secretary, GCDA
3. Dr. Ganesh Mohan, Deputy Superintendent, Govt Medical College, Ernakulam
4. Sri. John Mathew, M/s INKEL Ltd.
5. Sri. Unnikuttan, Project Engineer, Govt Medical College, Ernakulam

The Environmental Engineer, KSPCB welcomed all participants into the meeting. The Environmental Engineer explained the purpose of conducting the meeting. The STP of the medical college is presently non operational. KSPCB had given several directions to the hospital to make the STP operational. The augmentation work is not completed yet. Presently, the untreated sewage from the hospital is disposed without any treatment. In this circumstance, a temporary arrangement needs to be made to treat the sewage generated from the hospital till the hospital STP becomes functional. The Hon'ble NGT under OA 43/2017 had also intervened in the matter. The meeting is conducted for discussing the feasibility of utilizing the GCDA's STP of JLN stadium for the treatment of sewage generated in the medical college. The Environmental Engineer requested the participants to inform their views and suggestions.

The Secretary, GCDA informed their willingness of treating the sewage of medical college in the STP installed at JLN Stadium. The secretary explained that the capacity of the STP plant at JLN Stadium is 750 KLD. The secretary further informed that the hospital authorities shall report the quantity of sewage generated for calculating the approximate treatment cost and also an agreement shall be executed in this regard.

The Medical College Deputy Superintendent informed that in this pandemic situation, the sewage generation quantity may be high since there are more no of patients.. The quantity of sewage shall be assessed for maximum bed strength.

The Environmental Engineer asked M/s INKEL to report the present status of hospital STP augmentation work. The INKEL informed that the construction of STP was delayed due to lockdown and also the KIIFB who is funding for the project, raised some queries regarding the structural stability of tanks. The INKEL informed that the stability test is completed and the tanks and its

motors will be installed in this month itself and the plant will fully commissioned by 31st August 2021.

The Environmental Engineer informed the Medical College that the details of work on the augmentation/modification of STP such as details of newly constructed tanks, its capacity etc. are not reported to the Pollution Control Board till date. Environmental Engineer informed the Project Engineer, Medical College Hospital to report the details of STP augmentation and also to report the quantity of sewage generated in Hospital. The Environmental Engineer further pointed out that since, hospital sewage is of different characteristics, a trial run need to be conducted to check whether STP of GCDA is adequate for treating the hospital sewage. The KSPCB will collect the treated waste water samples during trial run period and check whether the treated sewage is conforming to the discharge standards. If the JLN stadium STP is found to be adequate to treat the hospital sewage during the trial run period, the JLN stadium STP can be utilized for treating the Hospital sewage till the hospital STP start operational.

The Decision of the meeting is summarized as below.

1. The Medical College shall report the details of quantity of waste water generated and details of work done for STP augmentation/modification to KSPCB.
2. GCDA will assess the cost of treatment and the treatment and cost shall be paid by the Medical College. An agreement shall be executed in this regard.
3. Trial run need to be conducted to check the adequacy of the plant. KSPCB will monitor the STP operation during trial run period and collect samples to check whether treated sewage is conforming to the discharge standards.
4. INKEL shall complete the Medical College STP augmentation work within the specified time i.e, on or **before 31st August 2021.**

The Environmental Engineer concluded informing that the decisions of this meeting will be reported to the higher authority of the Board for submitting before the State Government. The meeting came to an end at 11.45 AM.



SREELAKSHMY P B
Environmental Engineer
KSPCB, District Office-1, Ernakulam

**Minutes of the meeting held by the Chairman, KSPCB on 19.07.2021 with IMAGE & KEIL the
CBWTF operators of the State**

The meeting commenced at 11.00 am with the Chairman presiding. The Member Secretary, Chief Environmental Engineer, Environmental Engineer- 2 and Assistant Engineer also attended the meeting. The request of IMAGE authorities to join the meeting through VC was approved. KEIL authorities attended in person. The list of participants is attached as Annexure. In the meeting convened by ACS (Envt.) on 29.06.2021 the matter of effective distribution of BMW among the two facilities was discussed. The current situation of one facility struggling to operate the facility with optimum capacity while the other facility operating with full capacity and still accumulating waste of around 8T/day was noted. The Pollution Control Board Chairman was instructed to convene a meeting with KEIL & IMAGE authorities to solve this issue and work out a solution in a weeks' time.

At the outset the Chairman acknowledged with gratitude the service of IMAGE in the State in the midst of the pandemic situation and mentioned that continuous support is always expected. The meeting is convened to arrive at an amicable and economically feasible solution for the treatment of bio medical waste being generated in the State. Chairman requested IMAGE authorities to express their opinion regarding the bifurcation of area among the two service providers as the new CBWTF started functioning since May 2021. The points raised by IMAGE and KEIL are furnished below:

Dr. Jayakrishnan, Chairman, IMAGE Technical Committee

Dr. Jayakrishnan said that in a meeting by the Joint Secretary, Health, it was decided to allot the BMW generated from the Govt. hospitals in the three district of Ernakulam, Malappuram and Pathanamthitta to KEIL and accordingly IMAGE had issued communication to the hospitals in the above districts to handover the BMW to KEIL. As KEIL had not started processing COVID waste and as the Govt. asked IMAGE to collect the COVID BMW from these hospitals, IMAGE is still collecting COVID BMW from these hospitals. Regarding the back log of waste pointed out by Chairman, it was informed that as the COVID BMW is to be disposed within the stipulated time they gave priority and utmost care and importance for its disposal and hence there occurred a back log of non COVID BMW. The situation is not existing now as there is a general reduction in the quantity of waste generation, both COVID and non COVID, as the situation has improved.

Dr. N.K. Pillai, CEO, KEIL

Though KEIL started operation from May 2021, they were initially hesitant to process COVID BMW. The collection of non COVID BMW from the Govt. hospitals from the three districts is now stabilized and the average daily collection is only 2.1 T/D as against the plant capacity of 16 T/D. With this limited quantity, continuous operation of the facility is not practical and is economically not viable. The CPCB has now issued registration ID and password to KEIL for registration in the mobile tracking app for collecting COVID BMW also from these hospitals. Now, even if they start collection of COVID BMW from these hospitals it would come to around 1 to 1.5 T/D only additionally as there is reduction in COVID cases now. Hence at least a quantity enough to run the plant economically should be allotted to them.

Dr. P. N. Parameswaran Moothattu, Director, KEIL

Dr. P.N. Parameswaran requested for granting permission to collect BMW from all health care facilities both Govt. and private within 75 km from the location of their plant. He also pointed out that as service charge for Govt. health care facilities is at subsidised rate, the transportation cost could be utilized effectively only if the waste from both the Govt. hospital and private hospitals in the same area are allotted. He explained that only 80% of beds are considered for payment from Govt. hospital and as there is no affiliation charge, the financial difficulty in operating the plant worsens.

The Chairman requested IMAGE to supplement their suggestions on the request of allotment of Pvt. hospitals along with Govt. to KEIL.

Dr. Jayakrishnan, IMAGE , Chairman of IMAGE Technical Committee

IMAGE started the project at Palakkad about 20 years back with the demand of the Private hospitals and they had maintained good working relationship of about 10 to 20 years with these private hospitals. They have no objection if the private hospitals are willing to join KEIL facility. The relationship of IMAGE with these private hospitals may not be delinked forcefully, unilaterally and discriminately.

The Chairman pointed out the suggestion of the Chief Secretary in the meeting on 08.03.2021 that it will be ideal to split up the rates as service charges and transportation charges separately so that the rate for processing is unified and variation in the transportation cost based on the actual distance of waste being transported would be more justifiable. Considering all the facts above, the Chairman asked IMAGE to submit their proposal to solve the matter in a mutually beneficial manner within two days. He also requested both agencies to peruse the guideline issued by the CPCB with respect to fixing of rates.

The IMAGE authorities requested for a week's time to work out a proposal from their side. The meeting ended at 12.10 pm.


CHAIRMAN

The lists of participants

IMAGE

1. Dr. P T. Zacharias, IMA State President
2. Dr. V. U. Seethi, IMAGE Chairman
3. Dr. Abraham Vargese, IMA Immediete Pasar President
4. Dr. Gopikumar P, IMA State Secretary
5. Dr. Sharafudeen K. P., IMAGE Secretary
6. Dr. A.V. Jayakrishnan, Chairman of IMAGE Technical Committee

KEIL

1. Dr. P. N. Parameswaran Moothattu, Director, KEIL
2. Dr. N. K. Pillai, CEO, KEIL
3. Sri. Krishnan Namboothiri, GM, KEIL
4. Sri. Rajesh Gopinathan, Sr. Manager, KEIL

PROCEEDINGS

(Present:Pradeepkumar A.B., Chairman)

Sub:-O A 43/2017-Allocation of bio medical waste to CBWTF of M/s Kerala Enviro Infrastructure Limited, Ambalamedu, Ernakulam and IMAGE ,Palakkad- Sanctioned - Orders issued.

KERALA STATE POLLUTION CONTROL BOARD
Thiruvananthapuram

No. PCB/HO/EE2/BMW-03/GENERAL

Dated: 13 /08/2021

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- Read: 1. The Bio medical Waste Management Rules, 2016
 2. Revised guideline of CPCB for CBWTF dated 21.12.2016
 3. Hon'ble NGT order dated 24.06.2021 in O.A 43/2017
 4. Minutes of meeting dated 29.06.2021 held by ACS,Envt.
 5. Minutes of meeting dated 19.07.2021 held by Chairman, KSPCB
 6. Letter dated 17.07.2021 of KEIL
 7. Letter dated 09.08.2021 of IMAGE
 8. Consent to establish issued to KEIL dated 10.03.2014 and renewals dated 15.10.2017 & 02.11.2019
 9. Environmental Clearance no. 1036(A)/SEIAA/EC3/502/2016 dated 29.11.2017 issued by SEIAA
 10. Consent to operate/authorization issued to KEIL dated 11.05.2021

O R D E R

The occupiers of health care units and operators of Common Bio Medical Waste Treatment Facilities (CBWTFs) are bound to comply with the relevant provisions under the Bio Medical Waste Management Rule 2016 (BMW Rule) and the guidelines issued by CPCB. The concept of biomedical waste treatment at common facility has been introduced in our country and widely accepted among health care units, medical associations and entrepreneurs. As per Rule 7, occupiers of health care units shall dispose BMW through CBWTFs, if the service of CBWTF is available at a distance of 75 km. Central Pollution Control Board (CPCB) published revised guidelines for common bio medical waste treatment and disposal facilities in December, 2016. It is mentioned therein that these guidelines are mandatory under the Bio-Medical Waste Management Rules, 2016. The guideline provides the criteria for development of CBWTFs for a locality or region.

The common facility, IMAGE in Palakkad was the only one common facility that catered the waste from Govt. and Private health care units across the State so far, in addition to the captive treatment facilities in a few institutions .

The second CBWTF in the State by Kerala Enviro Infrastructure Limited (KEIL), Ambalamedu has been set up and is presently functional at the premises of the already

established common hazardous waste treatment facility (CTSDF), after getting consent to establish of the Board and environmental clearance from SEIAA. Consent to operate/authorization was issued for 16 tonne/day capacity to KEIL on 11.05.2021 with validity up to 30.06.2024.

The Govt.(Health Department) issued directive vide M4/70/2021-Health dated 03.05.2021 allotting the waste from the Govt. hospitals in the three districts of Malappuram, Ernakulam and Pathanamthitta to KEIL. KEIL started treating wastes from Govt. health care units collected from these three districts with effect from 24.05.2021. They have also started collecting COVID BMW from these districts from 27.07.2021 onwards.

KEIL submitted before the Hon'ble NGT that they have been permitted to collect BMW from Govt. hospitals from the three districts of Ernakulam, Malappuram and Pathanamthitta. However as their installed capacity is much more than the permitted quantity they stated that the operation of the plant is not viable with the reduced quantity of waste, that they obtain from the government health care unit of 3 districts.

The Hon'ble NGT in its order dated 24.06.2021 in O A 43/2017 directed the Govt. to examine whether more area and hospitals can be connected with the facility of KEIL and directed the State Government to file a detailed report regarding the policy by which the demarcation is being made and whether the current allocation criteria caters to the entire biomedical waste generated in that area.

In compliance with the above order the Additional Chief Secretary, Environment Department convened a meeting on 29.06.2021 with the Principal Secretary, Health and the Chairman, KSPCB. The issues emerged during the pandemic situation, was discussed in the meeting and after deliberations on the bifurcation of area and allotment of Govt. and private health care units, the Additional Chief Secretary directed PCB to take a decision on the allotment of wastes from both Pvt. and Govt. sector health care units to KEIL. Accordingly the Board Chairman held a meeting on 19.07.2021 with IMAGE and KEIL authorities. KEIL vide letter dated 17.07.2021 submitted proposal and requested for granting permission for collection of BMW from both Govt. and Private health care units within 75 km radial distance from their facility as they are getting only a very few quantity as against their designed capacity of 16 t/day. IMAGE submitted a proposal regarding the system of charges to be levied from HCFs, in the State but did not submit any alternate proposal suggesting the allocation or transferring of waste from Govt. and private health care units to KEIL within 75 km radius.

As part of implementation of the guideline for the management of COVID waste, CPCB has developed a tracking app COVID 19 BWM for monitoring the waste being handled by the generators and CBWTFs and both the service providers are updating the daily quantity collected and disposed in the app. It is evident from the data that KEIL is getting only 3 to 4 t/day including both COVID and non COVID BMW from the already allotted hospitals by the Govt. whereas IMAGE is getting surplus quantity. This system of distribution of BMW is resulting in shortage of waste for processing in one unit and accumulation of waste in another unit. Hence, a balance need to be worked out for the effective management of BMW.

As per the CPCB guideline a CBWTF located within the respective State/UT shall be allowed to cater healthcare units situated at a radial distance of 75 km. However, in a coverage area where 10,000 beds are not available within a radial distance of 75 km, existing CBWTF in the locality (located within the respective State) may be allowed to cater the healthcare units situated upto 150 km radius with respect to its location provided the bio-medical waste generated is collected, treated and disposed of within 48 hours as stipulated under the BMW Rules.

It is also emphasized in the Rules that no healthcare facility shall establish on-site treatment and disposal facility for BMW, if a service of CBWTF is available within 75 km of travelling distance of the facility. All the healthcare facilities within a radius of 75km of CBWTF needs to dispose the BMW through such CBWTF only and are not allowed to establish its own treatment and disposal facility.

As the service charge for Govt. hospitals is at subsidized rate, the transportation cost could be utilized effectively only if the wastes from both Govt. and private hospitals in the same area are allotted. KEIL also informed that only 80 % of beds are considered for payment from the Govt. hospitals and as there is no affiliation charge, the plant can be run in a viable manner only if waste is obtained from both private and govt. health care units.

Considering the above facts and as per schedule III 6 (viii) of Rule 6 and 9(3) of the Bio medical Waste Management Rules, 2016 it is now decided to allot the waste to KEIL& IMAGE, the two service providers as follows:

1. As per the guideline, KEIL shall operate their plant at Ambalamedu, Kochi by collecting bio medical waste from both private and government health care units within a radial distance of 75 km from their facility. As implementation of this procedure based on radial distance would be difficult, it would be appropriate to allocate the full districts of Pathanamthitta, Alappuzha and Idukki along with Kottayam and Ernakulam to KEIL.

Therefore KEIL shall collect and process BMW from both Govt. and Private health care units from the districts of Alappuzha, Kottayam, Ernakulam, Pathanamthitta and Idukki.

2. The rest of the bio medical waste generated both from the government and private health care units of the districts of Thiruvananthapuram, Kollam, Thrissur, Malappuram, Palakkad, Wayanadu, Kozhikkodu, Kannur and Kasargodu shall be collected and processed by IMAGE in their facility at Palakkad.

The sketch showing the allotment is attached with this order.

This order shall come into effect from the first day of September 2021. All Government and private health care institutions in the State shall comply with this order.



CHAIRMAN

Copy to: The Additional Chief Secretary, Environment Department
The Principal Secretary, Health and Family Welfare Department
The Director, Directorate of Health Services, TVM
The Director, Directorate of Medical Education, TVM
The State President, IMA KSB, IMA State HQ, Thiruvananthapuram
The Hon. Secretary to IMAGE, IMAGE, Palakkad
The Chief Executive Officer, KEIL, Ernakulam
The Chief Environmental Engineers, Regional Offices, KSPCB
The Environmental Engineers, District Offices, KSPCB
CA to Chairman
CA to MS

