

Item No. 04

**BEFORE THE NATIONAL GREEN TRIBUNAL  
CENTRAL ZONE BENCH, BHOPAL**  
(Through Video Conferencing)

**Original Application No. 45/2021 (CZ)**

Dipankar Mukharjee

Applicant(s)

Versus

M/s BMW Solutionas

Respondent(s)

Date of hearing: **29.11.2021**

**CORAM: HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER  
HON'BLE DR. ARUN KUMAR VERMA, EXPERT MEMBER**

For Applicant(s):

Mr. Enosh George Carlo, Adv.

For Respondent(s):

Mr. Dharamveer Sharma, Adv.  
Mr. Sachin K. Verma, Adv.  
Ms. Parul Bhadoria, Adv.  
Mr. Om Shankar Shrivastava, Adv.

**ORDER**

1. Issue of violation of Biomedical Waste Management Rules and Environmental norms have been raised by the learned counsel for the applicant in Common Biomedical Waste Treatment Facility (CBWTF) established at village Rathatal Tehsil Berasia, District Bhopal. It is alleged that Respondent No. 1 is a Common Biomedical Waste Treatment Facility (CBWTF) established at village Rathatal Tehsil Berasia District Bhopal. The Respondent No. 1 has been flouting the Rules and Regulations and has been creating serious threat to the lives of the inhabitants of the adjoining villages of Pardi, Bandikalan, Chandbad Kadir, Jaitpura, Mudiya Khedi, Raipur Gram, Bairkhedi Kalan, Jagauni Jaura, Sukliya. The Respondent No. 1 unit was inspected by a team of officers of the Respondent No. 2 office on 08.09.2020 and series of serious violations were found in the Respondent No. 1's CBWTF facility. The RTM data capture rate was found to be 4.69%, wherein it should be more than 85% clearly 2 indicating that the Respondent No. 1 unit is simply not

destroying the biomedical waste at the required temperature and is not maintaining the two second retention time in secondary chamber.

2. The matter was taken up on 09.07.2021 and a joint committee consisting Municipal Commissioner, Bhopal, one representative of CPCB and MPPCB was constituted with the direction to submit a factual and action taken report. Joint report including Commissioner, BMC, Bhopal, Regional Officer, MPPCB, executive Engineer, MPPCB, Scientist, CPCB and Superintending Engineer, BMC have submitted the report, which is as follows :-

*“To verify the factual status the team has visited the unit and observed the biomedical waste management related activity which includes verification of storage and segregation practice adopted, treatment equipment’s, record keeping, data transmission, APCD and ETP status etc. The plant was operational on partial capacity at the time of visit as the less quantity of waste generated from member HCFs. During the visit the team also interacted with manager, machine operator, driver and helpers of unit to find out the awareness level and subject knowledge of work assigned.*

*During visit geographical coordinates, photographs and other relevant information were also collected which are incorporated in the report. The main observation of the team is given below:*

1. *GPS location of the site is recorded using a mobile-based GPS application. The recorded latitude and longitude are marked on the Google Map and photographs taken during the inspection are attached. The Google map of the site with duly marked locations of CBWTF is attached for observation.*
2. *As shown in the Google map, the Unit is located approx 200 meters on east side of Bhopal Berasia road and approx 18 Km (areal) away from Bhopal city. Nearest habitation is approx 1.0 km away from the unit. The unit is connected with main road by a kaccha road. The area is surrounded*

*with stone queries.*

- 3. The unit has constructed wall all around its premises and has developed thick plantation inside the premises. Total area is approx 2.00hact.*
- 4. Unit has obtained consent under Water (Prevention and control of pollution) Act 1974 and Air (Prevention and control of pollution) Act 1981 with validity upto 31/01/2023 and Authorization under BMWM Rules 2016 with validity up to 31/01/2023. Unit has provided BMW treatment facilities inside a covered shed of approx. sq. meter area apart from waste storage and treated waste storage area, following treatment units are found installed in the premises:*
  - a) Incinerator of 250 Kg/hr capacity*
  - b) Autoclave of 400 liters capacity*
  - c) Shredder of 100 Kg/hr capacity*
  - d) Sharp pit with covered top.*
  - e) Vehicle washing platform.*
  - f) Venturi scrubber with 30 meters stack*
  - g) ETP for venturi scrubber waste water and vehicle washing waste water*
- 5. The incinerator is found equipped with Air Pollution Control Device (APCD) which comprises venturi scrubber, demister attached with 30 meters stack. The water is used as the medium in venturi scrubber to suppress the particulate matter from laden flue gas. The particulate matter trap in the water is collected as sludge in the settling tank.*
- 6. As informed by the in-charge of the facility the BM waste is collected from the member HCFs by the dedicated vehicles and every day the collection starts in the morning and completed in the evening. The collected waste is treated /*

*incinerated on the next day.*

- 7. At the time of visit, approx 60 kg yellow category, 80 kg red category and 150 kg blue category of waste was found collected and stored. The unit has provided separate area for treated (300 sq. ft) and untreated waste storage (300 sq.ft) and seems it is sufficient to fulfill the present requirement of waste collected.*
  
- 8. At the time of visit 250 kg/Hr incinerator was found operational, it is a Rotary kiln type incinerator equipped with feeder bucket elevator with static secondary chamber. It is partially operated with PLC system to control operations and also fitted with sensors for Real Time Monitoring (RTM) data and sends the data to MPPCB server through internet. It is having temperature sensors to measure real time temperature in primary and secondary chamber. The OCEM system is connected with computer and LED display, and storage arrangement for all the data of primary and secondary chamber including temperature. HSD is being used as fuel in the incinerator for incineration of BMW waste.*
  
- 9. During inspection, it is informed by the CBWTF owner that data is being transfer to the MPPCB server through internet but due to poor internet connectivity in this area data transfer is sometimes hampered.*
  
- 10. It was observed that the present 250 kg/Hr incinerator is rotary type of incinerator and having 2 second residence time as per certificate provided by manufacturer.*
  
- 11. The operation of incinerator and feeding of BMW process is observed by the committee. The incinerator is started by ignition of diesel burners by auto ignition. Due to flame emitted from burner, internal temperature started rising*

*in primary and secondary chambers. As per BMW Rule 2016, the required temperature in primary and secondary chambers is 8500 C and 10500 C respectively. It is observed in OCEMS display system that the temperature of primary and secondary chambers started rising gradually and it has taken approx. 45 minutes to reach the required temp of 8500 C in primary chamber and 10810 C in secondary chamber.*

- 12. After achieving the required temperature, the feeding of yellow category BMW waste started in to incinerator. The 60 kg yellow category waste started feeding in to the incinerator in small packets through the bucket elevator. The bucket elevator overturns the waste on the entry point of incinerator and waste is then pushed into the incinerator by mechanical pusher. The process is carried out by CBWTF trained staff wearing PPE kit.*
- 13. The total 60 Kg yellow BMW waste has taken approx 30 minutes for complete incineration in the incinerator. During this process the temperature raised to 9900 C in primary chamber and temperature in the secondary chamber was measured 10810 C. After completing the process (30 min) the diesel burners were shut off as no waste was available.*
- 14. It is observed that the data including temperature in primary and secondary chambers measured using RTM system simultaneously transfer to MPPCB server through internet.*
- 15. The OCEMS data capturing obtained from MPPCB server shown 52% on the day of visit for all the parameters i.e. CO, CO2, primary chamber temperature and secondary chamber temperature. However it should be above 85%.The online data sheet during the monitoring time is enclosed as Annexure-02. It means that*

*only 52% data is transfer and captured on the server send from CBWTF facility.*

- 16. In this case the data capturing by OCEMS, duration of operation and data connectivity with MPPCB server has to be checked by CBWTF facility owner and rectify it.*
- 17. Committee has observed the previous one-month record of waste receipt at the site and found that average waste received is 180 to 200 kg per day and out of this the yellow category waste is approx 60-80 kg per day whereas the capacity of incinerator is 250 kg/hr or 1250 kg a day. So, the unit has operated the incinerator for on an average 1-2 hrs a day (excluding the time used for warm up)*
- 18. It is observed from the record that the incinerator is operative only 1-2 hrs daily on an average and rest of the time in a day the incinerator is kept ideal and not used for operation as no waste is available. The operation of incinerator is verified through OCEMS data available on web.*
- 19. The autoclave was in operation at the time of visit and completed one batch of recyclable material and print out of the process duration was also available. Spore test of each batch and records was also maintained. The unit has provided separate energy meter for autoclave but it was found non functional during inspection.*
- 20. Shredder was found operational and kept in a separate room fixed on RCC foundation.*
- 21. The unit has also provided concrete make sharp pit for disposable of metal sharp and needles.*
- 22. The unit one DG sets (125 KVA) to take care of electrical load in case of power failure.*
- 23. There are some leakages observed during feeding of waste, which may be overcome by providing double opening system for feeding in*

to incinerator.

24. *The thermocouples are installed near to burner in both the chambers, whereas the proper location of thermocouple in primary chamber is before admission into secondary chamber and in secondary chamber at the end of chamber or before admission of dilution medium to cool gas.*
25. *The venturi scrubber requires regular maintenance as corrosion and degradation of O-rings in joints was observed. Also, frequent tripping due to power fluctuation during monitoring which may affects the monitoring result.*
26. *The ID fan of the incinerator is either under capacity or having damaged coupling-bearing as it was not able to create negative draft during incineration as a result low velocity observed in stack and fugitive emission come out from incinerator. Water leakage was observed from venturi pump section.*
27. *The major source of waste water generation is floor washing, vehicle washing and scrubber for which the unit has provided 05 KL capacity ETP which comprised of collection pit, chemical dosing tank, co-angulation chamber, primary settling tank, PSF & ACF. The treated water is being reused in scrubbing process.*
28. *The unit has not installed flow meter at water withdrawal point, ETP inlet and outlet.*
29. *Waste water samples are collected from collection tank of ETP (Recycle water) and analysis results revealed that the pH is 6.14, TSS is 96.00 mg/l, COD is 158.08 mg/l, BOD is 26 mg/L. The parameters are within the prescribed limit. As informed by operator treated water is re-circulate in the process and no waste water found discharged outside the premises at the time of visit.*

30. In compliance of CPCB guidelines for management of Covid waste revision-4, the unit has provided separate waste collection mechanism with dedicated vehicle but same could not be physically verified because from 7th July 2021 onwards no Covid patient admitted in any member HCFs.
31. For transmission of OCEMS data the unit is using the Sim card however as per OCEMS-guidelines-29.08.2018 data transmission through leased line (1Mbps) and Broadband. CBWTF owner informed that lease line connectivity is not available in the area.
32. The unit has started the bar-coding facility but its implementation at ground level was found poor because still un-segregated waste received from member HCFs. However implementation of the bar code system is the joint responsibility of the Occupier as well as Operator of a CBWTF. It was observed all the bags collected by vehicle no MP04-LD-4572 and reached on CBWTF during visit were bar coded and driver and helper also well acquainted with the bar-coding system.
33. Manual log book for incinerator operation was maintained however as per norms PLC prints out or electronic tamper proof record is to be maintained.
34. The unit has provided the separate energy meter at incinerator and it found functional and meter reading also maintained in log book in a proper manner.
35. During the visit the team conducted the stack emission monitoring to assess the performance of APCD and emission value are given in the table below:

S. No	Location	PM (mg/Nm <sup>3</sup> )	NO <sub>x</sub> (mg/Nm <sup>3</sup> )	Remarks
01	Incinerator stack	80	BDL	Result are not representative as frequent tripping in APCD occurred.
Standard limit		50		450



36. *The emission result of PM is found above the limit. During the monitoring period (45 minutes) venture scrubber and ID fan tripped four times it has affects the monitoring results. On the basis of above emission results, it reveals that the venture scrubber is not working effectively.*
37. *In stack emission CO and CO<sub>2</sub> were also measured to assess the combustion efficiency and the values are 0.084 % and 1.47 % respectively. On the basis of that the combustion efficiency is 94.57 % against standard of at least 99.0 %.*
38. *The unit disposed 5.04 MT of ash through TSDF, Pithampur on 28.2.2021. The manifest for the same has been maintained. It is enclosed.*
39. *The unit has not provided separate storage area for incinerator ash and stored below the staircase area inside the office. It was observed still 700 to 800 kg of ash is stored. It is a non-compliance of HW authorization conditions.*
40. *The plastic and other recyclable material collected from various hospitals is being stored inside the room for further treatment, after disinfection plastic sold to authorized plastic waste recycler i.e. M/s Kabadiwala.com recently the unit has sold out 1083 kg of plastic and record of the same has been maintained. The receipt of plastic waste acceptance enclosed.*
41. *The facility has made its own website (<http://www.bmw-solutions.in>) in which information related to annual report, health care facilities detail etc. has been available.*
42. *As the unit is collecting and storing the medical waste inside but outside the premises there was no foul smell observed by committee members during the visit.*

**Estimation of Environmental compensation :**

The Environmental Compensation for the shortcomings observed during inspection are estimated as per the CBCB guidelines issued in reference to NGT order dated 12/03/2019 passed in OA 710 of 2017. Details of the EC estimation are as under: -

- i. Improper segregation of BMW
- ii. Flow meter not installed at ETP
- iii. Stack emission above limit
- iv. Non function of energy meter
- v. ETP and Incinerator Log book not maintained properly
- vi. Improper storage of incinerator ash
- vii. BMW stored during closure of unit (32 days)

Formula for computation of Environmental Compensation for CBWTF=  $PI \times S \times R \times N$

Where:

PI: Pollution Index

S: Size of Operation

R: Environmental Compensation Factor

N: Number of days of Violation

In case of the above CBWTF:

**For** Segregation was not done in accordance of BMWM, Rules

PI- 10

S: 0.50

N: 18 days (07/08/2021 to 24/08/2021)

R: Rs.250

EC =  $10 \times 0.50 \times 250 \times 18 = \text{Rs. } 22500.00/-$

**For** Flow meter not installed at ETP

PI- 10

S: 0.50

N: 18 days

(07/08/2021

to

24/08/2021)

R: Rs. 250

EC =  $10 \times 0.50 \times 250 \times 18 =$  Rs. 22500.00/-

*For Stack emission above limit*

PI- 20

S: 0.50

N: 18 days (07/08/2021 to 24/08/2021)

R: Rs. 250

EC =  $20 \times 0.50 \times 250 \times 18 =$  Rs. 45000.00/-

**For** Non function of energy meter

PI- 10 S: 0.50

N: 18 days (07/08/2021 to 24/08/2021)

R: Rs. 250

EC =  $10 \times 0.50 \times 250 \times 18 =$  Rs. 22500.00/-

**For** ETP and Incinerator Log book not maintained properly

PI- 10

S: 0.50

N: 18 days

(07/08/2021

to

24/08/2021)

R: Rs. 250

EC =  $10 \times 0.50 \times 250 \times 18 =$  Rs. 22500.00/-

**For** Improper storage of incinerator ash

PI- 10

S: 0.50

N: 87 days (Ash disposal on dated

28/02/2021 and after 90 days

30/05/2021 to 24/08/2021)

R: Rs. 250

EC =  $10 \times 0.50 \times 250 \times 87 =$  Rs. 108750.00/-

**For** BMW stored during closure of unit (32 days)

PI- 10

S: 0.50

N: 32 days (07/02/2021 to 10/03/2021)

R: Rs. 250

$$EC = 10 \times 0.50 \times 250 \times 32 = \text{Rs. } 40000.00/-$$

Total amount of EC= 22500 + 22500+ 45000 + 22500 +25000 + 108750 +40000 is Rs. 283750/- (Two lakh eighty three thousand seven hundred and fifty only).

**Recommendation:-**

On the basis of the joint inspection and monitoring by committee the following recommendations are given by the committee:-

1. The CBWTF operator shall ensure the continues data transmission of the incinerator Real Time Monitoring (RTM) Data to MPPCB / CPCB server. In case of any interruption, it should be conveyed to MPPCB.
2. The thermocouples should be installed at exit of primary chamber and entry of secondary chamber of incinerator.
3. All the operations of incinerator shall be controlled by PLC based system.
4. The feeding system of the incinerator should be upgraded and also provide double gate in the entry point.
5. The maintenance of APCDs including venturi scrubber and ID fan should be take up regularly.
6. Logbook should be maintained as per BMWM guidelines 2016
7. Incinerator ash should be disposed of regularly and stored as per HWM Rules 2016.
8. Environmental compensation of Rs 283750/- shall be imposed on the unit.
9. The unit should comply with all the directions given by CPCB and MPPCB and submit time bond action plan.

3. Applicant has filed the objection on the following points:-

1. *The Committee has stated in the Para 2 of its report that the Respondent No. 1 unit is located at a distance of approximately 200 Meters on eastern side of Bhopal-Berasia road. However the Committee has deliberately abstained from stating that the Bhopal-Berasia road is a declared state highway and the Revised Guidelines for Common Bio-medical Waste Treatment and Disposal Facilities 2016 in Provision 6 (b) prescribes that such unit should be at least 500 Meters away from state highway and the guidelines provide that only if such land is not available, the buffer distance from the notified sensitive areas may be reduced to less than 500 meters by State Pollution Control Board without referring the matter to Central Pollution Control Board by prescribing additional control measures such as adoption of best available Technologies by the proponent of CBWTF. In the instant matter ample amount of land is available in various industrial areas of Bhopal district. Why the respondent number one has been allowed to establish a plant of such nature upon agricultural land is beyond understanding particularly when for establishing such plant at such place additional control measures like (i) adoption of best available technologies by the proponent of CBWTF (ii) adoption of zero liquid discharge by CBWTF etc. have been prescribed. The Respondent No. 1's plant is not using the best available technology of Fully PLC Controlled Dry Incinerator Technology. The Respondent No.1 plant is utilizing Wet Technology which is certainly not a modern and best available Technology. The Guidelines provides that in case of any complaint arrives from the public then such CBWTF needs to prove that the facility is not causing any adverse impact on environment and habitation. The Respondent No. 2 has itself found that the Respondent No. 1 unit has committed serious violation and so an order to close down the unit was issued. And without the Respondent No. 1 unit proving that it is not causing any adverse impact on environment and habitation in the vicinity the order for restarting the unit where issued illegally and incomplete violation of the law and the Guidelines . The report of the committee is actually nothing but a cover up of the nuisance being caused by the Respondent No. 1 unit. This breach in itself is a serious threat to the lives of*

*thousands moving through the State Highway. By not placing these facts on record the Committee has deliberately downplayed a very serious violation by the Respondent Unit.*

2. ....

3. *The Inspection Report of the Respondent No. 1 Unit Dated 8.09.2020 and 12.01.2021 a serious violation by the Respondent Unit was found. The inspection found that the Respondent Unit inspite of various notices was still using 50 kg/hr Incinerator without maintaining the 2 second Residence Time in secondary chamber. The Applicant in the Paragraph 3.6 of his Application has brought this violation on record. The Joint Committee Report has not stated a word regarding the presence of such standby Incinerator at the rate of 50 kg/hr in the premises of the Respondent No. 1 Unit. Categorical statement by the Joint Committee was expected so as to rule out the presence of such standby Incinerator at the rate of 50 kg/hr in the premises of Respondent No. 1 Unit as the Respondent No. 1 was found to dispose the Biomedical Waste by using this standby incinerator and not the 250 kg/hr capacity incinerator inspite of several notices by the Respondent No. 2. The Inspection Committee was required to categorically state whether such standby Incinerator of 50 kg/hr capacity is still in the premises of the Respondent No. 1. To the best knowledge of the Applicant this incinerator of 50 kg/hr capacity is still installed in the premises of the Respondent No. 1 and the Respondent No. 1 shall use the same as the running cost of this incinerator is far less than the incinerator of 250 kg/hr capacity. As the minimum residence time of 2 seconds is not maintained in the 50 kg/hr incinerator disposal of Biomedical Waste by using such 50 kg/hr Incinerator will always cause hazard to the environment as the Biomedical Waste may not be completely disposed and the end product gases produced will also be dangerous to the environment.*

4. ....

5. *The entire Paragraph 6 of the Joint Committee Report has been stated as reported by the in-charge of the Respondent No. 1 unit. Such statement without independent verification is not expected from such a high level Committee. The Joint Committee should have taken in account that two continuous inspections found the unit running in serious violation of the rules. Actually all Biomedical Waste created needs to be*

*disposed off within 48 hours and the committee has stated this without confirming the same from the health care facilities from whom the Respondent No. 1 collects the Biomedical Waste. The Joint Committee was required to confirm the facts from the available GPRS data, Log books and Annual Reports of the client Health Care facilities of the Respondent No. 1. The entire averments of this Paragraph are based upon the statement made by the Respondent No. 1 who's act in past have not been worthy to be trusted in such blind manner.*

6. ....

7. ....

8. *The BMW Guideline 2016 makes a mandatory provision that the Incinerator must be fully operated by Tamper-Proof PLC (Programmable Logical Control) based system to avoid any kind of manipulation in incineration process. How can the Respondent No. 1 unit be allowed to continue with an incinerator which is not fully operated by PLC? The very fact that the incinerator of Respondent No. 1 unit is partially operable by PLC indicates that the incineration process at the Respondent No. 1 Unit is not interference and manipulation free. Manual intervention in the incineration process is very much possible in the Respondent No. 1 unit and it proves the allegation of the Applicant that the incinerator of Respondent No. 1 can be operated manually by an operator on single chamber.*

9. *It is very unfortunate for such high level Committee to deliberately downplay major violations at the Respondent No. 1 unit. Paragraph No. 8 of the Committee report states that the incinerator is having temperature sensors to measure real time temperature in primary and secondary chamber. Whereas in the Paragraph 24 of the same report the Committee is stating that the thermocouples (temperature sensors) are installed near to burner in both the chambers where as the proper location of thermocouple in primary chamber is before the gases from primary chamber enter the secondary chamber and in the secondary chamber the thermocouple should be ideally placed at the end of secondary chamber before admission of gases in the dilution medium. The Committee has simply stated its conservation and has deliberately denied interpreting the same. The Respondent No. 1 has deliberately placed these thermocouples near the burner because the*

*Respondent No. 1 is not wanting to correctly record the temperature of the primary and secondary chamber. The act of placing the thermocouple near the burner is a dishonest mischief intending to hide the fact of low temperature in the primary and secondary chamber. By placing thermocouples directly near the flame higher temperature of flame and not of the chambers is being recorded and transmitted to the Respondent No. 2 board. Actually the Biomedical Waste is destroyed only when the calorific value required for such destruction is acquired. The Committee consisted of technical members who are expected to comment upon the same as the thermocouple have not been placed at the proper position and have instead being placed near the flame. Why the Respondent No. 1 unit has done this. The committee has not commented upon this. Less temperature in the chambers is leading to partial destruction of Bio Medical Waste and also causing hazardous emissions.*

- 10. That similarly the Committee has abstained from disclosing the effects of operating the incinerator by partial PLC system and has deliberately recorded in Paragraph No. 23 that some leakages were observed during feeding of waste. The Joint Committee has deliberately bypassed its mandate by going to the extent of giving suggestions to the Respondent No. 1 wherein the committee was only required to observe the irregularities stated in the application and if the Respondent No. 1 unit is found violating the environmental norms and Biomedical Waste and Management Rules then take immediate action against the violator. The Joint Committee inspite of finding such blatant violation of the environmental norms and Biomedical Waste and Management Rules has not taken any immediate action and has instead given suggestions to the Respondent No. 1 in its paragraph No. 23. Actually the leakages observed during feeding of waste are simply because the incinerator is not being operated completely by the PLC system. Manual interference in the Respondent No. 1 unit is being done to cut cost by using less amount of fuel. Certainly the required calorific value of the biomedical waste inside the primary and secondary chamber is not being achieved which is leading to incomplete disposal of the biomedical waste and is causing dangerous emissions from the incinerator the Respondent No. 1. This mischief of the Respondent No. 1 has been observed by the Committee but the interpretation of same*



*and the reason for doing the same as not being brought before the Hon'ble Tribunal which is very objectionable. For such violation immediate closure of the Respondent No. 1 unit should have been ordered. Instead of taking immediate action the Committee is trying to shadow the continuous mischief been done by Respondent No. 1 which demands the outright rejection of the committee report.*

- 11. The Paragraph 9 of the report is again advocating the Respondent No. 1 unit. The rules require that the CBWTF owner has to transmit the data immediately. Achieving good internet connectivity is not impossible. The Joint Committee appears to be advocating the Respondent No. 1's lame excuse that the internet connectivity is poor in the area. Wherein the fact that the neighboring Indian Oil petrol pump has good internet connectivity which is proved by the fact that the petrol pump accepts payment through Credit/Debit Card Swipe machines. Internet companies are willing to provide high speed internet services by acquiring fully dedicated fiber optic cable line. The Respondent No. 1 unit is not willing to invest in such infrastructures. Instant transfer of data generated in CBWTF unit has been made mandatory so as to rule out any manipulation in the data shown/ created. The Respondent No. 1 unit in the shadow of internet connectivity actually manipulates the vital data which are required to monitor the functioning of the CBWTF unit in accordance with the Biomedical Waste Rules 2016 etc.*
- 12. The actually the Committee has again downplayed the violations being done by the Respondent No. 1 Unit and has deliberately stated one type of violation at two places so as to conceal the vital information from the Hon'ble Tribunal. The committee in the Para 31 of its report states that the Respondent No. 1 unit is using SIM card instead of transmitting the data through leased line and broadband. It would have been appropriate if the Committee had in the Para 9 of its report itself stated that the Respondent No. 1 has not acquired leased line of 1 MBPS and broadband and has violated the OCEMS Guideline dated 29.08. 2018. The Committee has again believed the Respondent No. 1 CBWTF owner that leases line connectivity is not available in the area.*
- 13. The Paragraph No. 10 of the Committee report does not warrant any comments.*

14. *The Paragraph No. 11 of the Committee report should have been stated along with Paragraph No. 8, Paragraph No. 24 and are being stated simply to mask the mischief of placing the thermocouple near the flame.*
15. *The Paragraph No. 12 is sufficient to expose the contradictory observations of the Committee. This Paragraph should have been placed along with the Paragraph No. 8, 11 and 24. The actual temperature of the primary and secondary chambers of the Respondent No. 1 incinerator is not being recorded by the wrongly placed thermocouples. In spite of knowing this mischief the Committee has stated that the required temperature in the primary and secondary chamber of 850 degree Centigrade and 1050 degree Centigrade as per the BMW Rule 2016 was achieved in about 45 minutes after the flames were ignited. The Committee should have written that the actual temperatures of the primary and secondary chambers were not recorded as the thermocouples were not placed at the correct position. So how could the Committee state that the required temperatures in the primary and secondary chambers were achieved after which feeding of Bio Medical Waste was started. The guidelines have mandated that best available Technology must be used in BMWTF facility. The feeding of Biomedical Waste to the incinerator through bucket elevator is not the best available Technology. The best available technology is automatic feeding through machines without any human involvement. Mechanical pusher is operated manually whereas an automatic pusher is being used in other modern CBWTF facility which saves the workmen from hazardous exposure.*
16. *The averments made in the Paragraph No. 13 and 17 of the report are completely contradictory. The report in Paragraph No. 13 states that it took 30 minutes for complete incineration of 60 kg yellow Bio Medical Waste. The report further says that during this process the temperature in primary chamber was 990 degree Centigrade and in the secondary chamber the temperature was 1081 degree Centigrade. Whereas in the Paragraph No. 17 the Committee says that previous one month record of waste receipt at the site revealed that average waste received was 180 to 200 kg/day out of which yellow category waste was approximately 60 to 80 kg/day. The committee further states that the capacity of the installed incinerator at*

*Respondent No. 1 unit is 250 kg/hr or 1250 kg/ day. The Committee states that Respondent No. 1 unit operates the incinerator for an average of 1 to 2 hours per day. If it is taking 30 minutes for destroying 60 kg of yellow Bio Medical Waste then the unit should operate for only 30 minutes as the capacity of the incinerator is 250 kg, this conclusion of the Committee proves that it has not applied its mind and has simply written what the Respondent No. 1 CBWTF owner told them. Why should the incinerator function for more than 30 minutes if the total Bio Medical Waste received is only 180 to 200 kg/day? The committee has again placed the observations of Para No. 18 away from paragraph No. 13. In response to Paragraph No. 18 it is demanded that the original records of the respondent No. 1 unit be summoned by the Hon'ble tribunal and the total amount waste received and alleged to be destroyed compared with the period of time for which the incinerator has been operated. Actually this reaffirms the allegation of the applicant that actually the incinerator of 50kg/hr capacity is in use and the incinerator of 250 kg/hr is not operated. This reaffirms the observation made in two inspection reports of Annexure P-2 and P-4 which states that the facility is found to be operated through 50kg/hr standby incinerator without maintaining the 2 second residence time in secondary chamber. The truth is as stated in Annexure P-4 that even after receiving the notice of Annexure P-2 the Respondent No. 1 used the 50kg standby incinerator regularly and the primary and secondary chamber temperature data was not in accordance with mandated specifications.*

- 17. Again the observations recorded in the Paragraph No. 14 of the report have deliberately written separately and not in continuation with Paragraph No. 9 and 31. When the Committee has reported that the Respondent No.1 unit is using SIM card instead of leased line and broadband, and the transfer of data is being hampered due to poor internet connectivity then how can it conclude that the data including the temperature in primary and secondary chamber measured using ATM system is transferred to Respondent No. 2's server simultaneously? Actually the data is never being transmitted instantly/simultaneously. The question here arises that why the permission for establishing and operating CBWTF facility at such location has been granted and is being allowed where not even a high speed broadband internet connection is*

available?. Certainly the unit is being allowed to operate for some dubious and unexplained reasons which can very well be understood. As has been stated adjoining petrol pump is having broadband internet connection and accepts digital payment through all modes which is possible only due to availability of broadband high speed internet connectivity.

18. Observations stated in Paragraph No. 15 are again very contradictory. The Committee states that the EMS data capturing obtained from MPPCB server was 52% on the day of visit for all the parameters. The Committee states that it should be above 85%. The Inspection Report dated 08.09.2020 Annexure- P/2 stated that the RPM data capture rate instead of 85% was only 4.69%. The Committee found that no dedicated broadband leased line is available, the Committee also found that the internet connectivity is poor, the committee also found that the data transfer through SIM card too is sometimes hampered then, how the data capture roused to 52% even this observation is shabby and cannot be believed. This again raises serious doubts upon the entire Committee report.
19. The paragraph number 16 since the committee found that the RPM data captured is only 52% and not 85% then instead of taking immediate action against the respondent CBWTF facility the committee transgressed its mandate granted by Hon'ble Tribunal and gave suggestion to the Respondent No. 2 an dalso an opportunity to rectify the violations. It is very clear that since both the inspections of the Respondent No. 1, the RTM data capture and transmission of the same to MPPCB server was not above 85% which was clear violation of the rules.
20. The response to Paragraph No. 17 have already been submitted along with the response to Paragraph No. 13.
21. The Committee has innocently mentioned that separate energy meter for autoclave was found non-functional during inspection and has stated that when the Committee did the inspection autoclave was in operation. It is a very sad situation to respond on such blatant mischief being innocently ignored by such high level Committee. What stops the Respondent No. 1 from keeping the separate energy meter of autoclave functional? This is a serious violation of guideline. The checks and measures have deliberately being made non-functional by the Respondent No. 1 and the Committee instead of taking

- immediate action, has again given suggestions to the Respondent No. 1. Actually the autoclave is not been operated. The Respondent No. 1 unit is not disinfecting the red waste and is directly trading and selling the same which is a very serious health hazard this single violation by the Respondent No.1 was sufficient for the Committee warranting immediate action to close down against the Respondent No. 1 unit function.*
22. *Paragraph No. 20, 21 and 22 do not warrant that any response.*
  23. *Paragraph 23 of the report has been discussed along with Paragraph No. 8 and No. 12. Similarly the response to Paragraph No. 24 of the report has been submitted along with response to Paragraph No. 8 and No. 11.*
  24. *The averments made in Paragraph No. 25 are again very objectionable. Once the Committee concluded that frequent tripping due to power fluctuation was observed during monitoring and the committee knew that such tripping affects the monitoring result then how could it allow the Respondent No. 1 unit to function. Actually the Respondent No. 1 unit is continuously causing environmental pollution and the committee instead of taking immediate action as per the order of the Hon'ble Tribunal simply neglected and rather covered up the same and did not take any immediate action against the violator as per order dated 07.072021.*
  25. *Paragraph No. 26 of the report is again in gross violation of the mandate granted by the Hon'ble Tribunal. The report should have simply stated that negative draft during incineration was not found and stack and fugitive emission from incinerator were found. The report states that water leakage from venturi pump section was observed. In such circumstances how can the Respondent No. 1 unit be allowed to function? The Respondent No. 2 performed its duties efficiently when it conducted the inspections and gave the report of Annexure P/2 and P/4, but the committee has tried to mask every violation of the Respondent No. 1 unit. In spite of observing and stating that fugitive emissions were coming out from the incinerator the committee did not take any immediate action and allowed the Respondent No. 1 unit to continue harming the environment.*
  26. *The Paragraph No. 28 again displays gross violation of the Water Act. The Respondent No. 1 unit has not installed flow meter at water withdrawal point ETP inlet and outlet without*

*such important monitoring equipment how could the Committee allow the Respondent No.1 unit to function inspite of the order dated 07.07.2021of the Hon'ble Tribunal to take immediate action if violations are observed.*

- 27. The Paragraph No. 29 again displays that the statements made by the Respondent No. 1 have been taken on the face value by the Committee which is not warranted from such high level Committee.*
- 28. In response to the Paragraph No. 30 of the report it is stated that the Applicant has filed the document of Annexure-3 which clearly demonstrates that the Respondent No. 1 unit denied collecting Biomedical Waste from the Covid-19 Care Centre - Government Homeopathic Hospital. The Committee has deliberately abstained from reporting on the allegation made in Paragraph 3.9 of the Application. Actually the Respondent No. 1 unit has not collected Covid-19 waste from its clients. The Committee should have inquired from the Government Homeopathic Hospital and then responded upon the truth of the Applicant's allegation.*
- 29. The Applicant has responded upon the Paragraph No. 31 of the report along with its response on the Paragraph No. 8,9,14 and 15.*
- 30. The Paragraph No. 32 of the report is again display of inaction of the Committee inspite of finding violations on part of the Respondent No. 1.*
- 31. Paragraph No. 33 of the report again displays the violations made by the Respondent No. 1 unit and the Committee's inaction. The violation of not keeping the PLC printouts and electronic tamper proof record prove that the 250 kg/hr incinerator is not being operated as been claimed before the Committee.*
- 32. That the contents of Paragraph No. 34 of the report can-not be believed upon and are hence denied.*
- 33. The Paragraph No. 35 of the report is again displaying e serious violations of environmental norms as fixed by law at the Respondent No. 1 unit. The incinerator's stack emission is monitored to assess the performance of Air Pollution Control device. At the Respondent No.1 unit the emission values were all found to be above the standard limits. The Committee states that no Nitrous Oxide gas emission was detected. This means that no Human Biomedical Waste was being destroyed at the Respondent No. 1 unit. Human body parts when destroyed in*

*incinerator lead to emission of Nitrous Oxide gas. Waste received in yellow bags constitute a considerable part of the biomedical waste received in any CBWTF unit. It indicates that the Respondent No. 1 unit is not disposing the Human Biomedical Waste received in yellow bags in the incinerator but in some other manner as indicated by the Applicant in his Application.*

- 34. The Committee found during 45 minutes of its monitoring that the Venturi scrubber and ID fan were not functioning. The Committee found that this was affecting the monitoring results. Still the Committee did not take any immediate action and submitted its report without any recommendation to shut down the Respondent No. 1 unit. The Committee has not conducted the inspection independently and as given this biased report. The report has stated the violations observed but has failed to take action as directed by the Hon'ble Tribunal immediately.*
- 35. The entire conclusions of Paragraph No. 37 of the report are completely false and fabricated. The Committee itself has stated that the Venturi scrubber and ID fan tripped four times and monitoring results were affected. The ID fans were not functioning because of which the negative draft was not being created in the secondary chamber which certainly would have lead to incomplete combustion of the biomedical waste. The observation that combustion efficiency is 94.57% is completely in contradiction with the conclusions made in Paragraph No. 35, if the combustion efficiency is as high as 94.57% then how can the incinerator stack particulate matter be as high as 80 against the standard limit of 50.*
- 36. The response to Paragraph No. 38 and 39 of the report is being made collectively. The Committee has clearly stated that non-compliance of HW authorization conditions has been observed. Committee itself has stated that the Respondent No. 1 unit receives 180 to 200 kg of Biomedical Waste everyday in which the yellow category waste is hardly 60 to 80 kg/day, then how can 700 to 800 kg of ash got collected and was not being sent to TSDF Pithampur. The law says that ash cannot remain lying at the CBWTF facility for more than 90 days. However even after special permission such ash cannot lie for more than 180 days at the CBWTF facility. If the yellow waste is destroyed properly in accordance with law at the optimum temperature required in the primary and secondary chamber ash creation is hardly 0.2% to 1% of the total weight of the disposed*

biomedical waste. Going by these norms collection of 700 to 800 kg of ash displays that such ash was lying at the CBWTF unit since very long time and hence the disposal of 5.04 tons of ash on 28.02.2021 again displays that this ash must have been collected from more than 2 to 3 years. The applicant in his application had clearly stated that the data for this must be called from TSDF unit Pithampur and also the movement of container vehicle recorded and monitored by the Respondent No. 2 on GPS also should have been taken into account. Data of total fly ash collected and disposed is also required to be monitored and verified by the Respondent No. 2. Applicant had specifically prayed that team of specialists be directed to collect figures and other data from the records of Respondent No. 1 and 2 and verify the same with the data at Pithampur Industrial Waste Management Private Limited. The Committee has deliberately abstained from getting into this exercise, as this would have revealed the truth before the Hon'ble Tribunal. The committee has actually deliberately acted in violation with the mandate given to it by the Hon'ble Tribunal and has concealed and masked the irregularities and illegalities being carried out at the Respondent No. 1 unit. This act of the Committee warrants strict and stringent action by the Hon'ble Tribunal.

37. Paragraph No. 40 of the report states that 1083 kg of plastic has been sold. It has been stated that the autoclave is not functional and in such situation whatever plastic waste has been sold whether it has been sold to authorized plastic vendor or not should have been commented upon in the humble opinion of the Applicant. No authorize plastic vendor will purchase such plastic waste which has not been treated in autoclave.
38. That apart from the above it should also have been stated in the report that the Incinerator at the Respondent No. 1 unit was not working according to BMW Guidelines 2016 as is evident by facts mentioned below –
  - (i) Bucket elevator and mechanical pusher dose not ensure negative draft (Para 12 of report).
  - (ii) RTM is only 52% (Para 15 of the report) as against 85%(As per rules) against 4.69% which was observed by MPPCB On 8/9/20. Hence this violation is continued since then.



- (iii) Incinerator is partially operated by PLC System. As per BMW guidelines 2016 it should be fully operated by (Programmable Logic Control) PLC system, to avoid any manipulation(Para 8 of the report). As PLC system leakages were observed during feeding of waste(Para 23 of the report).
- (iv) Particulate matter ( PM ) at incinerators stack is **veryvery high ie. 80 mg/Nm3** as against **50mg/Nm3 as per rules**. Also Nox were not recorded.This is when 1/4<sup>th</sup> capacity ( 60 kg ) against 250 kg was loaded. With full loading these parameters will deteriorate further, thus endangering environment.
- (v) Thermocouples are **placed at flames**, not at the place where gases enters secondary chambers and from secondary chamber to APCD device. This gives false reading as it is the temperature of flame and not of gas.
- (vi) Due to above violating circumstances combustion efficiency is not 99%. This was observed on 08.09.20 also (Para 3 of report)

4. We have heard the learned counsel for the parties and examined the report submitted by the joint committee, in view of the objection raised by the applicant, we are of the view that the recommendations made by the joint committee should be strictly followed. Accordingly, we direct the authorities concerned and State Pollution Control Board to continuously monitor the unit and in case, it is found that unit is violating the environmental norms, legal action in addition to calculation and realisation of environmental compensation must be initiated. State PCB is also directed to ensure that the conditions as laid down in the rules must be strictly observed.

5. Learned counsel for the applicant has submitted that, authorities concerned should give opportunity of hearing to the project proponent before finally deciding the environmental compensation.

6. Accordingly we direct the State Pollution Control Board to proceed in accordance with law and also provide the opportunity of hearing, while finalizing the environmental compensation. **Original Application No. 45 of 2021 is disposed of.**

**Sheo Kumar Singh, JM**

**Arun Kumar Verma, EM**

29<sup>th</sup> November 2021  
O.A. No. 45/2021(CZ)  
PN