

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

Original Application No. 85/2020 (CZ)

Nagrik Upbhokta Margdarshak Manch & Ors.

Applicant(s)

Versus

State of MP & Ors.

Respondent(s)

Date of hearing: 15.06.2021

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

For Applicant(s):

Mr. Prabhat Yadav, Adv.

For Respondent(s):

Ms. Parul Bhadoria, Adv.

ORDER

1. In order to deal with COVID-19 (pandemic) various steps have been initiated which include setting up of quarantine centers/camps/isolation wards central collection centers and laboratories. Therefore, Central Pollution Control Board on 21st July, 2020 has issued specific guidelines for the management of waste generated during diagnostics and treatment of COVID-19 suspect and confirmed patients. Even these guidelines have been disregarded.
2. By way of filing this application, the main grievance of the applicant is that handling, treatment and disposal of waste generated during treatment/diagnosis/quarantine of COVID-19 patients are not being done as per the direction and observation made by Principal Bench of this Tribunal passed in O.A. No. 124/2017 and no

scientific disposal of COVID-19 materials, masks, gloves, kits are being taken and these items are being thrown anywhere at any time. The matter is serious in nature.

3. The matter was taken up on 01.10.2020 by this Tribunal and it was directed as follows :

“7. In light of the urgency of the matter and serious nature of the issue raised in this application urgent action is required, thus, we deem it just and proper to constitute a Committee consisting Principal Secretary/Secretary Health, Madhya Pradesh and Member Secretary, Madhya Pradesh Pollution Control Board and direct them to submit a factual and action taken report with regard to the facts narrated in the application throughout the State. We direct that the medical waste generated due to COVID-19 must be dealt with according to the parameter laid down and guidelines issued by the Central Pollution Control Board and Principal Bench of this Tribunal.”

“8. The report reveals that the waste material of COVID-19 in the locality, no proper procedure has been followed and waste generated due to COVID- 19 has not been properly dealt with. No disposal in a scientific manner of masks, gloves, kits, these items are thrown in the garbage or at the places of solid waste, as result highly sensitive infection of Corona Virus is spreading causing spike in cases of

Corona. It is reported that in 50 districts of Madhya Pradesh mortality rate is 01 death in every 100 minutes in last 60 days.”

“9. Accordingly, we direct that handling, treatment and disposal of waste generated during treatment/diagnosis/quarantine of COVID-19 patients issued from the Central Pollution Control Board on 21.07.2020 (Revision- 4) must be complied with in letter and spirit and further with the consultation of the Expert Committee remedial measures are directed to be taken forthwith.”

“10. Factual and action taken report as directed above be submitted before the next date of hearing by email at judicial-ngt@gov.inpreferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF.”

4. In compliance thereof the Joint Committee consisting of Secretary, Health & Family Welfare, Member Secretary, Madhya Pradesh Pollution Control Board, Dy. Secretary, Medical Education has submitted the compliance report which is as follows :

1. The applicant has alleged that handling, treatment and disposal of waste generated during treatment/diagnosis/quarantine of COVID-19 patients are not being done and no scientific disposal of COVID-19 materials, masks, gloves, kits are being done and these items are being thrown here and there. It is pertinent to mention here that, the allegations raised by the applicant are general in nature and do not point out any specific violation.

- (i) The committee has carried out thorough investigation into the matter and called for the record from the COVID-19 hospitals and quarantine centers in the entire State.
2. The Bio-Medical Waste generated during the treatment of COVID positive patients is required to be handled, managed and disposed off as per the guidelines issued by the Central Pollution Control Board on 18.03.2020. The guidelines were revised on 25.03.2020, 18.04.2020, 10.06.2020 and 21.07.2020. The guidelines and its time to time revisions were widely circulated among the regional officers of the Board, operators of the CBWTFs, district administration and local bodies for strict compliance. The guidelines were also circulated for compliance to the officers of the Health and Family Welfare Department & Urban Administration & Development Department.
3. The Central Pollution Control Board [CPCB] has devised a software application for tracking of generation, collection and disposal of Covid-19 biomedical waste, generated at various healthcare facilities/hospitals quarantine centres, isolation wards, testing labs, sample collection centers and urban local bodies involved in performing the duties of waste collection from home quarantine centers/homecare units.
4. The information on the daily generation of the COVID-19 infectious waste and its disposal is being regularly feed into the CPCB devised mobile app from 26.05.2020. Since 25.03.2020 till 30.09.2020, **1278 MT** of COVID -19 waste has been collected and disposed through the CBWTFs in the State. The MPPCB has also issued the directions to all concerned Zonal Officers and Regional Officers for taking action in reference to directions of the Hon'ble Chairman, CPCB, during review meeting of High Level Task

Committee for Covid 19, by VC on 24.09.2020 under the compliance of the Hon'ble Tribunal in OA 72/2020.

5. The number of registered Covid care hospitals and other centers keep varying according to the variation in the requirement. However, as on this date total no. of Covid care hospitals in the State are **304** and the number of other facilities (quarantine centres, isolation wards, centers, labs etc) are **525**. Total quantity of Covid-19 bio-medical waste generated is approximately **10,900 Kg/day** in the entire State. Since the no. COVID positive patients are more in Indore and Bhopal, almost 70% of the COVID waste generated is from these two cities.
6. The status report regarding compliance of Guidelines issued by Central Pollution Control Board comprising of the no. of facilities generating COVID- 19 Waste, Quantity of COVID-19 waste being generated per day, number of inspections carried out during 01.04.2020 to 30.09.2020, action taken against the violators are provided in the chart.
7. The MPPCB is doing regular inspections of COVID care centers to verify the status of compliance of CPCB guidelines. The regional offices of MPPCB have carried out around 612 inspections of the health care facilities in the State between 01.04.2020 to 30.09.2020. This is a regular exercise that is being done by the department to ensure the compliance of the CPCB guidelines for COVID waste. In case any shortcomings are noticed during the inspections, immediate rectification measures are ensured and no violation of serious nature has been observed during these inspections.
8. In compliance of the CPCB guidelines, the COVID waste is being transported to the Common Bio Medical Waste Facilities [CBWTFs] through dedicated

vehicles. The total no. of vehicles used by CBWTFs are 87, out of which 11 GPS enabled vehicles are dedicated for the collection of COVID-19 Waste.

9. The Member Secretary, MPPCB had issued letter dated 22.09.2020 to all the Regional Officers for ensuring the effective use of "COVID-19 BMW APP" and Online Continuous Emission Monitoring System.
10. The Directorate of Health Services had issued directions vide letter dated 18.08.2020 to all government health care facilities for complying with the guidelines issued by CPCB while disposing COVID waste. Further, in the wake of COVID-19, Bio-Medical Waste has been declared as emergency services by the Home Department, State of Madhya Pradesh.
11. The Bio-Medical Waste generated during the treatment of COVID positive patients & non positive patients is required to be handled, managed and disposed off as per the latest guidelines issued by the Central Pollution Control Board on 21.07.2020. The guidelines and it's time to time revisions were widely circulated among the regional officers of the Board, operators of the CBWTFs, district administration and local bodies for strict compliance. The guidelines were also circulated for compliance to the officers of the Health and Family Welfare Department & Urban Administration & Development Department. **It has been provided in the guidelines that masks and gloves used by persons other than COVID-19 patients should be kept in paper bag for a minimum of 72 hours prior to disposal of the same as general waste after cutting the same to prevent reuse.** The CPCB also directed shopping malls etc to follow the same procedure to dispose discarded protective personal equipment, PPE kits from general public. It asked to ensure that general solid waste and biomedical waste generated from quarantine centers and quarantine home is not mixed and they should be collected separately. General solid waste (household waste) generated from quarantine centers or camps should be collected in bags,

securely tied and handed-over to municipal solid waste collector identified by Urban Local Bodies for final disposal.

12. The State Government and MPPCB have fully seized of the gravity of the Covid-19 pandemic and have taken the issue very seriously. All efforts are being made to ensure that the waste generated during the treatment of COVID patients is handled, treated and disposed as per the guidelines of the **CPCB**.

5. The facilities generating Covid -19 waste, quantity of Covid-19 waste being generated per day during the 01.4.2020 to 30.09.2020 are given in the following chart as Annexure -1 which is quoted below :

NGT-85/2020							
Table - 2 Status Of Compliance Of Disposal Of COVID-19 Waste							
S. No.	District	No. of facilities generating COVID-19 waste		Quantity of COVID-19 BMW generated (Present average in Kg/Day)	Status of compliance of CPCB COVID-19 guidelines dated 21.07.2020	No of Inspections carried out During 01-04-2020 to 30-09-2020	Action taken against violators
		No. of COVID Care Hospitals	Others				
1	Bhopal	39	7	1351.55	Complied	73	Notice issued-5 Nos HCFs
2	Sehore	1	2	9.89	Complied	18	Notice issued
3	Vidisha	6	2	9.506	Complied		Notice issued
4	Indore	31	101	6000	Complied	43	Notice issued-2 Nos HCFs
5	Khargone	1		180	Complied	5	Notice issued
6	Khandwa	1		200	Complied		Notice issued
7	Burhanpur	1		12	Complied		Notice issued
8	Barwani	1		50	Complied		Notice issued
9	Gwalior	29		279.8	Complied	186	Notice issued
10	Sheopur	1		2.1	Complied		Notice issued
11	Datia	2		3.2	Complied		Notice issued
12	Bhind	1	1	35	Complied	2	Notice issued
13	Morena	4		54	Complied	1	Notice issued
14	Sagar	3		140	Complied	8	Notice issued
15	Damoh	1		20	Complied	1	Notice issued
16	Panna	1		11	Complied	1	Notice issued
17	Chhatarpur	2		31	Complied	3	Notice issued
18	Tikamgarh			53	Complied	1	Notice issued
19	Dewas			83.75	Complied	12	Notice issued
20	Shajapur			50.91	Complied	8	Notice issued
21	Dhar			296.53	Complied	5	Notice issued

22	Jhabua		1	5.68	Complied	4	Notice issued
23	Alirajpur		3	4.57	Complied	5	Notice issued
24	Pithampur		1	43.965	Complied		Notice issued
25	Ujjain		2	350	Complied	22	Notice issued
26	Ratlam			80	Complied	2	Notice issued
27	Neemuch			70	Complied	1	Notice issued
28	Mandsour			75	Complied	2	Notice issued
29	Agar Malwa					2	Notice issued
30	Raisen			14.22	Partially Complied		Notice issued
31	Hoshangabad		2	71.01	Partially Complied		Notice issued
32	Harda				Partially Complied		Notice issued
33	Guna			250	Complied	24	Notice issued
34	Shivpuri				Complied		Notice issued
35	Ashoknagar				Complied		Notice issued
36	Rajgarh				Complied		Notice issued
37	Chhindwara			29.68	Complied	11	Notice issued
38	Betul			30.98	Complied	7	Notice issued
39	Katni			55.5	Complied	36	Notice issued
40	Jabalpur		1 7 5	575	Complied	1	Notice issued
41	Narsinghpur		4 8	so	Complied	32	Notice issued
42	Mandia		4 4	45	Complied	2	Notice issued
43	Seoni		5 1	40	Complied	3	Notice issued
44	Balaghat		7 1	50	Complied	4	Notice issued
45	Rewa			84	Complied	6	Notice issued
46	Sidhi			22	Complied	5	Notice issued
47	Satna			27.63	Complied	22	Notice issued
48	Shahdol		5	63.5	Complied	54	Notice issued
49	Umaria		5		Complied		Notice issued
50	Anuppur		1		Complied		Notice issued
51	Dindori		3		Complied		Notice issued
52	Singrauli			36.06	Partially Complied	Inspected	Notice issued

6. Biomedical waste differs general Municipal Waste and as it poses various health hazards. The Biomedical Waste Rules, 2016 and Amendment Rules are the latest guidelines from the Ministry of Environment, Forest & Climate Change (MoEF&CC) to regulate the handling of BMW activities in the country. Due to flawed Biomedical Waste Management System and lack of resources faces severe consequences during the Covid-19. Untreated and improperly managed BMW is a potential source of infection. The diligent handling and management of BMW can prevent the occurrence of hospital-acquired

infection and lower the rates of disease transmission. It is mandatory for all the small clinics, diagnostics, laboratories, nursing houses, hospitals and other healthcare institutions to comply with these guidelines. Previously, the country had ten different categories of waste for segregation. Later it was amended into four classes for easy segregation.

7. There is an urgent requirement for additional personal protective equipment and workers to manage biomedical waste safety. The unexpected rise in biomedical waste during the pandemic has raised fear among biomedical waste handlers, because the virus created an uncertain work environment and increased the occupational risk of exposure, leading to occupational stress. New materials have been added to the biomedical waste generated during the pandemic, especially from the quarantine centres. Hence, the existing guidelines will need to be updated. BMW's rudimentary disposal and the lack of proper system heightened the risk of hospital-acquired infection and several other environmental hazards.

Handling of solid biomedical waste

- i. The guidelines recommended the use of color-coded bins for onsite segregation and the usage of double-layered bags in the COVID-19 isolation areas.
- ii. There should be additional and temporary bins for disposable PPEs, gloves and masks and separate containers for reusable material (e.g. N95 mask for cleaning and sterilization)
- iii. The faces from the confirmed COVID-19 positive patient should be collected in a diaper and segregated as the yellow category BMW or it can be collected in a pan and flushed in the toilet, following which the toilet should be disinfected in adherence to the SOPs.
- iv. There should be separate segregation bags and carrier trolleys for handling the BMW generated at COVID-10 areas. The bags and containers should be well labeled as "COVID-19" for easy, identification, treatment and disposal of BMW. The outer and inner surface of the containers

and trolleys should be cleaned daily by using a 1-2% sodium hypochlorite solution

- v. A separate record should be maintained for BMW generated from COVID-19 related activities, and the same should be reported to the pollution control board.
 - vi. The facilities can download the official application of the Central Pollution Control Board (COVID19BMW) FROM THE Google play store and register in the app in order to upload the details which ease.
 - vii. A separate arrangement for the transportation of BMW from the hospital to the common BMW disposal and treatment facility should be made.
 - viii. There should be dedicated vehicles for the transportation of BMW, and it should be sanitized after every trip.
 - ix. BMW generated from COVID-19 related activities should be strictly disposed of within 24h.
 - x. All the waste collected from the nearby isolation and quarantine centers should be treated as BMW generated within the hospital and the details should be documented and reported to the pollution control board.
 - xi. Liquid waste should be treated chemically, and the disinfection process should ensure the inactivation of coronaviruses in an effluent treatment plant.
 - xii. All the person involved in the handling of BMW (COVID-19) should be given the required training and personal protective equipment.
 - xiii. These individual should adhere to the standard operating procedure, follow basic hygiene and infection control measures, and undergo regular health screening. This should be accompanied by education, training and awareness is given at regular intervals.
8. Although the evidence of virus transmission through sewage is low, individuals working with the sewage treatment plant (STP) are at high risk. The wastewater and liquid waste generated in the healthcare facilities while performing COVID-19 related activities should be handled and treated with the utmost care. The management of liquid waste differs from solid waste due to its physical nature and hence, the processes used for the management of solid BMW are not applicable to liquid waste. The following measures as directed by the central pollution control board can be considered;

- i. All the healthcare facilities operating STP and the terminal sewage plant operators are responsible for treating the liquid waste
- ii. The hospital and the person involving in its handling should ensure the inactivation or death of coronavirus.
- iii. All the STP should strictly follow the SOPs framed by the pollution control board.
- iv. The workers involved in the handling of wastewater treatment should be protected with PPE
- v. *The utilization of treated water from the STP can be avoided during the pandemic.*

9. The waste generated within the quarantine centers should be considered as general waste, but the waste generated from the suspected and confirmed cases within the quarantine centers should be treated as BMW. The waste generated in the quarantine centers should be segregated at the site of generation and kept in the designated bags/bins/ boxes like the handling of BMW in healthcare facilities. The authorities which are involved in the quarantine centres are required to follow the guidelines quoted below:

- i. Providing all the legal authority for the establishment and allocation of resources for of the BMW storage area.
- ii. Arranging authorized vehicles for the transportation of BMW to the hospital or disposal facilities.
- iii. Conducting induction, orientation programs and training the personnel involved in the handling and management of BMW.
- iv. Monitoring the processes and ensuring its compliance with SOPs that have been laid down.
- v. Issuing the authorized identity card to the person entering the quarantine facilities.
- vi. Handing over the generated BMW to the authorized collectors.
- vii. Maintaining accurate documentation and reporting the same to the higher authorities.

CBMWDFS are required to follow :

- i. Timely collection of BMW from the quarantine centers (at least twice a day).
 - ii. Providing all the personal protective equipment to the persons involved in the transportation and disposal of BMW.
 - iii. Regular sanitization of the BMW workers.
 - iv. Encouraging the strict adherence to the guidelines during the transportation and disposal of waste.
 - v. Providing the information regarding the reception of BMW to the generating facilities.
 - vi. Handing over the disinfected or sterile waste to the respective agency for recycling. Providing updated information to the BMW handlers.
 - vii. Assist healthcare facilities and quarantine centres during the training.
 - viii. Maintaining proper records and documents for at least five years.
 - ix. Auditing the records with the generating facilities.
 - x. Any injury or accident case should be reported to the quarantine facility in charge or the sanctioned authority. Continuous education, training, monitoring and supervision of BMW handling processes (daily basis)/
10. State Pollution Control Board is required to follow the following settled guidelines :
- i. They should ensure the compliance of healthcare facilities and other BMW generating centres to the BMW rules 2016, and revised guidelines.
 - ii. They can allow the CBMWF for additional hours of work, but it should be monitored and recorded accurately.
 - iii. They should make sure that the minimum documentation for the authorization of quarantine centers is received and maintained.
 - iv. They shall monitor and supervise the BMW handling activity of all the facilities regularly and document the same.
 - v. Remote quarantine centers beyond the reach of CBMWFs should be permitted for the deep burial of BMW.

- vi. The state control board should assist CBMWFs with any required resource collection and disposal during the pandemic.
 - vii. In case the amount of BMW exceeds the capacity of CBMWFs, the hospital or healthcare setting can be permitted for incineration within the health care setting
 - viii. State Pollution Control Board should download and use the COVID19BWM app and stay updated with the uploaded data regularly
11. The etiological agent of the pandemic is highly contagious and rapidly transfers from one person to another via various routes. Due to its high transmission rate, the risk of getting infected is persistently high.
12. The matter of disposal of waste have been dealt in O.A. No. 95/2018 in *Aryavart Foundation vs, M/s Vapi Green Enviro Ltd. & Ors.* (vide order dtd. 05.02.2020) relevant paras are quoted below :

“ 12. The environmental law principles, which this Tribunal is mandated to apply under sections 20 and 15 of the NGT Act, 2010, are – ‘sustainable development’, ‘precautionery’ and ‘polluter pays’. In *Hanuman Luxman*, (2019) 15 SCC 401, (paras 142-156), significance of environmental rule of law has been highlighted to achieve sustainable development goals for 14 prosperity, health and well being. This requires filling of gap between law and enforcement. In *T.N. Godavarman Thirumulpad v. Union of India*, (2002) 10 SCC 606, at page 621, it was observed that the State has to

“forge in its policy to maintain ecological balance and hygienic environment. Article 21 protects right to life as a fundamental right. Enjoyment of life and its attainment including the right to life with human dignity encompasses within its ambit, the protection and preservation of environment, ecological balance free from pollution of air and water, sanitation without which life cannot be enjoyed. Any contra acts or actions would cause environmental pollution. Therefore, hygienic environment is an integral facet of right to healthy life and it would be impossible to live with human dignity without a humane and healthy environment. Environmental protection, therefore, has now become a matter of grave concern for human existence. Promoting environmental protection implies maintenance of the environment as a whole comprising the man-made and the natural environment. Therefore, there is constitutional imperative on the Central Government, State Governments and bodies like

municipalities, not only to ensure and safeguard proper environment but also an imperative duty to take adequate measures to promote, protect and improve the man-made environment and natural environment.”

“13. In A.P. Pollution Control Board v. Prof. M.V. Nayudu, (1999) 2 SCC 718, at page 732, it was observed “..Good governance is an accepted principle of international and domestic laws.It includes the need for the State to take the necessary “legislative, administrative and other actions” to implement the duty of prevention of environmental harm...”. In Techī Taga Tara, supra, the Hon’ble Supreme Court referred to several Committees on need for revamping the regulatory bodies by appointing persons of outstanding ability and high reputation to the State PCBs and equipping them with laboratories and other equipment for performing statutory functions. Apart from the Tribunal being approached under sections 14 and 15 by aggrieved parties, pointing out degradation of environment and inaction of the statutory regulators, the Hon’ble Supreme Court has required this Tribunal to monitor compliance of such statutory obligations for protecting environment. This is not possible unless the statutory regulators are effective. Significant 15 issues so referred by the Hon’ble Supreme Court include a) liquid waste management, (2017) 5 SCC 326, Paryavaran Suraksha vs. Union of India & Ors. wherein it was directed that requisite STPs, ETPs, CETPs must be set up by 31.3.2018, failing which coercive measures may be taken against concerned authorities, to enforce statutory mandate of the Water (Prevention and Control of Pollution) Act enacted in 1974, prohibiting any water pollution, making it a criminal offence. b) compliance of solid waste management rules. Vide order dated 2.9.2014 in WP 888/1996, Almitra H. Patel Vs. Union of India & Ors. on the file of the Supreme Court, the issue has been referred to this Tribunal for monitoring compliance of Solid Waste Management Rules. c) In (2015) 12 SCC 764, MC Mehta v. UOI, issue of rejuvenation of Ganga stands referred to this Tribunal. d) Vide order dated 24.7.2017 in WP 725/1994, ‘And quite flows Yamuna’, rejuvenation of Yamuna stands referred to this Tribunal. It is not necessary to refer to several other orders. Finding that statutory regulators were not effective and serious damage was continuing, the Tribunal

has appointed independent monitoring Committees³ on several issues.”

“14. The findings in the report showing gaps resulting in large scale non-compliances in enforcement of environmental laws are supported by observations of this Tribunal, which include the following:

(I) OA 593/2017, Paryavaran Suraksha Samiti & Anr. vs. Union of India & Ors.⁴, involves monitoring of liquid waste management in terms of orders of the Hon'ble Supreme Court in (2017) 5 SCC 326. We have found that as a result of continuing failure of the statutory authorities to ensure compliance, industrial as well as municipal liquid waste is being discharged resulting in pollution of groundwater as well as surface water, including water bodies, drains, streams, rivers and coastal areas. The Tribunal has noted that as per data compiled by the CPCB, 351 river stretches are declared polluted. Comprehensive Environment Pollution Index (CEPI) prepared by the CPCB shows that 100 industrial clusters are polluted. The Tribunal is also dealing with the remedial action for restoration of the 351 stretches in OA 673/20185, In Re: News item published in “The Hindu” authored by Shri Jacob Koshy, titled “More river stretches are now critically polluted: CPCB” for which the Tribunal has directed preparation ⁴ Vide order dated 21.09.2020 ⁵ Vide order dated 21.09.2020 ¹⁷ and execution of action plans for each of such stretches by constituting River Rejuvenation Committees (RRCs) for all States/UTs headed by Environment Secretaries which action needs to be overseen by the Chief Secretaries at the State level and by a Central Monitoring Committee (CMC) headed by Secretary, Jal Shakti alongwith NMCG and CPCB at the national level. OA 829/20196, Lt. Col. Sarvadaman Singh Oberoi v. Union of India & Ors. deals with the remedying of coastal pollution for which directions have been issued on the same pattern for preparation and execution of action plans by the RRCs to be overseen by the Chief Secretaries at the State level and by the CMC at the national level. The same order also deals with utilisation of treated water, being OA 148/2016, Mahesh Chandra Saxena vs South Delhi Municipal Corporation & Ors. and OA 325/20157, Lt. Col. Sarvadaman Singh Oberoi v. Union of India & Ors., dealing with the issue of restoration of water bodies by removing encroachments and preventing pollution has been dealt with by this Tribunal. OA 176/2015, Shailesh Singh v. Hotel Holiday Regency, Moradabad & Ors. ⁸, the Tribunal has directed monitoring of groundwater extraction to give effect to

the mandate in Hon'ble Supreme Court judgment in M.C. Mehta v. Union of India & Ors. (1997) 11 SCC 312.

(II) Apart from water pollution, air pollution the issue air pollution has been dealt with by this Tribunal by separate order in OA 681/20189, News item published in "The Times of India" Authored by Shri Vishwa 6 Vide order dated 21.09.2020 7 Vide order dated 18.11.2020 8 Vide order dated 20.07.2020 9 Vide order dated 21.08.2020 18 Mohan titled "NCAP with multiple timelines to clean air in 102 cities to be released around August 15" requiring constituted Air Quality Monitoring Committees in all States/UTs to prepare and execute action plans for control of air pollution in 122 nonattainment cities (where air quality is normally beyond the prescribed norms).

(III) The issue of solid waste management has been dealt with by this Tribunal in OA 606/2018 in pursuance of directions of the Hon'ble Supreme Court in Writ Petition No. 888/1996, Almitra H. Patel & Anr. v. Union of India & Ors. In the said matter, the Chief Secretaries of all States/UTs were required to remain present before this Tribunal¹⁰ and after interaction with them, separate orders for all States/UTs referring to the individual issues in such States/UTs,¹¹ particularly issue of legacy waste dump sites and remediation of current waste on scientific basis were dealt with and the Chief Secretaries were directed to monitor compliance every month by creating a monitoring cell, directly under them, in terms of directions of the Hon'ble Supreme Court and the District Magistrates monitoring such compliances every fortnight. It has been found that there are more than 3000 dump sites where legacy waste has accumulated over the years but the remedial action has not been taken except at very few places. This is resulting in water and air pollution and soil degradation on continuous basis, to the detriment of the environment and the public health. The statutory timelines have come to an end. Reference is made in this regard also to order dated 29.01.2021 in ¹⁰ Vide order dated 16.01.2019 ¹¹ Vide order dated 18.07.2019 (last such order is in respect of Jammu & Kashmir) ¹⁹ OA No. 519/2019, In re: News item published in "The Times of India" Authored by Jasjeev Gandhiok & Paras Singh Titled "Below mountains of trash lie poison lakes" and order dated 28.02.2020 in OA No. 606/2018, Compliance of Municipal Solid Waste Management Rules, 2016. It was directed, vide order dated 10.01.2020, that compensation will be payable for failure to comply with the requirement of

taking steps mentioned in Rule 22 of the SWM Rules, 2016 at scales mentioned therein, depending on the size of local bodies, from 01.04.2020 till compliance. Compensation was also directed to be recovered at the laid down scale for delay in commencing and completing the legacy waste remediation measures.

(IV) With regard to bio-medical waste, the matter has been dealt with in OA 710/2017, Shailesh Singh, v. Sheela Hospital & Trauma Centre, Shahjahanpur & Ors. 12, with regard to hazardous waste, matter has been dealt with in OA 804/2017, Rajiv Narayan v. Union of India & Ors. 13, with regard to e-waste, matter has been dealt with in OA 512/2017, Shailesh Singh v. State of UP¹⁴, with regard to plastic waste, matter has been dealt with in EA 13/2019 in OA 247/2017, Central Pollution Control Board v. State of Andaman & Nicobar & Ors.¹⁵ for laying down liability to pay compensation for non-compliance.”

“17. As earlier observed, damage to environment is directly linked to the public health and neglecting compliance of environmental norms results in deaths and injuries. Violation of environmental norms needs to be taken as seriously as preventing crimes of homicides and assaults. It is more serious as the victims may be wide spread and unidentified. The consequences may even affect future generations. The compliance status is directly linked to effectiveness of monitoring which requires that the key office bearers of statutory regulators and oversight bodies are qualified, competent and reputed and exclusively dedicated to such work, instead of devoting part time, while simultaneously holding other positions. In this regard, the Tribunal has made observations vide order dated 02.02.2021 in OA 231/2014, Doaba Paryavaran Samiti v. State of U.P & Ors, finding that the Member Secretary of the PCB in UP was only devoting part-time, while holding several other positions. Adequate and well-equipped laboratories and effective machinery for implementation of “Polluter Pays” principle for assessment and collection of compensation is another important aspect of environmental governance.”

“21. Further, there is need to study the extent of environmental loss and the contributors to the same. Though environment is priceless, normative parameters are now available to determine the compensation for the loss caused for failure to observe laid down rules and regulations such as

not clearing legacy waste as per Solid Waste Management Rules, causing air/water pollution. Environment is wealth which needs protection from being plundered by law violators, for their monetary interests, by adequate monitoring and stringent vigilance. Its scientific management, including enforcement of polluter pays principle, requires study of level of pollution and contributors thereto and cost of restoration to be recovered by an efficient machinery. Such steps will advance the environmental rule of law and lead to sustainable development.”

“22. The directions on the subject are summed up as follows:

i. The Chief Secretaries of all States/UTs, in coordination with their respective Secretary Environment and Chairman State PCB/PCCs, need to forthwith study and address the issues emerging from the CPCB report, prepare and execute their respective action plans which will include filling up all vacant posts by competent persons and procuring the requisite equipment, including commissioning and upgradation of all laboratories and recognition under the EP Act, 1986. The CPCB may assist and monitor all the States for compliance of these directions. The steps in this regard be initiated and completed as far as possible within six months. In view of Section 33 of the NGT Act, 2010, whereunder the NGT Act has overriding powers over other statutes, any restriction placed by any administrative order will not stand in the way of carrying out this direction.

vii . CPCB and State PCBs/PCCs, as directed earlier, may utilise EC funds on laboratory set up/upgradation, and on the mentioned areas in the report as well as on approved District Environment Plans. No approval of Central/State Government will be necessary in this regard in view of section 33 of the NGT Act, supra.

viii. Consistent with Digital India initiatives, MoEF&CC/MoJS/CPCB may consider setting up and periodically updating National Environment Data Grid (NEDG) linked to the State Environment Data Grids (SEDGs) DEDGs and further linked to available portals like online air/water quality, Sameer and other monitoring stations to facilitate analysis, research and planning on the subject. It may be further interlinked to initiatives like NMCG/Swachh Bharat/Jal Jeevan Mission.

ix. To assess the extent of monetary loss caused to the environment on account of violation of environmental norms by failure to scientifically manage waste, violating Water/Air/EP/Forest (Conservation) Acts and other specified Acts for fixing accountability, for improving efficiency and better enforcement of ‘Polluter Pays’ principle.

x. To monitor the extent of carrying capacity for particular activities at different locations for planning suitability of siting of particular activities for giving effect to 'Precautionary' and 'Sustainable Development' principles."

13. The similar matter was taken up by this Tribunal on 01.10.2020 in Original Application No. 63/2019 titled as *Rajendra Kumar Bhardwaj State of Rajasthan Ors.* relevant paras are quoted below :

"10. *As per Environment Impact Act Notification, 2006 as amended vide notification of S.O.1142 E dated April 17, 2015, 'bio-medical waste treatment facility' is categorized under item 7 (da) in the schedule and requires 'Environmental Clearance' from the State Environment Impact Assessment Authority (SEIAA). It is further submitted that facility of Respondent No.3 was installed in the year 2008 which was prior to the said notification. As per the guidelines issued by CPCB, a facility may require Environmental Clearance' as follows:*

a) Expansion and modernization with additional treatment capacity of existing bio-medical waste treatment facility (excluding augmentation of incineration facility for compliance to the residence time as well as Dioxins and Furans without enhancing the existing treatment capacity)

b) In case of any expansion in the treatment capacity or relocation of the existing CBWTF."

"15. In exercise of the powers conferred by section 6, 8 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), and in supersession of the Bio-Medical Waste (Management and Handling) Rules, 1998, the Central Government has framed the rules called the

Bio-Medical Waste Management Rules, 2006 and relevant provisions are as follows:-

4. *Duties of the Occupier.- It shall be the duty of every occupier to-*

(a) *take all necessary steps to ensure that bio-medical waste is handled without any adverse effect to human health and the environment and in accordance with these rules;*

(b) *make a provision within the premises for a safe, ventilated and secured location for storage of segregated biomedical waste in colored bags or containers in the manner as specified in Schedule I, to ensure that there shall be no secondary handling, pilferage of recyclables or inadvertent scattering or spillage by animals and the bio-medical waste from such place or premises shall be directly transported in the manner as prescribed in these rules to the common bio-medical waste treatment facility or for the appropriate treatment and disposal, as the case may be, in the manner as prescribed in Schedule I;*

(c) *pre-treat the laboratory waste, microbiological waste, blood samples and blood bags through disinfection or sterilization on-site in the manner as prescribed by the World Health Organization (WHO) or National AIDS Control Organization (NACO) guidelines and then sent to the common bio-medical waste treatment facility for final disposal;*

(d) *phase out use of chlorinated plastic bags, gloves and blood bags within two years from the date of*

notification of these rules;

(e) dispose of solid waste other than bio-medical waste in accordance with the provisions of respective waste management rules made under the relevant laws and amended from time to time;

(f) not to give treated bio-medical waste with municipal solid waste;

(g) 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 and the details of training programmes conducted, number of personnel trained and number of personnel not undergone any training shall be provided in the Annual Report;

(h) immunise all its health care workers and others, involved in handling of bio-medical waste for protection against diseases including Hepatitis B and Tetanus that are likely to be transmitted by handling of bio-medical waste, in the manner as prescribed in the National Immunisation Policy or the guidelines of the Ministry of Health and Family Welfare issued from time to time;

(i) establish a Bar- Code System for bags or containers containing bio-medical waste to be sent out of the premises or place for any purpose within one year from the date of the notification of these rules;

(j) ensure segregation of liquid chemical waste at source and ensure pre-treatment or neutralisation prior to mixing with other effluent generated from health care facilities;

(k) ensure treatment and disposal of liquid waste in accordance with the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);

(l) ensure occupational safety of all its health care workers and others involved in handling of biomedical waste by providing appropriate and adequate personal protective equipments;

(m) conduct health check up at the time of induction and at least once in a year for all its health care workers and others involved in handling of bio-medical waste and maintain the records for the same;

(n) maintain and update on day to day basis the bio-medical waste management register and display the monthly record on its website according to the bio-medical waste generated in terms of category and colour coding as specified in Schedule I;

(o) report major accidents including accidents caused by fire hazards, blasts during handling of biomedical waste and the remedial action taken and the records relevant thereto, (including nil report) in Form I to the prescribed authority and also along with the annual report;

(p) make available the annual report on its web-site and all the health care facilities shall make own website within two years from the date of notification of these rules;

(q) inform the prescribed authority immediately in case the operator of a facility does not collect the bio-medical waste within the intended time or as

per the agreed time;

(r) establish a system to review and monitor the activities related to bio-medical waste management, either through an existing committee or by forming a new committee and the Committee shall meet once in every six months and the record of the minutes of the meetings of this committee shall be submitted along with the annual report to the prescribed authority and the healthcare establishments having less than thirty beds shall designate a qualified person to review and monitor the activities relating to bio-medical waste management within that establishment and submit the annual report;

(s) maintain all record for operation of incineration, hydro or autoclaving etc., for a period of five years;

(t) existing incinerators to achieve the standards for treatment and disposal of bio-medical waste as specified in Schedule II for retention time in secondary chamber and Dioxin and Furans within two years from the date of this notification.

5. Duties of the operator of a common bio-medical waste treatment and disposal facility.-It shall be the duty of every operator to –

(a) take all necessary steps to ensure that the bio-medical waste collected from the occupier is transported, handled, stored, treated and disposed of, without any adverse effect to the human health and the environment, in accordance with these rules and

guidelines issued by the Central Government or, as the case may be, the central pollution control board from time to time;

(b) ensure timely collection of bio-medical waste from the occupier as prescribed under these rules;

(c) establish bar coding and global positioning system for handling of bio- medical waste within one year;

(d) inform the prescribed authority immediately regarding the occupiers which are not handing over the segregated bio- medical waste in accordance with these rules;

(e) provide training for all its workers involved in handling of bio-medical waste at the time of induction and at least once a year thereafter;

(f) assist the occupier in training conducted by them for bio- medical waste management;

(g) undertake appropriate medical examination at the time of induction and at least once in a year and immunise all its workers involved in handling of bio-medical waste for protection against diseases, including Hepatitis B and Tetanus, that are likely to be transmitted while handling bio- medical waste and maintain the records for the same;

(h) ensure occupational safety of all its workers involved in handling of bio-medical waste by providing appropriate and adequate personal protective equipment;

(i) report major accidents including accidents caused by fire hazards, blasts during handling of biomedical waste and the remedial action taken and the records relevant thereto, (including nil report) in Form I to the prescribed authority and also along with the annual report;

(j) maintain a log book for each of its treatment equipment according to weight of batch; categories of waste treated; time, date and duration of treatment cycle and total hours of operation;

(k) allow occupier, who are giving waste for treatment to the operator, to see whether the treatment is carried out as per the rules;

(l) shall display details of authorisation, treatment, annual report etc on its web-site;

(m) after ensuring treatment by autoclaving or microwaving followed by mutilation or shredding, whichever is applicable, the recyclables from the treated bio-medical wastes such as plastics and glass, shall be given to recyclers having valid consent or authorisation or registration from the respective State Pollution Control Board or Pollution Control Committee;

(n) supply non-chlorinated plastic coloured bags to the occupier on chargeable basis, if required;

(o) common bio-medical waste treatment facility shall ensure collection of biomedical waste on holidays also;

- (p) maintain all record for operation of incineration, hydroor autoclaving for a period of five years; and*
- (q) upgrade existing incinerators to achieve the standards for retention time in secondary chamber and Dioxin and Furans within two years from the date of this notification.*

6. Duties of authorities.-The Authority specified in column (2) of Schedule-III shall perform the duties as specified in column (3) thereof in accordance with the provisions of these rules.

7. Treatment and disposal.-

(1) Bio-medical waste shall be treated and disposed of in accordance with Schedule I, and in compliance with the standards provided in Schedule-II by the health care facilities and common bio-medical waste treatment facility.

(2) Occupier shall hand over segregated waste as per the Schedule-I to common bio-medical waste treatment facility for treatment, processing and final disposal: Provided that the lab and highly infectious bio-medical waste generated shall be pre-treated by equipment like autoclave or microwave.

(3) No occupier shall establish on-site treatment and disposal facility, if a service of `common biomedical waste treatment facility is available at a distance of seventy-

five kilometer.

(4) In cases where service of the common bio-medical waste treatment facility is not available, the Occupiers shall set up requisite biomedical waste treatment equipment like incinerator, autoclave or microwave, shredder prior to commencement of its operation, as per the authorisation given by the prescribed authority.

(5) Any person including an occupier or operator of a common bio medical waste treatment facility, intending to use new technologies for treatment of bio medical waste other than those listed in Schedule I shall request the Central Government for laying down the standards or operating parameters.

(6) On receipt of a request referred to in sub-rule (5), the Central Government may determine the standards and operating parameters for new technology which may be published in Gazette by the Central Government.

(7) Every operator of common bio-medical waste treatment facility shall set up requisite biomedical waste treatment equipments like incinerator, autoclave or microwave, shredder and effluent treatment plant as a part of treatment, prior to commencement of its operation.

(8) Every occupier shall phase out use of non-chlorinated plastic bags within two years from the date of publication of these rules

and after two years from such publication of these rules, the chlorinated plastic bags shall not be used for storing and transporting of bio-medical waste and the occupier or operator of a common bio-medical waste treatment facility shall not dispose of such plastics by incineration and the bags used for storing and transporting biomedical waste shall be in compliance with the Bureau of Indian Standards. Till the Standards are published, the carry bags shall be as per the Plastic Waste Management Rules, 2011.

(9) After ensuring treatment by autoclaving or microwaving followed by mutilation or shredding, whichever is applicable, the recyclables from the treated bio-medical wastes such as plastics and glass shall be given to such recyclers having valid authorisation or registration from the respective prescribed authority.

(10) The Occupier or Operator of a common bio-medical waste treatment facility shall maintain a record of recyclable wastes referred to in sub-rule (9) which are auctioned or sold and the same shall be submitted to the prescribed authority as part of its annual report. The record shall be open for inspection by the prescribed authorities.

(11) The handling and disposal of all the mercury waste and lead waste shall be in accordance with

the respective rules and regulations.

8. *Segregation, packaging, transportation and storage.*

-(1) No untreated bio-medical waste shall be mixed with other wastes.

(2) The bio-medical waste shall be segregated into containers or bags at the point of generation in accordance with Schedule I prior to its storage, transportation, treatment and disposal.

(3) The containers or bags referred to in sub-rule (2) shall be labeled as specified in Schedule IV.

Bar code and global positioning system shall be added by the Occupier and common bio-medical waste treatment facility in one year time.

The operator of common bio-medical waste treatment facility shall transport the bio-medical waste from the premises of an occupier to any off-site bio-medical waste treatment facility only in the vehicles having label as provide in part 'A' of the Schedule IV along with necessary information as specified in part 'B' of the Schedule IV.

The vehicles used for transportation of bio-medical waste shall comply with the conditions if any stipulated by the State Pollution Control Board or Pollution Control Committee in addition to the requirement contained in the Motor Vehicles Act, 1988 (59 of 1988), if any or

the rules made there under for transportation of such infectious waste.

Untreated human anatomical waste, animal anatomical waste, soiled waste and, biotechnology waste shall not be stored beyond a period of forty –eight hours:

Provided that in case for any reason it becomes necessary to store such waste beyond such a period, the occupier shall take appropriate measures to ensure that the waste does not adversely affect human health and the environment and inform the prescribed authority along with the reasons for doing so.

Microbiology waste and all other clinical laboratory waste shall be pre-treated by sterilisation to Log 6 or disinfection to Log 4, as per the World Health Organisation guidelines before packing and sending to the common bio-medical waste treatment facility.

18. Liability of the occupier, operator of a facility.-

(1) The occupier or an operator of a common bio-medical waste treatment facility shall be liable for all the damages caused to the environment or the public due to improper handling of bio- medical wastes.

(2) The occupier or operator of common bio-medical waste treatment facility shall be liable for action under section 5 and section 15 of the Act, in case of any violation.”

“17. Part II of the rules provide as follows:-

1. All plastic bags shall be as per BIS standards as and when published, till then the prevailing Plastic Waste Management Rules shall be applicable.

2. Chemical treatment using at least 10% Sodium Hypochlorite having 30% residual chlorine for twenty minutes or any other equivalent chemical reagent that should demonstrate Log10⁴ reduction efficiency for microorganisms as given in Schedule- III.

3. Mutilation or shredding must be to an extent to prevent unauthorized reuse.

4. There will be no chemical pretreatment before incineration, except for microbiological, lab and highly infectious waste.

5. Incineration ash (ash from incineration of any bio-medical waste) shall be disposed through hazardous waste treatment, storage and disposal facility, if toxic or hazardous constituents are present beyond the prescribed limits as given in the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 or as revised from time to time.

6. Dead Fetus below the viability period (as per the Medical Termination of Pregnancy Act 1971, amended from time to time) can be

considered as human anatomical waste. Such waste should be handed over to the operator of common bio-medical waste treatment and disposal facility in yellow bag with a copy of the official Medical Termination of Pregnancy certificate from the Obstetrician or the Medical Superintendent of hospital or healthcare establishment.

7. Cytotoxic drug vials shall not be handed over to unauthorised person under any circumstances. These shall be sent back to the manufactures for necessary disposal at a single point. As a second option, these may be sent for incineration at common bio-medical waste treatment and disposal facility or TSDFs or plasma pyrolysis at temperature >1200 OC.

8. Residual or discarded chemical wastes, used or discarded disinfectants and chemical sludge can be disposed at hazardous waste treatment, storage and disposal facility. In such case, the waste should be sent to hazardous waste treatment, storage and disposal facility through operator of common bio-medical waste treatment and disposal facility only.

9. On-site pre-treatment of laboratory waste, microbiological waste, blood samples, blood bags should be disinfected or sterilized as per the Guidelines of World Health Organisation or National AIDS Control Organisation and then given to the common bio-medical waste treatment and disposal facility.

10. *Installation of in-house incinerator is not allowed. However in case there is no common biomedical facility nearby, the same may be installed by the occupier after taking authorisation from the State Pollution Control Board.*

Syringes should be either mutilated or needles should be cut and or stored in tamper proof, leak proof and puncture proof containers for sharps storage. Wherever the occupier is not linked to a disposal facility it shall be the responsibility of the occupier to sterilize and dispose in the manner prescribed.

Bio-medical waste generated in households during healthcare activities shall be segregated as per these rules and handed over in separate bags or containers to municipal waste collectors. Urban Local Bodies shall have tie up with the common bio-medical waste treatment and disposal facility to pickup this waste from the Material Recovery Facility (MRF) or from the house hold directly, for final disposal in the manner as prescribed in this Schedule.”

“22. It is further argued that COVID-19 materials like masks, gloves, kits all other things which are being used by the medical staff or other patients and the authority are not being disposed of according to the rules or according to the parameter laid down by the Central Pollution Control Board. ”

“23. After the COVID-19, the Central Pollution Control Board on 21.07.2020 issued Revision 4 guidelines for handling, treatment and disposal of waste generated during treatment/diagnosis/quarantine of COVID-19 patients as follows:-

“In order to deal with COVID-19 pandemic, State and Central Governments have initiated various steps which includes setting up of quarantine centers/camps, Isolation wards, samples collection centers and laboratories.

Following specific guidelines for management of waste generated during diagnostics and treatment of COVID-19 suspected/ confirmed patients are required to be followed by all the stakeholders including isolation wards, quarantine centers, sample collection centers, laboratories, ULBs and common biomedical waste treatment and disposal facilities, in addition to existing practices under BMW Management Rules, 2016.

These guidelines are based on current knowledge on COVID-19 and existing practices in management of infectious waste generated in hospitals while treating viral and other contagious diseases like HIV, H1N1, etc. These guidelines will be updated if need arises. This revision-4 of guidelines issued to provide revised guidance on segregation of general solid waste and biomedical waste from quarantine centers/home-care/healthcare facilities treating COVID-19 patients and to recommend on disposal of PPEs.

Guidelines brought out by WHO,

MoH&FW, ICMR, CDC and other concerned agencies from time to time may also be referred for understanding other aspects related to COVID-19.

Guidelines for handling, treatment and disposal of COVID-19 waste at Healthcare Facilities, Home-care, Sample Collection Centers, Laboratories, SPCBs/PCCs, ULBs and CBWTFs is give below:

(a) COVID-19 Isolation wards: (isolation wards are those where COVID-19 positive patients are being kept for treatment / diagnosis)

Healthcare Facilities having isolation wards including temporary Healthcare Facilities like rail coach wards, COVID Care Centers etc. for COVID-19 patients need to follow these steps to ensure safe handling and disposal of biomedical waste generated during treatment;

-Keep separate color coded bins (with foot operated lids)/bags/containers in wards and maintain proper segregation of waste as per BMW Rules, 2016 as amended and CPCB guidelines for implementation of BMW Management Rules.

-As precaution double layered bags (using 2 bags) should be used for collection of waste from COVID-19 isolation wards so as to ensure adequate strength and no-leaks;

-Collect and store biomedical waste separately prior to handing over the same CBWTF. Use a dedicated collection bin labelled as "COVID-19" to store COVID-19 waste and keep separately in temporary storage room

prior to handing over to authorized staff of CBWTF. Biomedical waste collected in such isolation wards can also be lifted directly from ward into CBWTF collection van.

In addition to mandatory leveling, bags/containers used for collecting biomedical waste from COVID-19 wards, should be labeled as "COVID-19 Waste". This marking would enable CBWTFs to identify the waste easily for priority treatment and disposal immediately upon the receipt."

24. Accordingly, we dispose of this application with the following directions:-

1. The respondents are directed to follow the guidelines issued by the Central Pollution Control Board which was communicated vide order dated 21.07.2020 and strict action should be initiated for non-compliance of the guidelines with reference to disposal of materials collected, used and thrown in COVID-19.

2. The State Pollution Control Board is directed to have a strict vigil to ensure the compliance of the Bio-Medical Waste Rules and in case it is found that there is a violation of the rules, strict action should be initiated including calculation of environmental compensation and its recovery according to law.

3. It is further directed that the Chief Secretary, in compliance of the order of Principal Bench of this Tribunal at New Delhi, may monitor the handling treatment and disposal of Covid waste at a quarterly basis as per direction issued or direct the Secretary Health, Member Secretary,

MPPCB and the Dy. Secretary Medical Education to periodically monitor the above treatment and if it is found that there is non-compliance in any of the facility centre, necessary remedial legal action may be taken accordingly.

14. With the above observations, the original application is finally disposed of, with no order as to cost.

Sheo Kumar Singh, JM

Arun Kumar Verma, EM

June 15th 2021
O.A. 85/2020(CZ)
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