

Item No. 03

(Court No. 1)

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

(By Video Conferencing)

Original Application No. 93/2021

Mukesh Kumar Aggarwal

Applicant

Versus

Central Pollution Control Board & Anr.

Respondent(s)

Date of hearing: 09.05.2022

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE PROF. A. SENTHIL VEL, EXPERT MEMBER**

Applicant: Mr. Salik Shafique, Advocate

Respondent(s): Mr. Pradeep Misra & Mr. Daleep Dhyani, Advocates for UPPCB
Mr. Raunak Parekh, Advocate for R - 106

ORDER

The Issue

1. Grievance in this application is against the failure to take adequate remedial measures against air pollution caused by the operation of brick kilns in Mathura District in UP resulting in severe health impact on the lives of the citizens. It is stated that the applicant is permanent resident of Kosi Kalan (Rural), Tehsil Chhata, District Mathura and is living with his old age parents. They are severely affected by the air pollution in Mathura District where AQI crosses 400. One of the identified causes of air pollution is 350 brick kilns operated by coal using polluted fuel like spent organic, solvent, oily residue, pet coke, filter press cake, plastic rubber, leather waste etc. Operation of such brick kilns is against declared norms for siting

by maintaining prescribed distance of habitations, educational institutions and hospitals. The said kilns do not have the requisite consents and are non compliant with regard to the siting norms prescribed by CPCB as well as under the Uttar Pradesh Brick Kilns (Siting Criteria for Establishment) Rules, 2012. The applicant has filed satellite images of a kiln in village – Surir situated at the distance only 20 kms from Kosi Kalan and Mathura, Uttar Pradesh, where a cluster of around 65 brick kilns is being operated within the small area of 4 km. belt which is highly populated residential area. A Government Hospital is situated only at the distance of 265 mtrs. Rashtriya Inter College is situated at the distance of 400 mtrs. Air quality of Mathura is as bad as air quality of NCR and safeguards are needed at par with the Taj Trapezium Zone (TTZ). But while remedial measures have been taken for preventing polluting activities in NCR and TTZ, similar measures are required for Mathura District.

2. The applicant has referred to Comprehensive Environment Pollution Index (CEPI) compiled by the CPCB with regard to the Industrial areas in the country, based on the air, water and land pollution. CPCB has on that basis categorised industrial areas as critically polluted/severely polluted and polluted. Those above the score of 70 are critically polluted. The score of Mathura industrial area is 91.10. Brick kilns are mushrooming and are being allowed to be set up without requisite consents and safeguards. Adverse health impacts of polluted air quality have been noted *inter-alia* in judgement of Hon'ble Supreme Court in M.C. Mehta v. UOI¹, M.C. Mehta v. UOI², M.C. Mehta v. UOI³ and K. Guruprasad Rao v. State of Karnataka⁴ and order of this Tribunal dated 17.02.2021 in O.A. No.

¹ (1998) 9 SCC 149

² (2000) 7 SCC 422

³ (2002) 4 SCC 378

⁴ (2012) 12 SCC 736

1016/2019, *Utkarsh Panwar v. CPCB & Ors.* wherein the Tribunal directed stopping of all brick kilns in NCR beyond the assimilative carrying capacity in the air in NCR, till such brick kilns shift to PNG. Till shifting to PNG, it was directed that the brick kilns cannot operate except in limited number and only from March to June when assimilative air capacity permits such operations.

3. In Mathura brick kilns are operative throughout the year without any study of the assimilative air capacity of the area and without following the laid down siting criteria and without consents. The statutory regulatory authorities have not taken any meaningful action. The applicant has also pointed out letters of CPCB seeking information on the subject from the UP State PCB but it appears that no further action has been taken. Brick kilns in question do not even follow Zig Zag Technology which is being followed in other air polluted areas and even outside the air polluted areas, in pursuance of directions of State PCB dated 28.06.2017 as follows:-

“1. All the Brick kilns operating without permission and valid consent from SPBs, not meeting prescribed norms and siting guidelines be closed down with immediate effect.

2. Provide status on conversion of natural draft to induced draft brick kilns (with rectangular kiln shape and zig zag brick setting).

3. *Enforce strictly the siting criteria guideline for brick kilns.*

4. *All the moving area around the main Brick Kiln should be paved with the bricks to minimize the fugitive dust emission from the Brick Kilns operations. This condition should be incorporated in the consent conditions while granting the Consent by the UP Pollution Control Board.*

5. *Ensure that fine dust not to accumulate all around the brick kiln.”*

4. The applicant has filed a list of 189 Brick kilns which according to the applicant are violating the siting criteria or other environmental norms. It is also submitted that even there is compliance by any individual brick

kiln if the assimilative air capacity cannot sustain coal fire brick kilns, such brick kilns cannot operate adding further to the already polluted air. The applicant has stated that the brick kilns in question are contributing upto 28% air pollution.

Procedural History

5. The matter has been earlier dealt with mainly by orders dated 13.4.2021, 12.8.2021 and 21.11.2021 and after ascertaining facts directions for remedial action have been issued as shown below.

Order dated 13.4.2021

6. Vide order dated 13.04.2021, the Tribunal constituted a joint Committee of CPCB, State PCB and District Magistrate, Mathura to verify facts and file factual and actual taken report. The operative part of the order of the Tribunal is as follows:

“5. In view of the above, we consider it appropriate to require a joint Committee comprising CPCB, State PCB and District Magistrate, Mathura to verify the facts and furnish a factual and action taken report in terms of compliance of siting and environmental norms, including the assimilative capacity of the air to sustain particular number of brick kilns. The Committee may look into the report dated 06.07.2020 furnished in O.A. No. 1016/2019, supra as well as discussion in the said order. The report may be furnished within two months by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF. The State PCB may also verify whether brick kilns in question are operating without consent, as alleged, in which case the State PCB may take remedial action, following due process of law. The report may be uploaded on the website of the CPCB so as to be accessed by any affected party. Objections to the report, if any, can be filed within 15 days of the uploading of the said report on the website. The CPCB and the State PCB will be the nodal agency for coordination and compliance.”

Order dated 12.8.2021

7. The matter was thereafter considered on 12.08.2021 in the light of report dated 04.08.2021 acknowledging serious violations in operation of

the Brick Kilns. The Tribunal issued directions including constitution of a five Member Committee. The relevant extracts from the order are:

“9. We have heard learned Counsel for the appearing parties. Learned Counsel for the applicant submitted that Zig-Zag technology is mandatory under the CPCB direction as the said technology comparatively produces lesser pollution. All brick kilns using old polluting technology FCBTK be closed. Reliance has been placed on the order of this Tribunal on the subject dated 22.01.2019 in OA 718/2017, Anil Kumar v. Union of India & Ors. In violation of the directions of the CPCB, fresh consents are being given by the State PCB for operation of brick kilns using old FCBTK technology. Infact time has come to close coal fired activities in area where air quality is poor or above. Out of 189 brick kilns, only 30 brick kilns are using Zig-Zag technology. The remaining are required to be closed. It is preferable to shift to gas based fuel.

Mathura District is part of Taj Trapezium Zone (TTZ) where ‘orange’ and ‘red’ category industries are not permitted. Even if Mant and Chhata or other areas all under outside TTZ, the level of air quality has to be considered before granting/renewing any consent having regard to mandate of Air (Prevention and Control of Pollution) Act, 1981. In the report, the data considered is of the entire year and not of the months during which air quality is beyond norms and pollution level is high. Data is not of the local area where the brick kilns are working. The report ignores the order of this Tribunal dated 17.02.2021 in OA 1016/2019, Utkarsh Panwar v. Central Pollution Control Board & Ors., whereby the Tribunal allowed operation of brick kilns only from March to June, having regard to the air quality, limiting to the number which was sustainable as per carrying capacity. Carrying capacity needs to be worked out following correct norms and correct data. Brick kilns not complying with the consent conditions need to be closed till compliance as per precautionary principle. Siting criteria is to apply even to old brick kilns as every renewal is at par with new consent. No doubt the earlier order in Utkarsh Panwar is for Delhi and NCR, the principle underlying the said order has to be followed. Further reference has to be made to the notification issued by the Govt. of India prescribing standards for brick kilns. The prescribed standards are:

“18. Standards of the Brick Kilns of Small Unit was 1000 mg/Nm³, Medium Unit was 750 mg/Nm³ and large Unit was 750 mg/Nm³.

19. Thereafter, the MoEF on in the year 2015 issued Environment Protection draft Amendment Rules, 2015. The Particulate matter standards as per the draft rules for Natural Draft Kilns was 500 mg/Nm³ and Induced Draft Kilns was 250 mg/Nm³.

20. The MoEF& CC on 15.03.2018 published draft prescribed standards for brick kilns under the Environment Protection Rules, 1986. The proposed prescribed standard for particulate matter is 250 mg/Nm³ for all class of brick kilns.”

The Uttar Pradesh Brick Kilns (Siting Criteria for Establishment) Rules, 2012 requires a distance from 250 meters from the Government Hospital habitation area, school, colleges and highway. But in violation of the said criteria, there are brick kiln clusters in violation thereof. 54 brick kilns have been recently granted consent to establish without considering the air quality data. The CEPI score for Industrial Areas/Clusters monitored during 2018, mention Mathura as '91.10 score' and hence Mathura is a 'Critically Polluted Area'. Further, as per the CPCB uniform categorization of industries, the Brick Kilns unit falls under 'Orange' category and hence the UPPCB cannot be allowed to issue consent to establish to new units. Brick kilns which are located in very small area and these brick kilns continuously require raw material i.e. Soil, the Joint Committee has made no observation regarding source of such minor mineral and whether necessary permissions have been obtained for the same or not.

The brick kilns are also violate the consent conditions. The joint Committee has found:

- “i. Greenery and Plantation was not observed in majority of the units.*
- ii. No paved road and 3 meters boundary wall were observed.*
- iii. No permanent arrangement of stack monitoring.*
- iv. Absence of water sprinklers to suppress the dust.*
- v. No display board consisting of name of the unit, address, monitoring data among other things.*
- vi. Out of 189 brick kilns only 65 number of brick kilns are registered for GST.”*

Banned fuel such as plastic, rubber parts of old vehicles, shredded old automobile tyres and remnants of vehicles and other combustible machinery scraps were also found being used by the brick kilns units. The Joint committee in its report at Page No. 121 states that only permissible fuel was found in Chhata cluster but in the same report at Page No. 134 annexed photograph stating that Brick Kiln at Chhata was found using non permitted fuel.

10. We have considered the issue and also heard learned Counsel for the State PCB/CPCB/Brick kiln owner. From the above resume, it is seen that there are acknowledged serious violations of environmental norms in permitting the operation of brick kilns but the statutory authorities have failed to enforce the law, to protect public health and citizens right to breathe clean air which has to prevail over right to business. Precautionary principle is completely ignored. Air quality norms are violated. Consents have been mechanically given and renewed without any regard to statutory obligation of assessing air quality. There is no effective monitoring mechanism against violations. Even after violations are found, closure is not being ordered till compliance, which has to be the norm under the law. Even air quality monitoring stations have not been set up at air pollution hot spots. Norms

16. *In view of earlier orders quoted above and discussion in paras 10 to 12, we are of the view that steps need to be forthwith taken to stop operation of brick kilns already found to be operating in violation of environmental norms till compliance by the State PCB in exercise of its statutory power, following due process of law, till compliance. This will include brick kilns not following consent conditions, operating in excess of carrying capacity, CPCB guidelines and orders of this Tribunal, and those violating siting guidelines. Necessary action be ensured within two months. At the same time, there is need for further study of carrying capacity, applying correct data and norms. Air quality monitoring equipments be installed in the concerned area and if online monitoring stations cannot be set up, easily available equipments be used to continuously monitor air quality. Stringent monitoring mechanism be put in place. Process of mechanically giving consents be reviewed by the State PCB in view of binding 'precautionary' principle. Public health needs to be given due preference to the need for establishment of brick kilns. Violators be strictly proceeded against by way of prosecution, recovery of compensation and preventing pollution. While determining carrying capacity, other sources contributing pollution loads may be factored in while considering concentrations of PM₁₀ in microgram per cubic metre in addition to loads given in kgs. Further, mixing heights data may be referred from the nearest location of IMD station. It is also necessary to clarify reasons of high CEPI score (91.1) particularly for Air and remedial action plan.*

17. *Our directions are summed up as follows:*

- (A) *Brick kilns operating in violation of environmental norms - without consent, in violation of consent conditions, in violation of siting criteria, beyond carrying capacity be forthwith closed, following due process of law, exercising statutory powers by the State PCB.*
- (B) *The State PCB in coordination with the District Magistrate and the Air Quality Monitoring Committee headed by Secretary Environment may ensure setting up of air quality monitoring stations at appropriate locations and also take other steps for effective monitoring of compliance of air quality norms in the area in question.*
- (C) *Consent given to all the brick kilns be reviewed by the State PCB in the light of CPCB directions as well as the air quality norms, siting criteria and carrying capacity. Shortlisting as per carrying capacity may be done on the basis of technology used, inter se distance, distance from sensitive locations and comparative level of compliance.*
- (D) *Tunnel kiln technology with PNG may be appropriately encouraged in the interest of reduction of pollution load.*
- (E) *Five-member Committee is constituted to undertake further study of carrying capacity of the area in terms of number of brick kilns which can be sustained applying right parameters and based on relevant data of air quality, overcoming deficiencies pointed out hereinabove. The Committee will comprise of the following:*
 - i. *Justice Anil Kumar Sharma, former Judge of Allahabad High Court now available at Mathura - Chairman.*

- ii. *Representative of CPCB of the level not below Additional Director – Member.*
- iii. *Professor Mukesh Khare, former Prof. IIT Delhi – Member.*
- iv. *Member Secretary, SEIAA, UP - Member.*
- v. *Chief Engineer Environment, UP State PCB – Member.*

The CPCB and the State PCB will be the nodal agency for coordination and compliance. The Committee may visit the site and interact with the stakeholders. The Committee may meet within 15 days from today to take stock of the situation. Thereafter, it may visit the site and study the available data of air quality and location of the brick kilns. It will be free to conduct proceedings online except for visit to the site which may be undertaken by all or such members as may be decided by the Chairman of the Committee. The Committee will be free to consult any other expert/institution. The Committee may give its report to this Tribunal within three months by e-mail at judicial-nqt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF. The report may be uploaded on the website and it will be open to any aggrieved party to file their response, if any, before the next date. Justice Anil Kumar Sharma will be entitled for honorarium @ Rs. 2 lac per month and Prof. Mukesh Khare will be entitled for honorarium @ Rs. 1.5 lac per month. The said honorarium will be payable by the State PCB out of the ‘consent funds’ available with it. Logistic support may be provided by CPCB/State PCB/District Magistrate to enable the Committee to complete its task.”

Order dated 21.11.2021

8. Vide order dated 21.11.2021, the matter was further considered in the light of interim reports of the Committee and a further report was required to be furnished in the light of observations particularly failure to monitor compliance of consent conditions and use of improved technology.

Relevant observations are:

“12. We have heard learned Counsel for the State PCB. On being asked how the simple work which was expected to be done by the Committee is being outsourced at unnecessary huge cost and causing delay in much needed remedial action, he submitted that there appeared to be some communication gap about the role expected from the Committee. Further, there is no figure of illegally operating brick kilns which have now been closed. We are informed that those which did not have consent have been closed. What about those violating consent conditions, not following siting norms, continuing old technology against guidelines? There seems to be flagrant violation of orders of this Tribunal on these aspects. The Committee appointed by this Tribunal may look into these aspects and ensure remedial action which may be mentioned in its report.

13. Engagement of IIT for carrying capacity assessment appears to be as a result of some communication gap which is not as per mandate of the Tribunal. Instead of this course of action, what is required is the analysis of available data on the pattern of approach of the Expert Committee in its report dated 06.07.2020 filed by the CPCB, dealt with vide order dated 15.10.2020 in OA No. 1016/2019, Utkarsh Panwar supra.

14. Simple work in terms of order of this Tribunal does not warrant any fresh study or any intricate research by any other institution. **Assessment of the ground situation needs to be made for a decision whether and how many brick kilns ought to be allowed in the light of air quality data in the area. We further note that contrary to orders of this Tribunal only brick kilns operating without consent are reported to have been closed. There is no mention about closure of brick kilns violating siting criteria and consent terms, using obsolete technology contrary to CPCB guidelines or operating in excess of the carrying capacity i.e. when data shows inability to take more pollution load in the area, except by use of technology which avoids pollution load and if the air quality is not harmful for public health. If air quality norms are already exceeding, all that the Committee needs to say is that no brick kiln can be allowed during the period air pollution is above threshold, till improvement of air quality. If the air quality can sustain lesser number or maintaining longer distance, it has to be ascertained. If improved technology can help, it may be so mentioned. The Committee is to operate within these parameters. Precautionary principle has to guide the issue.**

15. **In Mant and Chatta area where 168 and 59 brick kilns are said to be operating in a cluster. The Committee was required to determine whether siting norms were reasonable and being followed and whether the air quality permitted could sustain the pollution load generated by the brick kilns. The Air Quality Monitoring Stations were required to be set up at appropriate locations based on which effective monitoring of the pollution load was possible.**

16. **As already mentioned, the State PCB has miserably failed to monitor compliance of consent conditions, ambient air and stack monitoring, siting criteria as well as compliance of environmental norms. Such lapse on the part of the State PCB has resulted in serious damage to the environment and public health. The Chairman, State PCB needs to take action against such failure, including the erring officers of the State PCB posted in the area.**

17. In view of above discussion, further steps in the matter be taken by the statutory regulators and monitored by the Committee constituted by this Tribunal. The Committee will stand reconstituted as follows:

- i. Justice Anil Kumar Sharma, former Judge of Allahabad High Court now available at Mathura - Chairman.
- ii. Member Secretary, CPCB – Member.
- iii. District Magistrate, Mathura– Member.
- iv. Member Secretary, SEIAA, UP - Member.
- v. Member Secretary, UP State PCB – Member.

If any member finds it difficult to attend physically, with the permission of the Chairman of the Committee, he can be allowed to participate online.

18. The Committee may accordingly give further report in the light of above observations. In the report, number of brick kilns closed or required to be closed or could be allowed and the period during which the same could be allowed as a result of assessment and monitoring by the Committee may be specified. Further report be furnished to this Tribunal within two months by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF. The report may also be uploaded on the website of CPCB for any response by any stakeholder before the next date.”

Consideration today and further order

9. In pursuance of above, a report has been filed on 23.02.2022 by the Joint Committee. The report notes the failure of the administration in enforcing the law for compliance of consent conditions and siting norms. Necessary verification process has not been undertaken by the authorities as required. Minutes of meeting of 22.04.2022 have also been filed as follows:

“1- Review of the progress of inspections conducted by district level committee and action taken on its report:

The Member Secretary apprised the committee that;

- a- *In the first action taken report submitted to the Committee it was mentioned that earlier 227 brick kilns were operational in tehsil Mant and Chhata district Mathura. However, during latest survey additional 33 more brick kilns are found by the Committee formed by the DM, Mathura vide order dated 31.12.2021 in tehsil Mant and Chhata district Mathura. So at present total 260 brick kilns are identified in that area till date.*
- b- *Earlier in year 2021 the SPCB has issued closure orders against 38 brick kilns found operating without valid CTO issued by SPCB under Air (Prevention and Control of Pollution) Act, 1981.*

c - On the basis of inspection reports of joint committee, the following action has been taken by the State Pollution Control Board:

- i- The State Pollution Control Board has issued closure orders u/s 31(A) of Air (Prevention and Control of Pollution) Act, 1981 against 125 brick kilns which have been identified as operating without valid consent or their sites were not as per the guidelines.
- ii- The State Pollution Control Board has issued show cause notices u/s 31(A) of Air (Prevention and Control of Pollution) Act, 1981 against 15 brick kilns that why closure order should not be passed against them as they have been identified for not complying with the conditions imposed in the Consent to operate issued to them.
- iii- The SPCB has issued show cause notice u/s 21(4) of Air (Prevention and Control of Pollution) Act, 1981 against 47 brick kilns that why their valid consent should not be revoked for not submitting the compliance report of the conditions imposed in their valid consent.

It was discussed that grounds/reasons for the action taken / action proposed in respect of brick kilns should be mentioned in the action taken report.

Action : Regional Officer, UPPCB, Mathura

2- Compliance status of the closure orders issued by SPCB:

The Chairman drew attention of the members/officers about the non-execution of closure orders issued by the SPCB. He informed that inspite of closure directions; most of the brick kilns are not following the closure order issued by the Board and are operating in violation thereof. The District Magistrate Mathura informed the Committee that he has constituted two teams consisting of concerned SDM of the tehsil to ensure compliance of the closure orders issued by the Board. The teams are using water canon to quench the fire in the brick kiln. He further apprised that SDMs have been instructed to strictly comply the closure directions. It has been reported by the SPCB that inspite of putting water in the brick kiln several brick kilns after some time have again started production in violation of closure order. It was emphasized that penal action should be initiated against defaulter brick kilns. The DM also stressed about the need to sensitize the local officials of the SPCB to take initiative in complying with the closure orders issued by the Board. The MS SPCB directed RO, Mathura to ensure strict compliance in coordination with the district administration.

The Member Secretary SPCB informed that in the given circumstances the Board would file complaints against the violators of the closure order before the designated Court u/s 37

of Air Act and also to impose the Environmental compensation against these defaulter brick kilns.

Member Secretary also submitted that earlier directions were issued by the Additional Chief Secretary, Department of Environment, Forest and Climate Change, Uttar Pradesh to all DM, SSP, SP and Police Commissioner of Uttar Pradesh vide letter no 582/81-7-2021-39 (Parya)/2014 TC-1 dated 08.07.2021 regarding effective actions against the defaulters brick kiln operating in the State. A reminder of the same had also been issued by the Member Secretary U.P. Pollution Control Board vide letter no. H72747/C-4/NGT/133/2022 dated 12.03.2022 to ensure the effective compliance of the closure orders issued by State Board against the defaulter brick kilns.

Member Secretary requested the District Magistrate, Mathura to sensitize the police administration of the district for ensuring effective compliance of the closure directions. He reiterated that SDM as well as SHO of concerned police station may be made accountable for compliance of closure order against the brick kilns.

MS SPCB directed R.O. U.P. Pollution Control Board, Mathura that the committee should identify those defaulting brick kilns and make recommendations for initiating prosecution and imposing the Environmental Compensation against each of them, on priority basis.

The Chairman of the committee stressed the need of wide publicity of the action taken against the defaulter brick kilns in the local news papers to deter the violators of the directions issued by U.P. Pollution Control Board.

The Chairman of the committee had suggested to hold a meeting of stake holders including the local administration, police, U.P. Pollution Control Board and the persons who are running the brick kilns to make aware of occupational hazards and environmental laws. The Hon'ble Supreme Court in Civil Appeal diary no.-18213/2021 NCR Brick Kiln Association Vs Central Pollution Control Board & Ors. vide order dated 8.4.2022 has directed to keep in mind the interest of the environment, and factoring both the interest of the persons who are running the brick kiln industry and the employees who would be working therein. The District Magistrate, Mathura has informed that the representatives of Brick Kilns Associations often meet him and the local administration and they are being directed/ advised to follow the Environmental laws.

Action: SPCB, District administration, and R O, Mathura

3- Discussion on applicability of the notification issued by MoEF&CC vide G.S.R. 143(E) dated 22.02.2022 w.r.t. OA 93/2021:

It was apprised that in the notification issued by MoEF&CC vide G.S.R. 143(E) dated 22.02.2022 inter alia the emission norms,

siting criteria have been modified and it is applicable to the whole country. This notification has found the approval of the Hon'ble Supreme Court in aforementioned case. The Chairman impressed upon the CPCB to apprise the Committee about the impact of this notification on the case in hand preferably within a fortnight.

Action: MS CPCB

4- Progress by CPCB in the assessment of the carrying capacity of district Mathura:

Shri Nazimuddin, Scientist-F, CPCB Delhi apprised the committee that a draft report of carrying capacity of tehsil Mant and Chhata has been prepared by the CPCB. The issue of impact of sources of pollution in the area has to be finalised in the report. The report will be submitted in due course. It was impressed that the detailed report be submitted to the Committee at the earliest.

Action: MS CPCB”

10. CPCB has forwarded a copy of the report on carrying capacity which may be placed on its website which may be taken into account by the State PCB. Operation of the brick kilns has to be governed by the Hon'ble Supreme Court order and the Notification of MoEF&CC. Relevant extract from the report is reproduced below:

“In compliance of aforesaid directions of Hon'ble NGT, the carrying capacity of the ambient air environment has been assessed for Mant and Chhata areas of Distt. Mathura. Carrying Capacity of the ambient air environment may be defined as “the maximum emission load (PM10), which an area can sustain at maximum rate of operation of any air polluting activity/activities”. Further, estimation of the carrying capacity of any area involves estimation of three components -. i) Existing Pollution Load, ii) Total Assimilative Capacity and iii) Supportive Carrying Capacity.

The month-wise air volume of each area for dispersion of pollutants, was calculated by multiplying the area (Km²) with average atmospheric mixing heights/depths as obtained from Indian Meteorological Department (IMD), for the months of January, 2021 – December, 2021

In order to estimate the existing pollution load, PM_{2.5} concentration as derived from Aerosol Optical Depth (AOD) was obtained from IIT Delhi for the period from January, 2021 to December, 2021 for Mant and Chhata area.

The data of PM_{2.5} derived from AOD, was extrapolated to PM₁₀ concentration on the basis of ratio of PM₁₀/ PM_{2.5} for summer and winter season. The month-wise Existing Pollution Load in terms of

PM_{10} was estimated by multiplying the volume of air in a particular area by PM_{10} concentration.

The Pollution load at which the maximum permissible concentration is reached is considered as the assimilative capacity. The maximum permissible concentration of PM_{10} as per National Ambient Air Quality Standard (NAAQS) of PM_{10} (24-hour average) is $100 \mu\text{g}/\text{m}^3$ and this was used for estimating the Total Assimilative Capacity, by multiplying with the volume of air available for dispersion in each grid.

The difference between the maximum permissible concentration/load of PM_{10} i.e Total Assimilative Capacity and the existing average PM_{10} concentration/ load i.e Existing Pollution Load gives an indication of the Supportive Carrying Capacity of an area available for sustaining the operation of additional air polluting activities. The positive values shows the capacity to accommodate additional pollution load and the negative values indicate that the pollution load is in excess of the assimilative capacity of the area i.e no additional pollution load can be accommodated and measures are required to bring the pollution load within the assimilative capacity.

The following formulae/equations were used to arrive at the conclusion with regard to available supportive carrying capacity:

Estimation of total existing PM_{10} Load:

Total area in Km^2 : a; Average Atmospheric Mixing Height/Depth during a particular month in Km: b

Total Volume of Air in the district during a particular month in Km^3
: $a \times b = c$

Average PM_{10} Concentration of Ambient Air in the area (Mant and Chhata) for a particular month in Kg/Km^3 : d

Therefore, Total estimated load of particulate matter (PM_{10}) in ambient air of the area (Mant and Chhata) during a particular month (x): $c \times d = x \text{ Kg}$

Estimation of Assimilative Carrying Capacity w.r.t. PM_{10} :

Total Volume of Air in the area (Mant and Chhata) during a particular month in Km^3 : c

NAAQS Standard for Particulate Matter (PM_{10}) : $100 \mu\text{g}/\text{m}^3$ i. e. $100 \text{ Kg}/\text{Km}^3$

Therefore, Assimilative Capacity w.r.t PM_{10} in ambient air of the area (Mant and Chhata) in a particular month (y) : $c \times 100 = y \text{ Kg}$

Estimation of Supportive carrying Capacity w.r.t. PM_{10} :

Supportive Carrying Capacity (z) = Assimilative Carrying Capacity (y) - Total Estimated Load (x)

The final outcome of the assessment with regard to the range of Supportive Carrying Capacity of the ambient air environment in the Mant and Chhata areas of Distt. Mathura, is summarized in the Table 1 and Table 2 respectively. The negative values indicate that there is no supportive carrying capacity and the pollution load in terms of PM₁₀, is exceeding the Assimilative Carrying Capacity.

Table 1: Carrying Capacity Assessment of Mant Area of Distt. Mathura

Carrying Capacity Assessment of MANT Area, Distt. Mathura										
S. No.	Month & Year	Area, Km ²	Mixing height, Mtr	Mixing height, Km	Avg. PM _{2.5} Conc, ug/m ³	Avg. PM ₁₀ Conc, ug/m ³	Volume of Ambient Air, Km ³	Assimilative Capacity, Kg	Existing PM ₁₀ Load, Kg	Supportive Capacity, Kg
1	Jan, 2021	731	267	0.267	115	210	195	19530	40957	-21428
2	Feb, 2021	731	296	0.296	92	168	216	21636	36426	-14790
3	March, 2021	731	415	0.415	51	93	304	30369	28288	2081
4	April, 2021	731	641	0.641	63	131	469	46853	61396	-14543
5	May, 2021	731	653	0.653	43	89	477	47729	42291	5437
6	June, 2021	731	812	0.812	41	84	594	59354	50000	9354
7	July, 2021	731	641	0.641	34	71	469	46885	33449	13435
8	Aug, 2021	731	470	0.470	36	74	343	34335	25424	8911
9	Sept, 2021	731	490	0.490	27	56	358	35827	20046	15781
10	Oct, 2021	731	350	0.350	62	126	256	25579	32142	-6563
11	Nov, 2021	731	273	0.273	152	308	200	19992	61647	-41655
12	Dec, 2021	731	257	0.257	114	231	188	18803	43476	-24673

Table 2: Carrying Capacity Assessment of Chhata Area of Distt. Mathura

Carrying Capacity Assessment of Chhata Area of Distt. Mathura										
S. No.	Month & Year	Area, Km ²	Mixing height, Mtr	Mixing height, Km	Avg. PM _{2.5} Conc, ug/m ³	Avg. PM ₁₀ Conc, ug/m ³	Volume of Ambient Air, Km ³	Assimilative Capacity, Kg	Existing PM ₁₀ Load, Kg	Supportive Capacity, Kg
1	Jan, 2021	1057	272	0.272	114	208	287	28706	59677	-30971
2	Feb, 2021	1057	312	0.312	97	178	330	32976	58596	-25620
3	March, 2021	1057	439	0.439	55	100	464	46393	46440	-47
4	April, 2021	1057	693	0.693	60	125	732	73202	91204	-18002

5	May, 2021	1057	692	0.692	45	93	731	73121	68137	4984
6	June, 2021	1057	849	0.849	43	89	897	89718	80057	9661
7	July, 2021	1057	651	0.651	34	71	688	68830	48963	19867
8	Aug, 2021	1057	466	0.466	37	76	493	49258	37602	11656
9	Sept, 2021	1057	480	0.480	28	59	508	50786	30000	20786
10	Oct, 2021	1057	358	0.358	65	119	379	37868	45113	-7245
11	Nov, 2021	1057	269	0.269	146	267	285	28476	76135	-47659
12	Dec, 2021	1057	252	0.252	112	205	267	26658	54590	-27932

The existing pollution load (PM10) estimated for determining the supportive carrying capacity is the sum total of the PM10 emissions from the all known and unknown activities/sources having pollution potential. Therefore, the resultant supportive carrying capacity is dependent on various factors and may not be attributed to a single source. As a result, the criteria governing the setting up of industries is based on sitting norms and the emission standards.

MoEF&CC vide Notification GSR No. 143 (E) dated 22.02.2022 has notified particulate matter standards of 250 mg/Nm³ with reference to the brick kilns (Annexure-1). The MoEF&CC notification has also mandated time bound adoption of zig-zag technology and also prescribed guidelines for siting of brick kilns, fugitive dust emission control, permitted fuels and porthole & platform for emission monitoring. These guidelines should be strictly adhered to by the brick kilns and monitored by State Pollution Control Board.”

Order of Hon’ble Supreme Court dated 8.4.2022

11. We note that the matter now stands covered by the order of the Hon’ble Supreme Court dated 08.04.2022 in Civil Appeal Diary No.- 18213/2021, *NCR Brick Kiln Association Vs Central Pollution Control Board & Ors.* and it will thus be appropriate to dispose of the matter in light thereof. The relevant part of the order is reproduced below:

“The permission to operate will be subject to the following conditions:

(1) The production will be permitted only subject to the units complying with notification dated 22.02.2022. For the sake of clarity, we quote the same:

**MINISTRY OF ENVIRONMENT, FOREST AND
CLIMATE CHANGE NOTIFICATION New Delhi, the
22nd February, 2022**

G.S.R.143(E).—In exercise of the powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:—

1. Short Title and commencement: -

- (1) These rules may be called the Environment (Protection) Amendment Rules, 2022.
- (2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Environment (Protection) Rules, 1986, in the SCHEDULE-I, for entry at Sl. No. 74, the following entry shall be substituted, namely: -

"74	Brick Kilns	Particulate matter in stack emission	250 mg/Nm³
		Minimum stack height (Vertical Shaft Brick Kilns)	
		-Kiln capacity less than 30,000 bricks per day	14 m (at least 7.5m from loading platform)
		-Kiln capacity equal or more than 30,000 bricks per day	16 m (at least 8.5m from loading platform)
		Minimum stack height (Other than Vertical Shaft Brick Kilns)	
		-Kiln capacity less than 30,000 bricks per day	24 m
		-Kiln capacity equal or more than 30,000 bricks per day	27 m

Notes:

1. All new brick kilns shall be allowed only with zig-zag technology or vertical shaft or use of Piped Natural Gas as fuel in brick making and shall comply to these standards as stipulated in this notification.

2. The existing brick kilns which are not following zig-zag technology or vertical shaft or use Piped Natural Gas as fuel in brick making shall be converted to zig-zag technology or vertical shaft or use Piped Natural Gas as fuel in brick

making within a period of (a) one year in case of kilns located within ten kilometre radius of nonattainment cities as defined by Central Pollution Control Board (b) two years for other areas. Further, in cases where Central Pollution Control Board/State Pollution Control Boards/Pollution Control Committees has separately laid down timelines for conversion, such orders shall prevail.

3. All brick kilns shall use only approved fuel such as Piped Natural Gas, coal, fire wood and/or agricultural residues. Use of pet coke, tyres, plastic, hazardous waste shall not be allowed in brick kilns.

4. Brick kilns shall construct permanent facility (port hole and platform) as per the norms or design laid down by the Central Pollution Control Board for monitoring of emissions.

5. Particulate Matter (PM) results shall be normalized at 4% CO₂ as below: $PM \text{ (normalized)} = (PM \text{ (measured)} \times 4\%) / (\% \text{ of } CO_2 \text{ measured in stack})$, no normalization in case $CO_2 \text{ measured} \geq 4\%$. Stack height (in metre) shall also be calculated by formula $H = 14Q^{0.3}$ (where Q is SO₂ emission rate in kg/hr), and the maximum of two shall apply.

6. Brick kilns should be established at a minimum distance of 0.8 kilometre from habitation and fruit orchards. State Pollution Control Boards/Pollution Control Committees may make siting criteria stringent considering proximity to habitation, population density, water bodies, sensitive receptors, etc.

7. Brick kilns should be established at a minimum distance of one kilometre from an existing brick kiln to avoid clustering of kilns in an area.

8. Brick kilns shall follow process emission/fugitive dust emission control guidelines as prescribed by concerned State Pollution Control Boards/Pollution Control Committees.

9. The ash generated in the brick kilns shall be fully utilized in-house in brick making.

10. All necessary approvals from the concerned authorities including mining department of the concerned State or Union Territory shall be obtained for extracting the soil to be used for brick making in the brick kiln.

11. The brick kiln owners shall ensure that the road utilized for transporting raw materials or bricks are paved roads.

12. Vehicles shall be covered during transportation of raw material/bricks”.

**[F. No. Q-15017/35/2007-CPW] NARESH PAL
GANGAWAR, Addl. Secy.**

Note : The principle rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i) vide number S.O. 844(E), dated the 19th November, 1986 and lastly amended vide number G.S.R. 724(E), dated the 04th October, 2021”

- (2) The Officers of both Central Pollution Control Board and the State Pollution Control Boards shall conduct surprise inspections without any notice and warning to the persons running the units from time to time to ensure that the production is being carried out in terms of the aforesaid notification.*
- (3) Production will be further subject to the condition that it will be limited to the production capacity as per the consent granted by the respective State Pollution Control Boards as has been in fact documented in the compliance affidavit dated 06.04.2022 (Annexure R2) filed by respondent No. 2.*

As an example, we would take the case of M/s. Shiv Brick Field, Pura Mahadev, Bagpat. Production will be limited to six lakhs for this unit. In similar vein other units will be entitled to undertake production, as per the consent granted by State Pollution Control Board in the affidavit which is filed by the Pollution Control Board.

- (4) The persons running the units shall report at the end of every cycle, the actual total production which has been carried out in their units (arising out of each cycle) to the respective State Pollution Control Boards. The State Pollution Control Boards shall promptly intimate the Central Pollution Control Board, the said figures and on the date of the next hearing, the Central Pollution Control Board will produce a chart showing the production so that the Court may analyse as to whether there is a violation of this Court’s order.*
- (5) The Central Pollution Control Board and the State Pollution Control Board will monitor the impact of the pollution which is generated as a result of the units being permitted to operate, and actually carrying out the production in such form as is measurable.”*

12. In view of above, further action be taken strictly as per the directions of the Hon’ble Supreme Court and Notification of the MoEF&CC dated 22.02.2022. The compliance may be monitored by a joint Committee of CPCB, State PCB and District Magistrate for a period of three months from today and thereafter by the concerned statutory regulators. The report of compliance status as on 31.07.2022 may be filed by 15.08.2022 with the Registrar General of this Tribunal by e-mail at judicial-ngt@gov.in

preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF. If found necessary, the same may be placed before the Bench for any further direction.

Subject to above, the application is disposed of.

A copy of this order be forwarded to CPCB, State PCB and District Magistrate by e-mail for compliance.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

Prof. A. Senthil Vel, EM

May 09, 2022
Original Application No. 93/2021
DV