

**BEFORE THE NATIONAL GREEN TRIBUNAL,
SOUTHERN ZONE- CHENNAI
O.A No. 12 of 2024**

E.V.Sampath,
S/o. Varadhan,
No. 1/113, BajanaiKovil Street,
Erumaiyur, Chennai – 600 044.

...Applicant

-Vs-

Tamil Nadu Pollution Control Board,
Rep. by its Member Secretary,
76, Mount Salai,
Guindy, Chennai – 600 032.

.... Respondent

INDEX

S. No	Description	Page No.
1.	REPLY FILED ON BEHALF OF THE RESPONDENT - TAMIL NADU POLLUTION CONTROL BOARD	1 - 21
2	ANNEXURES	22 - 229



**Advocate for Respondent: TNPCB
Thiru.S. Sai Sathya Jith ,
Advocate, Chennai.**

**BEFORE THE NATIONAL GREEN TRIBUNAL,
SOUTHERN ZONE- CHENNAI
O.A No. 12 of 2024**

E.V.Sampath,
S/o. Varadhan,
No. 1/113, BajanaiKovil Street,
Erumaiyur, Chennai – 600 044.

...Applicant

-Vs-

Tamil Nadu Pollution Control Board,
Rep. by its Member Secretary,
76, Mount Salai,
Guindy, Chennai – 600 032.

.... Respondent

REPLY FILED ON BEHALF OF THE RESPONDENT -
TAMIL NADU POLLUTION CONTROL BOARD

I, R.Sarasavani, daughter of Thiru.J.Raghavan, aged about 58 years having office at No.76, Mount Salai, Guindy, Chennai 600 032, do hereby solemnly affirm and sincerely state as follows:

1. I am the Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board, Chennai and I am filing this report on behalf of Respondent Board and as such I am well acquainted with the facts of the case as per records.
2. It is respectfully submitted that the applicant has filed this application seeking with a prayer “to quash B.P. Ms. No. 21 dated 31.07.2019, culminating in the Board resolution dated 16.10.2023 in so far as it relates dispensing with the minimum distance between crushers contained in condition (1) i.e. “The minimum distance of 1 km between new / proposed crushers as prescribed in the B.P. Ms. No. 4 dated 2.7.2004 is dispensed off. This relaxation is also applicable to the existing stone crushers and the M sand units” and the Board resolution dated 16.10.2023 in so far as it relates to acceptance of the recommendations of NEERI regarding dispensing with the minimum distance between stone crushing

units and to direct the respondent board to strictly enforce B.P Ms. No. 4, dated 02.07.2004”.

3. It is submitted that the above prayer has been drafted with an attempt to get out of the bar of limitation under Section 14 of the NGT Act,2010 since the Board Proceedings mentioned in the prayer relates to the year 2019.

A. STONE CRUSHING INDUSTRY

4. It is respectfully submitted that the Stone Crushing Industry is an important industrial sector in the country engaged in producing crushed stone of various sizes depending upon the requirement which acts as raw material for various construction activities such as construction of Roads, Highways, Bridges, Buildings, Canals etc
5. It is respectfully submitted that stone crushing is a mechanical operation by which large size stone as mined from quarries in the size range of 200 – 300 mm is crushed to smaller usable sizes, generally 6, 15, 25 mm. The crushed material is segregated size wise by screening and is then ready for dispatch and used for road and building construction. Quarried stone is normally delivered to the processing plant (Stone crusher) by truck and is dumped in a storage pit or bunker. The stone crusher is usually done by a jaw crusher.
6. It is respectfully submitted that the crushed material from the jaw crusher is separated from various fractions i.e., 25mm, 15mm, 6mm and stone dust in rotary / vibratory screens. The oversized material is sent back to the jaw crusher for further crushing, reducing the size of the stones to below 20mm. The different sized products are transferred from the bottom of the screen by belt conveyors to the stockpiles and further transported, usually by trucks to the consumer. The only pollutant emission of concern from stone crushing is particulate matter. Emission from stone processing should be considered to be fugitive as the sources are not vented to a bag house or contained in an enclosure with a forced air vent stack. Emission points for dust release from stone crushing typically include the following: loading of trucks, truck travel on dusty roads, fugitive dust loss from trucks, dumping into crusher, crushing,

dar
13/2/24

**JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.**

screening, transfer points on conveyor system, loading onto storage piles from conveyors, wind blowing dust from storage piles and conveyors.

7. It is respectfully submitted, originally, the Hon'ble Supreme Court of India in its order dated 25.04.1996 in the Civil Appeal No. 10732/1995 (Kennedy Valley Case) has banned the operation of stone crushers and quarries within the radius of 500 metres of the residential area.

**B. STUDY OF NATIONAL ENVIRONMENTAL
ENGINEERING RESEARCH INSTITUTE (NEERI),
NAGPUR**

8. It is respectfully submitted that the National Environmental Engineering Research Institute (NEERI), Nagpur is a constituent of Council of Scientific & Industrial Research (CSIR), New Delhi and has a nationwide presence with its five zonal laboratories at Chennai, Delhi, Hyderabad, Kolkata and Mumbai. CSIR-NEERI, Chennai Zonal Laboratory, one of the five Zonal Laboratories of the NEERI, Nagpur, has been a trail-blazer to the industries in the States of Tamil Nadu, Karnataka, Kerala and Pondicherry, ever since its inception in 1969. The Zonal Laboratory follows the footsteps of the parent organization (NEERI, Nagpur) in its commitment towards the national and societal missions and CSIR thrust area activities.
9. It is respectfully submitted that in its 47 years of existence, this NEERI has made significant strides in such thrust areas of R&D as environmental monitoring, environmental biotechnology, hazardous waste management, environmental systems design, environmental impact & risk assessment and environmental audit. CSIR-NEERI, Chennai Zonal Laboratory has played an important role in solving some of the most critical problems of pollution in the States of Tamil Nadu, Karnataka, Kerala and also union territories of Puducherry, Andaman & Nicobar Islands, and Lakshadweep. Projects of international status funded by such agencies as WHO, World Bank and the US Government have been undertaken by the Zonal Laboratory
10. It is respectfully submitted that the respondent Board received representations from various Associations of stone crushing industries in the State to consider relaxation of the norms of distance criteria. Hence, the Board entrusted a study to National Environmental Engineering

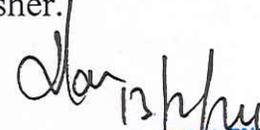
Research Institute (NEERI), Nagpur to assess the performance of air pollution control measures provided by the stone crushing industries and to assess the dust emission from the industry and also to arrive at the optimum distance from the National / State Highways and from the residential area. Based on the study conducted and recommendations by NEERI, the Board vide **B.P. No. 48 dated 09.09.1998** has issued certain norms **in respect of cluster and single crusher** and the same are as follows:-

- i. All the stone crushing units should provide air pollution control measures as suggested by the National Productivity Council.
- ii. If the distance between two crushers is more than 100 meters, each one will be considered as a single crusher. If the distance between the crusher boundaries is less than 100 meters, combinedly they will be considered as a cluster.
- iii. The distance between the crusher boundaries and the boundary of the National / State Highways shall be as specified below.

<i>Sl.No.</i>	<i>Cluster of crushers</i>	<i>Distance between crusher / cluster</i>	<i>Green belt area at the periphery</i>
<i>1</i>	<i>Single crusher</i>	<i>50 metres</i>	<i>10 metres</i>
<i>2</i>	<i>10 Crushers</i>	<i>150 metres</i>	<i>30 metres</i>
<i>3</i>	<i>25 Crushers</i>	<i>250 metres</i>	<i>50 metres</i>
<i>4</i>	<i>50 Crushers</i>	<i>300 metres</i>	<i>100 metres</i>

Note:-

- a. *There should be bilane road system to approach the crushers.*
- b. *Within the cluster a minimum distance of 20 meters should be made for roads.*
- c. *The crusher boundary implies the line joining all the emission sources such as jaw crusher, conveyer belt, head, rotary screen etc., in the crushing unit.*
- iv. Existing crushers, which are near the National or State Highways and not meeting the above criteria should provide a 15 to 20 feet wall on all the three sides (parallel to National / State Highways and both the sides) and up to the length to be stipulated on the alignment of road and boundary of the crusher.


JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

- v. In respect of residential area, no stone crushing industries are to be allowed to operate within 500 meters from residential areas as per the orders of Hon'ble Supreme Court of India in the Civil Appeal No.10732/1995, dated 25.4.1996". It is pertinent to note that order of the *Honorable Supreme Court however does not lay down any observation or mandate with respect to distance criteria to be maintained between crusher to crusher.*

The NEERI has not recommended any distance criteria to be maintained between crusher to crusher in their report. However it recommends cluster and accordingly suggested required width of greenbelt to be maintained depending up on the number of crusher units in that particular cluster

11. *It is also submitted that even during the year 1998, when the above proceedings were issued, it recognized the operation of crushers as a single unit or as a cluster also with conditions imposed for control of pollution being different to each of them.*

C. HON'BLE SUPREME COURT DIRECTIONS

12. It is respectfully submitted that the Hon'ble Supreme Court in its order dated 10.5.1999 in SLP© No.13564/1998 filed by Tamil Nadu Building Materials Manufactures and Transporters Association, had issued directions that the existing stone-crushers, who have valid licenses, are permitted to carry out their work subject to the complying with the conditions of the NEERI's Report.
13. It is respectfully submitted that the Hon'ble Supreme Court in another order dated 8.8.2000 in ©(C) No.13564/1998, had clarified that the earlier decision of the Supreme Court is confined to the facts of that case and will not stand in the way of the pollution control Board / State Government reconsidering amendment of Notification and or Resolution or Rule as the case may be and option is given to take into consideration the earlier expert committee report, dated 03.07.1991 and also the NEERI report for framing appropriate Rule.

dar
13/2/24

JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

D. B.P. Ms. No. 4 dated 02.07.2004

14. It is respectfully submitted that as per the recommendations of NEERI, the Board vide **B.P. Ms. No. 4 dated 02.07.2004** has issued criteria for the existing stone crushing units and new / proposed stone crushing units as follows:

I. Distance Criteria

Sl. No.	Type of clusters	Distance between crusher / cluster of crushers and habitations / NN or SH	Green belt area at the periphery
1.	Single crusher	50 mts.	10 mts.
2.	10 crushers	150 mts.	30 mts.
3.	25 crushers	250 mts.	50 mts.
4.	50 crushers	300 mts.	100 mts.

Note:-

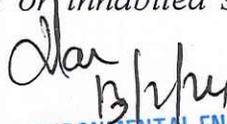
- (a) For single crusher, the distance is to be measured from crusher boundary.
 - (b) In the case of cluster of crushers the distance is to be measured from the last crusher boundary.
 - (c) The crusher boundary implies the line joining all the emission sources in the crushing unit such as jaw crusher, conveyer belt, head, rotary screen etc.
- If the distance between two existing crushers is more than 100 metres, it will be considered as a single crusher. If the distance between the existing crusher boundaries is less than 100 metres, it will be considered as a cluster.
 - Existing crushers, which are near the National or State highways and not meeting the distance criteria should provide a 15 to 20 feet wall on all the three sides (parallel to National / State highways and both sides) and upto the length to be stipulated on the alignment of road and boundary of the crusher in addition to the air pollution control measures.

Explanation

Existing stone crushing units are those which have valid licenses on the date of Supreme Court order namely 10.05.1999.

II. Criteria for new / proposed stone crushing units

- No new / proposed stone crushers should be located within 500 metres from any National highways or State highways or inhabited site or


JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

educational institutions / and other public offices and places of religious importance.

***Note:-** 'Inhabited site' shall mean a village site or town site or a house site as referred to in the revenue records or a house site or layout approved by a Local Body or Town or Country or Metropolitan Planning Authority, where the said Body or Authority is created under a statute and empowered to approve such an area as a house site or layout area (as desired in Rule 35 of Tamilnadu Minor Minerals Concession Rules, 1959).*

- *The minimum distance between new / proposed stone crushers should be 1 km to avoid dust pollution influence of one over the other.*
- *Green belt development: The stone – crushing unit shall provide adequate green belt cover around the periphery as suggested by the Board depending on site and meteorological conditions.*

III. Air pollution control measures

The existing and new / proposed stone crushing units should provide dust containment and dust suppression systems suggested by National Productivity Council and should also adhere to the recommendations furnished in NEERI Report.

E. NECESSITY FOR REVISION of B.P. Ms. No. 4 dated 02.07.2004

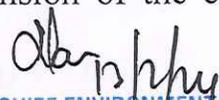
15. It is respectfully submitted that river sand is the essential material for the construction activities in the state/country. Due to scarcity of river sand in the state and indiscriminate mining of sand affects the river eco system and lowers the ground water table, hence, the State Government is now encouraging the use of M-Sand in construction activities in place of river sand. M-sand is manufactured by crushing of blue metal jellies either in stone crushers as an extended facility or in standalone M- Sand units. In order to regulate the activities of M- Sand units, the Board vide B.P. No. 26 dated 30.07.2018 has issued guidelines for M-Sand units.
16. It is respectfully submitted that in the meantime, Stone Crushers Associations have made representation that the norms for maintaining 1KM distance from crusher to crusher shall be waived off so that the

existing crushers can go for expansion to manufacture M-Sand in addition to the existing consented production of blue metal jellies and new crushers can be permitted so as to meet the demand for supply of blue metal and M-sand for construction activities.

17. It is respectfully submitted that considering the latest development in pollution control technologies, stringent emission standard, the present demand for construction materials and difficulties faced by the entrepreneurs to find suitable site to locate the stone crushers, the Board vide **B.P. No. 8 dated 05.03.2019** issued the following guidelines for the existing consented stone crushing units:

- i. The existing stone crushing units with valid consents shall be permitted to increase their production along with or without M-sand production unit, such units shall comply with all the norms as prescribed in B.P. Ms. No. 4 dated 02.07.2004 (read with B.P. Ms. No. 55 dated 06.10.2005) except 1 KM distance criteria from crusher to crusher.
- ii. The stone crushing units shall meet Ambient Air Quality standards at all times. The suspended particulate matter (measured between three metres and ten metres from any processes equipment of stone crushing unit shall not exceed 600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than 600 μ g/m³.
- iii. The Standalone M-Sand units (within / outside stone crushing unit) shall comply with all the norms as prescribed in B.P. No. 26 dated 30.07.2018 except the distance criteria as prescribed under A-II of said B.P.
- iv. The stone crushing units & M-Sand units shall not store raw materials & products of more than one month capacity and all the open storage should be properly covered with Tarpaulin to avoid dust emanation due to wind action.

18. It is therefore submitted that in so far as the existing units are concerned, their expansion is permitted without reference to the 1Kms criteria between two crusher units whether it is the expansion of the crusher


JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

activity or the M-sand activity. The said proceedings have been not challenged till date and are enforced as such.

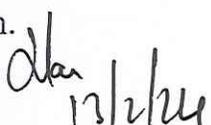
19. It is respectfully submitted that the Board has also approved the proposal to re-examine the 1KM distance criteria for the new stone crushers by conducting a study through a reputed institution like NEERI.

F. CONSTITUTION TECHNICAL EXPERT COMMITTEE

20. It is respectfully submitted that subsequently, the Board in its Proceeding No. TNPCB/O&G/F. 4792/2019/Stone Crusher/dated 07.03.2019 have constituted a Technical Expert Committee comprising of officers/experts from TNPCB, NEERI and National Productivity Council (NPC).

21. It is respectfully submitted that the Technical Expert Committee has carried out a detailed study in the existing stone crushers on air pollution control measures provided and the ambient air quality (AAQ) in the vicinity of the crushers. AAQ survey was conducted by the said committee in single stone crusher and cluster of stone crushers located in Kancheepuram, Tiruppur, Thiruvannamalai and Madurai Districts. The committee has also gone through the guidelines issued by other State Pollution Control Boards (SPCBs) in the country. After detailed study, the Committee in its report April 2019 has recommended as follows:-

- i. The minimum distance of 1 KM between New / Proposed crushers as prescribed in the B.P. Ms No.4 dated 02.07.2004 may be dispensed with.
- ii. The stone crushing units shall meet Ambient Air Quality standards at all times. The suspended particulate matter (measured between three metres and ten metres from any processes equipment of stone crushing unit shall not exceed 600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than 600 μ g/m³.
- iii. The crushers may be encouraged to establish nearby quarry site so as to avoid transportation and to reduce air pollution.


 13/2/24
 JOINT CHIEF ENVIRONMENTAL ENGINEER
 TAMIL NADU POLLUTION CONTROL BOARD
 No.76, MOUNT SALAI, GUINDY,
 CHENNAI-600 032.

- 10
- iv. All the existing and the new crushers shall provide air pollution control measures as suggested by National Productivity Council, NEERI and Board circular as mentioned in this report.
 - v. A detailed scientific study may be taken-up again through a reputed technical institution like NEERI. Based on the detailed study the minimum distance to be maintained from inhabited site, National Highway, State Highway, Places of public and religious importance may be decided. Until such time, the existing distance norms (500 metres from NH and SH, Habitations) as prescribed in B.P. Ms No.4 dated 02.07.2004 may be continued.

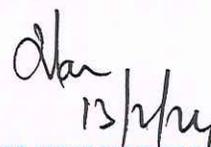
22. It is respectfully submitted that the above report of the Committee was placed before the Board in the meeting held on 24.4.2019. The Board in its Resolution No. 277-1-7 has stated that

'The Board has gone through the Committee Report and had a detailed discussion. The Board has observed that dispensing of the minimum distance of 1KM between New / Proposed stone crushers may lead to mushrooming of crushers which will have dust pollution influence of one over the other and may have impact on the surrounding environment. At the same time, the supply of blue metal is also to be ensured for the development of construction industry. Hence the Board has instructed to conduct a further detailed study to identify the notified areas and furnish a report so as to examine the relaxing of distance criteria of 1 KM from crusher to crusher of those notified areas only'.

G. B.P No. 21 dated 31.07.2019

23. It is respectfully submitted that based on the above, a proposal was placed before the Board and the same was considered vide Board Proceedings in B.P No. 21 dated 31.07.2019 and accordingly issued the siting criteria for the stone crushers as follows:

- i. The minimum distance of 1KM between New / Proposed crushers as prescribed in the B.P. Ms No.4 dated 02.07.2004 is dispensed off. This relaxation is also applicable to the existing stone crushers and the M-Sand units.


13/1/19
**JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.**

- ii. The stone crushing units shall meet Ambient Air Quality standards at all times. The suspended particulate matter (measured between three metres and ten metres from any process equipment of stone crushing unit shall not exceed 600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than 600 μ g/m³.
- iii. The crushers may be encouraged to establish nearby quarry site so as to avoid transportation and to reduce air pollution.
- iv. All the existing and the new crushers shall provide air pollution control measures as suggested by National Productivity Council, NEERI and Board circular dated 22.4.2008.
- v. The stone crushing units & M-Sand units shall not store raw materials & products more than one month capacity and all the open storage should be properly covered with Tarpaulin to avoid dust emanation due to wind action.
- vi. No new / proposed stone crushers should be located within 500 metre from any National Highways or State Highways or inhabited site or educational institutions / and other public offices and places of religious importance.
- vii. Board will review the performance of installation and operation of air pollution control measures and the compliance of standards by the stone crushing units after one year.

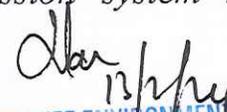
**H. POLLUTION CONTROL MEASURES TO BE ADOPTED
BY THE STONE CRUSHING UNITS AS RECOMMENDED
BY NPC/NEERI/TNPCB**

24. It is respectfully submitted that as per the impugned order in B.P. No. 21 dated 31.07.2019, the stone crushing units shall provide pollution control measures as follows:

**I. AS PER THE NATIONAL PRODUCTIVITY COUNCIL'S
RECOMMENDATION**

- a. *Dust containment system comprises of building enclosures over the major dust emission sources so as to contain the dust within the housing.*

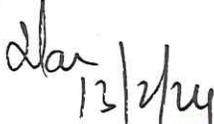
- 12
- b. Enclosures to be constructed of G.I. sheets (1.66 mm and 1.25 mm thick) and supported on angle structures so that it can withstand strong wind.
 - c. Wherever there is a persistent of wind speed is blowing in particular direction or high wind speed in a particular sector/directions construction wind breaking wall or net in such a way that it will bring down wind speed by 90%.
 - d. Roof to be given a gradual slope / curvature so as to prevent accumulation of water.
 - e. Material transfer point such as hopper bottom / product unloading conveyor to be covered suitably to prevent dust release into the atmosphere.
 - f. Locations where complete enclosures are not possible such as openings in jaw crushers side and bottom, are to be covered suitably (GI sheets / rubber flap or any other material) to prevent dust release into the atmosphere.
 - g. Telescopic chutes are to be provided at product unloading conveyor to prevent dust release into the atmosphere during free fall off material from height. These chutes can be adjusted in length according to size of the heap.
 - h. Openings in the enclosures over shafter, motor driver, conveyor belts etc., are to be covered with rubber flaps (wherever possible) to prevent release of dust.
 - i. Openings fitted with doors are to be provided for inspection and access in the enclosures
 - j. Paving of all the roads inside the crushing units and transport areas to avoid re-entrainment of dust into the atmosphere
 - k. All fine dust other than aggregates need to be collected below the ground level or completely covered to avoid blow away of fine dust which suspends in air for longer time and behaves like gas.
 - l. Dust generation from material transfer points is quite substantial. Therefore dust suppression system shall be


JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

provided in these points. Dust suppression system, comprising of spraying of fine water mist through special nozzles. It should be carried out over the dust generation sources to suppress the dust cloud.

II. AS PER ~~BY~~ NEERI'S RECOMMENDATION

- a. Periodical cleaning of water spray nozzles should be carried out to avoid choking.*
- b. Fine dust accumulated in the crushing area should be periodically cleaned and the dumps should be covered with tarpaulins to arrest erosion by wind.*
- c. The drop height of the processed material should be kept at a minimum during loading and unloading.*
- d. Conveyor chutes should be provided at the discharge points.*
- e. There should be bilane road system to approach the crushers.*
- f. The approach road should be properly laid with tar and concrete and should be sprayed with water. Similarly, the approach roads to individual crusher should be made in good condition and watered.*
- g. Within the crusher, a minimum distance of 20 metres should be made for roads.*
- h. The green belt will restrict the spread of particulate matter and trees should be evergreen high foliage type like neem, tarmarind, gold-mohar, fire of the forest and any other local varieties are recommended. Cash crops like cashewnut, mango, lemon and sapota may be encouraged to get back financial benefits.*
- i. Ornamental trees like Asoka along the roads on both sides leading to crushing area should be encouraged to improve the aesthetics of the working environment.*
- j. As an occupational safety, all the workers should be provided with nose masks.*


 13/2/24
 JOINT CHIEF ENVIRONMENTAL ENGINEER
 TAMIL NADU POLLUTION CONTROL BOARD
 No.76, MOUNT SALAI, GUINDY,
 CHENNAI-600 032.

III. AS PER TNPCB'S CIRCULAR DATED 22.4.2008

- a. *All the stone crushing units shall provide enclosures to the primary, secondary crushers. The entire conveyor belt shall be covered with GI sheet. Telescopic chute is to be provided at the product unloading conveyor so as to adjust the length according to size of heap.*
- b. *Water sprinkler arrangement at appropriate transfer points shall be provided.*
- c. *All the units shall provide compound wall / wind net arrestor of 20 feet height all around the unit premises.*
- d. *Green belt of evergreen high foliage type like neem, tarmarind, and gold-mohar shall be developed within and outside the boundary of the unit.*

I. MOEF&CC - STANDARDS FOR THE STONE CRUSHERS

25. It is respectfully submitted that with respect to relaxing the 1 KM distance from crusher to crusher, it is opined that the MoEF&CC, Gol has prescribed standards for the stone crushers in the Environment (Protection) Rules, 1986, as follows

- i. Rule 3 of the E (P) Rules 1986, prescribe the Standards for emissions or discharge of environmental Pollutants [Schedule I to IV]. In schedule I, serial No.37, described the Standards for emission of Suspended Particulate Matter (SPM) which consists of two paras as follows

i. Implementation of the following Pollution Control measures:

- a) Dust containment cum suppression system for the equipment.
- b) Construction of wind breaking walls.
- c) Construction of the metalled roads within the premises.
- d) Regular cleaning and wetting of the ground within the premises.
- e) Growing of a green belt along the periphery.

Alan
13/2/24
JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

ii. Quantitative standard for SPM :

[measured between three meters and ten metres from any process equipment of a stone crushing unit shall not exceed 600 microgrammes per cubic meter] from a controlled isolated as well as from a unit located in a cluster should be less than 600 mg/Nm³

However, in the above said Rule/Act there is no norms for any distance criteria to be maintained between crusher to crusher

26. It is respectfully submitted that the Comprehensive Industry Document (Series: COINDS/78/2007-08) on Stone Crushers is latest among Central Pollution Control Board publication in the above series with the main objective of this to impart an overall view of Stone Crushers operating in the country, to develop the National Environmental Standards, to provide cleaner technologies and to specify Guidelines / Code of Practice for Pollution Prevention & Control. The Report has been finalized after a series of discussion with the industry representatives, industry associations, State Pollution Control Boards and other statutory bodies associated with the Stone Crushing Sector. In the above Comprehensive Industry Document on Stone Crushers, the CPCB has not mentioned any distance criteria to be maintained between crusher to crusher.

27. It is respectfully submitted that the dust pollution influence depends on various factors including wind speed, wind direction, humidity, and ambient temperature. It is to be noted that the MoEF&CC has notified the standards for the stone crushers that the suspended particulate matter (measured between three metres and ten metres from any process equipment of stone crushing unit shall not exceed 600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than 600 µg/m³. Therefore the standards laid down by the MoEF& CC also include a situation of cluster of crushing units. It is therefore submitted that the legal framework therefore is not against the cluster of crusher units and on the other hand, it is realized, that in fact, it is a more desirable one for control and monitoring of the units.

- 10
28. It is respectfully submitted that NEERI in the study report 1998 conducted in stone crushing units in Pammal had made one of the recommendations that the stone crushers should be located only near the quarries. The consideration for this recommendation being the cluster of stone crushers nearby the stone quarry site will reduce the transportation, vehicle movement which ultimately reduces the air pollution. When the crushers are in cluster, they can develop green belt jointly, use common approach road, watering of roads etc.
29. It is respectfully submitted that due to boom in infrastructure sector especially roads, highways, and buildings, several stone crushing units are coming-up. If 1KM distance from crusher to crusher is insisted, then at the quarry site one crusher can only be permitted and other crushers have to move to far-away places from quarry site posing difficulties in finding a suitable site, due to the present urbanization, land use pattern and public awareness. If crushers are allowed to be located as clusters, it will reduce the travel distance for transporting raw material (i.e.) boulders from the quarry site. Thus air pollution and noise pollution due to lorry movement can be reduced significantly.
30. It is respectfully submitted that while reviewing the distance criteria prescribed by other States, it is found that other than Kerala and Assam no other State prescribed distance criteria between two crushers. The state of Kerala has fixed 100 metres and the state of Assam has fixed 300 metres from crusher to crusher. In fact, the geographical features of both Kerala and Assam are distinct and unique. The Telangana Pollution Control Board states that stone crushers shall preferably be located near the quarries.
31. In such a scenario, the restriction on units in the state of Tamil Nadu even when the public health aspects are taken care of and the latest and most stringent pollution control measures are installed, only leads to migration of industries to even nearby states thus resulting in an economic policy decision.

Handwritten signature and date: 13/2/14

**JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.**

32. It is respectfully submitted that considering the need to balance infrastructure requirements and economic growth with environmental protection and keeping in view the availability of advanced pollution control technologies and capability of units to deploy them to meet the SPM levels of 600 $\mu\text{g}/\text{m}^3$, the minimum distance of 1 KM between New / Proposed crushers as stipulated in B.P. MS No. 4 dated 02.07.2004 was dispensed with.
33. It is respectfully submitted that the Honourable Supreme Court of India in its order dated 25.4.1996 in the Civil Appeal No.10732/1995 restored the earlier Judgment of Honourable High Court of Madras and banned the operation of stone crushers and quarries within the radius of 500 meters of the residential area. It is submitted that even then, the Hon'ble Court had *not laid down any distance criteria to be maintained between crusher to crusher.*
34. It is respectfully submitted that in the cluster system, in lesser area, more stone crushers can be established and the effect of dust pollution will be localized and same will be effectively prevented and controlled as recommended by the NPC and NEERI.
35. It is respectfully submitted that in view of the above reasons, the Board has passed the impugned order whereby it dispensed off the minimum distance of 1 KM between New / Proposed crushers as prescribed in the B.P Ms No. 4 dated 2.7.2004, subject to compliance of pollution control measures by the stone crushing units. Further, it is submitted that the Board will review the performance of installation and operation of air pollution control measures and the compliance of standards by the stone crushing units after one year.
36. In view of the fact that the existing rule prohibiting establishments of crushing units within 500m of any habitation being relaxed, the Petitioner can't even have a cause of action as he is not aggrieved by the distance rule between two stone crushing units. As far as the public safety standards are maintained, the expert recommendation of NEERI being consistent with the decision recommending to not have distance rule between two stone crushers is purely a policy decision of the Board based

on objective criteria and upon applying the mind. It is respectfully submitted that the judicial interference in issues of this nature ought to be restricted only to the decision making process and not to the extent of the wisdom of the decision itself unless the petitioner makes out a case of public safety being affected.

J. HON'BLE HIGH COURT OF MADRAS- W.P No: 26786 of 2019

37.It is respectfully submitted that the applicant has already filed a Writ Petition in W.P No: 26786 of 2019 before the Hon'ble High Court of Madras with a prayer to quash the impugned proceeding of the respondent Board in the B.P No. 21, dated 31.07.2019 in so far as it relates to relaxing the minimum distance of 1 KM between the new / proposed crushers as prescribed in B.P Ms. No. 4, dated 02.07.2004.

38.It is respectfully submitted that the Hon'ble High Court of Madras in its order dated 05.09.2019 in W.P No:26786 of 2019 inter- alia that

"8. If the respondent Board is capable of taking the decision within nick of time, it is equally bound to take decisions as to the abatement of nuisance caused on account of letting untreated sewerage / chemical tainted waters of river and river stream. Unfortunately, the respondent Board is not bestowing its best attention to the said everlasting problem. This Court is of the considered view that a prima facie case has been made out for grant of interim order. Hence, there shall be an order of interim stay of operation of the impugned order in B.P.Ms.No.21 dated 31.07.2019, till 04.10.2019. Call the matter on 04.10.2019"

39.It is respectfully submitted that the Hon'ble High Court of Madras in its order dated 18.08.2020 in W.M.P Nos. 26175 & 29648 of 2019 in W.P.No. 26786 of 2019 inter- alia that

"6. Thus, with the above said clarification, we are not inclined to modify the orders passed otherwise. We are also not inclined to undertake the exercise of fixing any distance Rule by ourselves as that would involve the exercise which the expert body based upon the data is expected to do so. However, we make it clear that the State

13/1/24
JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

Government and the Tamil Nadu Pollution Control Board can undertake the said exercise in the meanwhile so that appropriate final orders can be passed. Needless to state, such exercise is with respect to fixing any lesser distance rule instead of dispensing the said criteria in its entirety. We further make it clear that the clarification issued in favour of those units which were in operation at the time of obtaining the interim order, shall not mean that they can extend the crushing capacity without the permission of the Court.

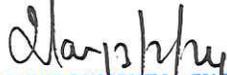
7. After the said exercise is done, liberty is given to the learned Special Government Pleader and the learned counsel for the Board to make a mention before us for fixing a date for hearing the writ petition. Accordingly, with the above clarification, the interim order already granted is extended until further orders."

40. It is respectfully submitted that the Hon'ble High Court of Madras in its order dated 01.04.2021 in W.P No:26786 of 2019 inter- alia that

"In the meantime, the Pollution Control Board should appoint experts with expertise in environmental studies to consider the criteria that should be evolved for granting future permission for stone-crushing units, including the minimum distance to be maintained between two units, the distance from places of dense habitation and the like".

41. It is respectfully submitted that the Hon'ble High Court of Madras in its order dated 19.07.2021 in W.P No: 26786 of 2019 has recorded that *"It is submitted on behalf of the TNPCB that the TNPCB will seek expert opinion and the future course of action pertaining to stone-crushing units to be adopted by TNPCB will be strictly in accordance with such expert opinion received. The TNPCB also says that in view of the subsisting interim order, no new stone-crushing unit has been made functional with the modified norms as contained in the impugned resolution of July 31, 2019"*

42. It is respectively submitted that the NEERI in its final report, dated 09.06.2022 has reported the following with respect to distance between


JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD

two stone crusher units as mentioned in the TNPCB Proceeding (BP No. 4, dated 02.07.2004) is not important & significant and can be withdrawn considering the following facts:-

- a) *By specifying inter distance between the stone crushing industries shall lead to the dispersal of stone crushing industries across in the state of Tamil Nadu resulting into spreading of dust pollutants.*
- b) *Inter distance between stone crushing industries is not as significant and governing criteria compared to specifying distance from stone crushing industries to habitation areas (approved residences/inhabited site, Educational Institutions, Places of public offices and religious importance, State/National Highways etc.)*
- c) *Specifying inter distance between stone crushing industries as a limiting criteria is a way against cluster of industries, which is not preferable leading to spread and increase in the dust pollutants.*

43. It is respectfully submitted that the Hon'ble High Court of Madras has disposed of the writ petition in its order dated 9.1.2024 in W.P No:26786 of 2019 inter- alia that:

"In the light of that, we permit the petitioner to approach the National Green Tribunal. In that event, all contentions are kept open. The interim order passed earlier shall continue for a period of ten days from today. It is needless to state that on lapse of ten days, the interim protection shall come to an end".

44. It is respectfully submitted that the respondent Board in respect of the above writ petition has filed its counter affidavit/affidavit during the month of September 2019, June 2020, the additional affidavit filed by the respondent Board during the month of March 2021, the reports dated 15.09.2021, 07.12.2021, 07.03.2022, 17.06.2022 and reply of the respondent TNPC Board on the objection of the petitioner to the assessment report of the NEERI, during the month of June – 2023, affidavit filed by the respondent Board during the month of October 2023 before the Hon'ble High Court and the same is submitted as annexure in this reply.

dar
13/2/24

JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

45. It is respectfully submitted that the present application is not a transfer of the litigation before the Hon'ble High Court. In fact, it is obviously also not a remand of the case to this Hon'ble Tribunal. In such view, it is submitted that the Hon'ble Court had permitted the Applicant to move this Hon'ble Tribunal if there are any further grievances to the new rules. It is submitted that the Hon'ble High Court has not observed any defect with B.P.No. 21 and the re-agitation of the same is not maintainable and also much beyond the period of limitation. Even the relief sought for the set-aside of the Impugned Order is not maintainable for the lack of cause of action, issue of environment and only a challenge to an internal proceeding of the Board accepting a report that was called. There was indeed no reason for the Board to not accept a scientific report and such a meeting can't be impugned by the Applicant under the guise of an application under Section 14 of the NGT Act, 2010.

For the reasons stated above, it is therefore prayed that this Hon'ble Tribunal (SZ), may be pleased to pass such order or other orders as this Hon'ble Tribunal may deem fit and necessary in the circumstances of the case and thus render justice.

13/2/24
 JOINT CHIEF ENVIRONMENTAL ENGINEER
 TAMIL NADU POLLUTION CONTROL BOARD
 No.76, MOUNT SALAI, GUINDY,
 CHENNAI-600 032.

VERIFICATION

I, R.Sarasavani, daughter of Thiru.J.Raghavan, aged about 58 years having office at No.76, Mount Salai, Guindy, Chennai 600 032, do hereby verify that the contents of above report are true to the best of my knowledge through records.

13/2/24
 JOINT CHIEF ENVIRONMENTAL ENGINEER
 TAMIL NADU POLLUTION CONTROL BOARD
 No.76, MOUNT SALAI, GUINDY,
 CHENNAI-600 032.

7

①

Copy of :-

TAMILNADU POLLUTION CONTROL BOARD

ABSTRACT

TAMILNADU POLLUTION CONTROL BOARD – FIXING NORMS FOR THE LOCATIONS OF NEW STONE CRUSHING UNITS IN THE STATE – ORDERS – ISSUED.

B.P.MS.No.142

Dated : 10.10.1986

Read :

1. G.O.Ms.No.340 / Health and Famil Welfare Department, dated 19.2.82.
2. G.O.Ms.No.4, Environment Control Department, dated 28.9.83.
3. Tamil Nadu Pollution Control Board Resolution No.28-12, dated.2.6.86.

ORDER

Stone crushing units generate considerable dust.

Rock and crushed stone products are loosened by drilling and blasting them from their deposit beds. Further processing includes crushing, regrinding and removal of fines. These operations cause considerable dust pollution.

The Central Board for the Prevention and Control of Water Pollution, New Delhi had conducted an ambient air quality survey in and around various stone crushing units in Haryana State and suggested the following norms as remedial measures, as a first step, for the prevention of air pollution problems due to stone crushers.

1. No stone crushers should be located within two kilometre from any National and State Highways.
2. The distance between two stone crushers should be four kilometers to avoid dust polluttional influence of one over the other.

: 2 :

3. If for other pressing reasons more than one stone crushers are required to come in existence, then they should be as much close to each other as may be permitted without causing difficulty in operation. In such a situation the source would be recognised as a collective one and the distance is to be estimated accordingly.

The matter was placed before the Board at its Special Meeting held on 2.6.86, the Board examined the matter carefully and decided to adopt the norms as per Appendix for new stone crushing units in the State.

**Sd/- G.RENGASAMY,
Member Secretary (I/c)**

To

The Chairman, Tamil Nadu Pollution Control Board, Madras.
The Regional Officers of All Regions
The Board Analyst, Coimbatore, Madras and
M/s.Richardson & Cruddes Ltd., Madras.

Copy to :

Stock file and T-3
All Consultants
B.P. File – 2 Nos. (Estt. Section)
Chief Scientific Officer, Tamil Nadu Pollution Control Board, Chennai – 4.
Assistant Environmental Engineers & Junior Environmental Engineers in Board Office
Section Office in T-1; T-2 & A.P.C.

Forwarded / By Order

**Sd/-
Section Officer**

Copy of :-

TAMILNADU POLLUTION CONTROL BOARD

TAMILNADU POLLUTION CONTROL BOARD – INDUSTRIES – FIXING
NORMS FOR THE LOCATIONS OF NEW STONE CRUSHING UNITS IN THE
STATE – ORDERS – ISSUED.

B.P.MS.No.609

Dated : 09.12.1992

Read :

1. B.P.Ms.No.142, dated 10.10.86.
2. Board Resolution No.123-68, dated 11.11.92.

ORDER

The Board in its proceedings first cited has fixed the following norms for location of new stone crushing units considering the results of ambient air Quality Survey conducted by the Central Board.

1. No stone crushers should be located within two kilometre from any National and State Highways.
2. The distance between two stone crushers should be four kilometers to avoid dust pollutional influence of one over the other.
3. If for other pressing reasons more than one stone crushers are required to come in existence, then they should be as much close to each other as may be permitted without causing difficulty in operation. In such a situation the source would be recognised as a collective one and the distance is to be estimated accordingly.

The Board in its resolution No.120-3 dated 26.6.92 has ordered to put up proposals for modification of Board Proceeding relating to the location of stone crushing units.

Ambient air quality survey was conducted for one of the stone crushing unit locating the ambient Air Quality stations at various distances from the source. The report of analysis of Ambient Air Quality survey conducted in the unit for Suspended particulate Matter concentration is as follows :

A

- 2 -

: 2 :

Sl. No.	Distance from the source	SPM concentration in Mg/M ³
1.	250 M	1011.73
2.	500 M	192.86
3.	750 M	68.22
4.	1000 M	61.02

Based on the results, the revised norms for setting on new stone crushing units was placed before the Board held on 11.11.92 for approval.

1. No stone crushing units should be located within 500 M from any NH or SH or Primary residential area or mixed residential area or places of public and religious importance.
2. The minimum distance between two stone crushers should 1 K.M to avoid dust pollutional influence of one over the other.

The Board in its resolution 123-68 dated 11.11.92 has approved the above norms for adoption.

This order comes into immediate effect.

Sd/-
For Chairman

To

The Joint Chief Environmental Engineers
The District Environmental Engineers
The Assistant Environmental Engineers & Assistant Engineers in Board Office

Copy to :-

P.A. to Chairman, TNPC Board, Madras
P.A. to Member Secretary, TNPC Board, Madras
P.C. to Additional Chief Environmental Engineer, TNPCBD, Madras
Stock file
B.P. File
All Assistants in Technical Section in Board Office
P1 / Personnel Branch

(5)

IN THE SUPREME COURT OF INDIA

CIVIL APPELLATE JURISDICTION

CIVIL APPEAL NO. 10732 OF 1995

Kennedy Valley Welfare Association

... Petitioner

Versus

Ceylon Repatriates Labourers Welfare
Service Society & Others.

... Respondents

O R D E R

Krishna Nagar and Kennedy Valley Welfare Association and various other residents of the area filed bench petitions under article 226 of the Constitution of India before the High Court of Madras, seeking mandamus that the Stone-crushers and Stone-quarries operating in close vicinity to the residential area be directed to be closed.

Learned Single Judge of the High Court appointed an Expert committee consisting of the Dr. S. Nanyan, IAS, Secretary to Government Environment & Forests Departments, Madras. Mr. M. S. Tiwari, Chairman, Central Pollution Control Board and Mr. Desiguvimayagum Pillai, Member Secretary, Tamilnadu Pollution Control Board to inspect the area and submit a Report.

The learned Single Judge of the Madras High Court accepted the Report of the Committee and allowed the Writ Petition in the following terms.

"As a result of my discussion, as above, I am satisfied that it is a fit case in which direction must issue to the respondent-State of Tamilnadu, to implement the recommendations of the Expert Committee dated 3-7-1991 on stone quarrying and crushing operation at Kennedy Valley and Krishna Nagar in

6

- 4 -

Thirusoolam area, submitted before this Court pursuant to order of this Court dated 31-10-1991 and not to allow quarrying or crushing operations close to the residential area and within 500 metres of the residential area. Accordingly, all the existing crushers must be stopped from operating within 500 metres of the periphery of the Kennedy Valley and Krishna Nagar residential quarters. They, however, may be considered for such license/permission only if they operate within the safe zone and thus not within 500 metres of any residential area and adopt pollution control measures recommended by the National Productivity Council, New Delhi, that is to say, enclosing the jaw crusher and the screens so as to contain dust and noise and making arrangements for spraying of water on the conveyor belts to suppress dust as well as air pollution, control measures to the satisfaction of the Pollution Control Board. No quarrying of blue metal shall be permitted within 500 metres of the residential area and permitted only if they are beyond the limit of 500 metres of the residential area and strictly follow the procedures required by the Mines and safety. Such quarrying, however, can be allowed by respondent State only at such place and in such areas which do not in any manner endanger human life and if there is any likelihood of danger to any grass or plant, in such cases the State Government after satisfying about the requirements of the community at large may surrender the needs of the environment to a limited extent.

I have not been able to appreciate why the respondent Collector of the District and the State Government have not shown necessary concern for granting license permit for quarrying operation, when the owners thereof have indicated that they would abide by all the conditions that may be imposed and that they will not violate the norms indicated above. If there is any loss of revenue on that account and the need of the community is not fulfilled, the responsibility shall be entirely that of the State. It will thus be in the interests of the Public that such application are immediately attended and disposed of as early as possible in accordance with law.

It is accordingly directed that any application for stone quarrying pending with the State Government shall be disposed of as quickly as possible, but not later than one month from the date of service of a copy of this order.

In the result, W. P. Nos. 14930 and 1831 of 1989 are allowed in the terms as above. There shall be no order as to costs.

- 3 - 4 -

81

13

The Writ Appeals filed by the Quarry owners against the Judgement of the learned Single Judge were heard by a Division of the High Court. The Division Bench modified the Judgement of the learned Single Judge to the extent that the ban so far as it related to the operation of quarries was reduced from 500 metres to 50 metres. This appeal by the residents of the locality are against the Judgement of the Division Bench.

We have examined the recommendations of the Committee. We are of the view that the learned single judge rightly accepted the report of the Committee and issued the directions banning operation of Stone-Crushers and quarries within the radius of 500 metres of the residential area. The Division Bench was not justified in reducing the area restriction from 500 metres to 50 metres in respect of the quarries. The Division Bench also issued further directions in modifications of the directions issued by the learned Single Judge which were not warranted in the facts of the case.

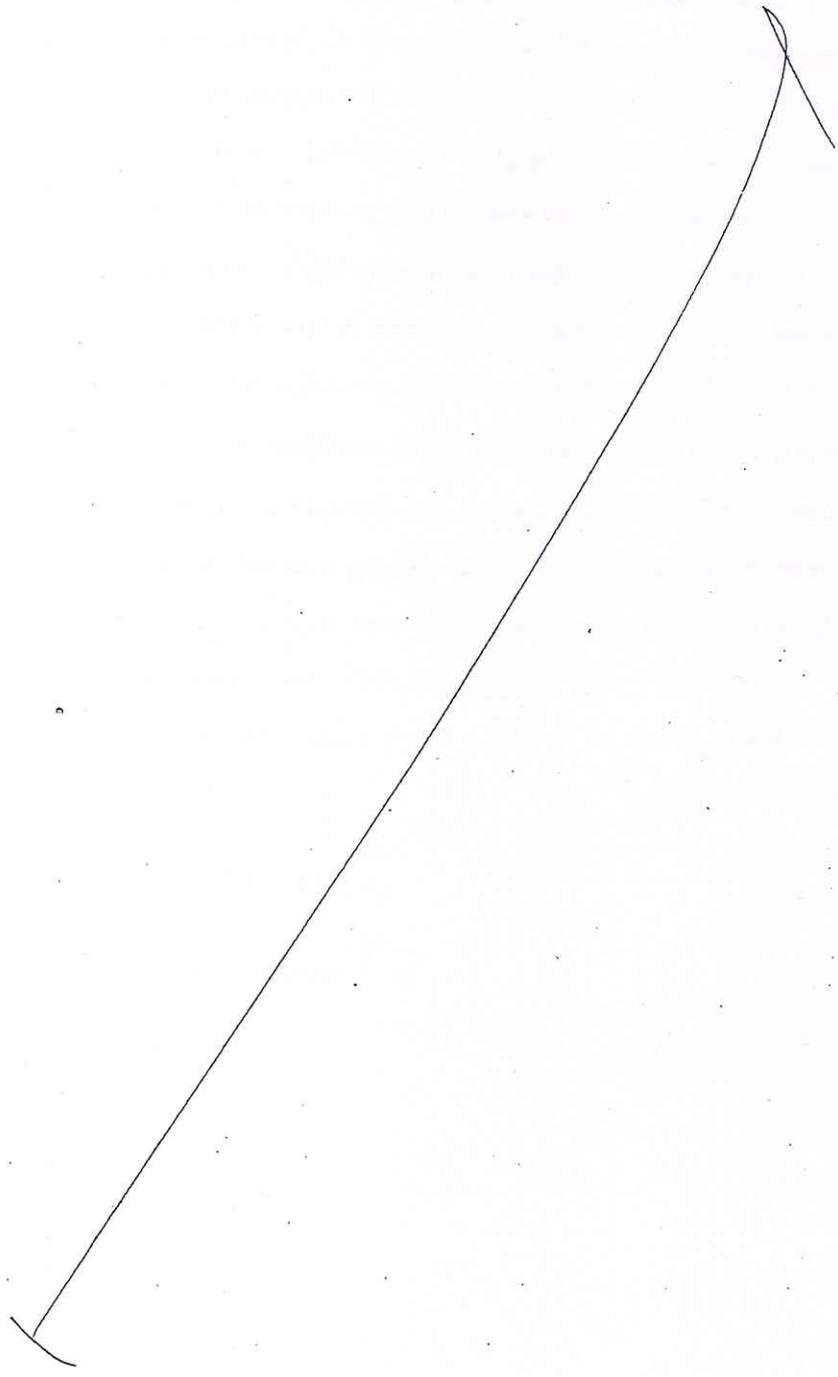
We, therefore, allow the appeal, set aside the impugned Judgement of the Division Bench of the High Court restore that of the learned Single Judge. No costs.

Sd/-
(KULDIP SINGH), J

Sd/-
(S. P. KURDUKAR), J

NEW DELHI.
April 25, 1996.

-6-



(8)

IN THE SUPREME COURT OF INDIA

CIVIL APPELLATE JURISDICTION

CIVIL APPEAL NO. 10732 OF 1995

Kennedy Valley Welfare Association

..... Petitioner

Versus

Ceylon Repatriates Labourers Welfare Service Society & Others.

... Respondents

O R D E R

Krishna Nagar and Kennedy Valley Welfare Association and various other residents of the area filed bench petitions under article 226 of the Constitution of India before the High Court of Madras, seeking mandamus that the Stone-crushers and Stone-quarries operating in close vicinity to the residential area be directed to be closed.

Learned Single Judge of the High Court appointed an Expert committee consisting of the Dr. S. Narayan, IAS, Secretary to Government Environment & Forests Department, Madras. Mr. M. S. Tiwari, Chairman, Central Pollution Control Board and Mr. Desigunayagam Pillai, Member Secretary, Tamilnadu Pollution Control Board to inspect the area and submit Report.

The learned Single Judge of the Madras High Court accepted Report of the Committee and allowed the Writ Petition in the following

"As a result of my discussion, as above, I am satisfied that it is a fit case in which direction must issue to the respondent-State of Tamilnadu, to implement the recommendations of the Expert Committee dated 3-7-1991 on stone quarrying and crushing operation at Kennedy Valley and Krishna Nagar in

-3- 19

Thirusoolam area, submitted before this Court pursuant to order of this Court dated 31-10-1991 and not to allow quarrying or crushing operations close to the residential area and within 500 metres of the residential area. Accordingly, all the existing crushers must be stopped from operating within 500 metres of the periphery of the Kennedy Valley and Krishna Nagar residential quarters. They, however, may be considered for such license/permission only if they operate within the safe zone and thus not within 500 metres of any residential area and adopt pollution control measures recommended by the National Productivity Council, New Delhi, that is to say, enclosing the jaw crusher and the screens so as to contain dust and noise and making arrangements for spraying of water on the conveyor belts to suppress dust as well as air pollution, control measures to the satisfaction of the Pollution Control Board. No quarrying of blue metal shall be permitted within 500 metres of the residential area and permitted only if they are beyond the limit of 500 metres of the residential area and strictly follow the procedures required by the Mines and safety. Such quarrying, however, can be allowed by respondent State only at such place and in such areas which do not in any manner endanger human life and if there is any likelihood of danger to any grass or plant, in such cases the State Government after satisfying about the requirements of the community at large may surrender the needs of the environment to a limited extent.

I have not been able to appreciate why the respondent Collector of the District and the State Government have not shown necessary concern for granting license permit for quarrying operation, when the owners thereof have indicated that they would abide by all the conditions that may be imposed and that they will not violate the norms indicated above. If there is any loss of revenue on that account and the need of the community is not fulfilled, the responsibility shall be entirely that of the State. It will thus be in the interests of the Public that such application are immediately attended and disposed of as early as possible in accordance with law.

It is accordingly directed that any application for stone quarrying pending with the State Government shall be disposed of as quickly as possible, but not later than one month from the date of service of a copy of this order.

In the result, W. P. Nos. 14930 and 1831 of 1989 are allowed in the terms as above. There shall be no order as to costs.

-4-

-4-

81

13

10

The Writ Appeals filed by the Quarry owners against the Judgement of the learned Single Judge were heard by a Division of the High Court. The Division Bench modified the Judgement of the learned Single Judge to the extent that the ban so far as it related to the operation of quarries was reduced from 500 metres to 50 metres. This appeal by the residents of the locality are against the Judgement of the Division Bench.

We have examined the recommendations of the Committee. We are of the view that the learned single judge rightly accepted the report of the Committee and issued the directions banning operation of Stone-Crushers and quarries within the radius of 500 metres of the residential area. The Division Bench was not justified in reducing the area restriction from 500 metres to 50 metres in respect of the quarries. The Division Bench also issued further directions in modifications of the directions issued by the learned Single Judge which were not warranted in the facts of the case.

We therefore, allow the appeal, set aside the impugned Judgement of the Division Bench of the High Court restore that of the learned Single Judge. No costs..

Sd/-
(KULDIP SINGH), J

Sd/-
(S. P. KURDUKAR), J

NEW DELHI,
April 25, 1986.

The first part of the report discusses the
 current state of the industry and the
 challenges it faces. It also outlines the
 objectives of the study and the methodology
 used to collect and analyze data. The
 findings of the study are presented in the
 following sections, which provide a detailed
 analysis of the data and discuss the
 implications for the industry. The report
 concludes with a summary of the key
 findings and recommendations for future
 research and practice.



Copy of :-

TAMILNADU POLLUTION CONTROL BOARD
100, ANNA SALAI, GUINDY, CHENNAI – 600 032.

TAMILNADU POLLUTION CONTROL BOARD – FIXING REVISED NORMS FOR THE LOCATIONS OF STONE CRUSHING INDUSTRIES IN THE STATE IN VIEW OF THE STUDY REPORT SUBMITTED BY THE NATIONAL ENVIRONMENTAL ENGINEERING RESEARCH INSTITUTE, NAGPUR.

B.P.MS.No.48

Dated : 09.09.1998
Read :

BOARD'S RESOLUTION NO.166-3-2, DATE 19.8.99.

The Tamil Nadu Pollution Control Board, in its proceedings B.P.Ms.No.609, dated 9.12.92 decided to adopt the following norms for siting of stone crushing industries in the state.

1. No stone crushers should be located within 500 M from any National and State Highways or Primary residential area or mixed residential area of places of public and religious importance.
2. The minimum distance between two stone crushers should be 1 K.M. to avoid dust polluttional influence of one over the other.
3. If for other pressing reasons more than one stone crushers are required to come in existence, then they should be as much close to each other as may be permitted without causing difficulty in operation. In such a situation the source would be recognised as a collective one and the distance is to be estimated accordingly.

Subsequently, the Honourable Supreme Court of India in its order dated 25.4.96 in the Civil Appeal No.10732/1995 restored the earlier Judgement of Honourable High Court of Madras and banned the operation of stone crushers and quarries within the radius of 500 meters of the residential area.

Subsequently, the Board received representations from various Associations of stone crushing industries in the State to consider relaxation in the above norms. Therefore Board entrusted a study to National Environmental Engineering Research Institute (NEERI), Nagpur to assess the performance of air Pollution Control Measures provided by the stone crushing industries and to assess the dust emission from the industry and also to arrive at the optimum distance from the National / State Highways and from the Residential area.

(12)

- 10 -

: 2 :

NEERI conducted the study during September 97 and October 97 and submitted their report with recommendations. It was decided to conduct the study during summer season also so as to confirm the results and the recommendations.

NEERI conducted the study on Assessment of Dust Emissions from Stone Crushing Industries during summer seasons during April, May 1998 in the cluster of stone crushing industries located in Pammal, Kancheepuram District. During the study period, 50 stone crushing industries having 40T capacity each, were in operation and all these units adopted the pollution control system (dust suppression and containment system comprising of building enclosures over the dust emission sources with spraying of water through special nozzles) of National Productivity Council (NPC).

In the study areas, the ambient air quality locations were selected based on the prevailing wind directions, wind speed and also the historical wind rose for Chennai. Three Respirable Particulate Samplers and seven High Volume Samplers were operated during the study period to assess the dust emissions from source and ambient air.

The dust emissions from source and Ambient air were recorded and analysed under four different conditions as below :

1. When all 50 units were in operation
2. When 25 units were in operation
3. When 10 units were in operation and
4. When one unit was in operation

During the study period, micrometeorological observations, transport vehicle counts and meteorological observations were also made simultaneously.

The study concludes with the summary of report with a recommendation that the crushing area (Pammal) should not accommodate any more crushers and also that the crushers existing outside the main crushing area should be asked to move inside.

In the study report, NEERI has made the following recommendations.

: 3 :

1. The control strategies suggested by National productivity Council should be sincerely adhered to.
2. For a single crusher an area of 50 meters radius should be left around the crusher with a 10 meter green belt at the periphery.
3. For a cluster of 10 crushers an open area of 150 meters radius should be left around the crushers with a 30 meter green belt at the periphery. There should be bilane road system to approach the crushers.
4. For 25 crusher cluster a distance of 250 meters on all sides around the periphery of the cluster area should be left, with a green belt of 50 meters within the extreme boundary.
5. For a 50 crusher cluster a distance of 300 meters around the periphery of the cluster area on all sides should be left with a green belt of 100 meters within the extreme boundary.
6. Periodical cleaning of the water spray nozzles should be carried out to avoid checking.
7. Fine dust accumulated in the crushing area should be periodically cleaned and the dumps should be covered with tarpaulins to arrest erosion by wind.
8. The approach road should be properly laid with tar or concrete and should be sprayed with water. Similarly the approach roads of individual crushers should be made in good condition and watered.
9. The drop height of the processed materials should be kept at a minimum during loading and unloading.
10. Conveyer chutes should be provided at the discharge points.
11. As an occupational safety, all the workers should be provided with nose masks.
12. The green belt will restrict the spread of particulate matter and trees should be evergreen high foliage type like Neem, Tamarind, Goldmahar, Fire of the forest and any other local varieties are recommended. Cash crops like cashewnut, mango, lemon and sapota may be encouraged to get back financial benefits.

14

- 12 -

: 4 :

13. Ornamental trees like Ashoka along the roads on both sides leading to the crushers area should be encouraged to improve the aesthetics of the working environment.
14. Within the cluster a minimum distance of 20 meters should be made for roads.
15. The above recommendations are for the stone crushers which are in the vicinity of residential areas.
16. The stone crushers should be located only near the quarries.
17. For the crushers which are near the State or National Highways, it is recommended that a 15 to 20 feet wall should be provided at least in the downwind direction besides the above mentioned recommendations. Note : For the crushers located near NH/SH the length of the wall to be provided will depend upon the alignment of road and crusher boundary. The wall should be provided on all the three sides (Parallel to NH/SH and both the sides).
18. For new or proposed crushers near State or National Highways, a minimum distance may be fixed by the appropriate authority.
19. Similarly for sensitive zones appropriate authority may fix the minimum, distance around the crushers.

The subject to consider fixing of revised norms for the location of stone crushing industries in the State in view of the above study report submitted by the National Environmental Engineering Research Institute, Nagpur was placed before the Board, at its, meeting held on 19.8.98.

The Board in Resolution No.166-3-2 dated 19.8.98 decided to accept the recommendations of National Environmental Engineering Research Institute, Nagpur based on the study conducted by the Institute to assess the dust emission from the Stone Crushing Industry and to arrive at the norms for the Air Pollution Control Measures to be provided by the Stone Crushing Units and the distance criteria from the National Highways, State Highways and the Residential Areas and decided to accept the following norms :

1. All the stone crushing units should provide Air Pollution Control Measures as suggested by the National Productivity Council.

: 5 :

- 2. If the distance between two crushers is more than 100 meters, it will be considered as a single crusher. If the distance between the crusher boundaries is less than 100 meters, it will be considered as a cluster.
- 3. The distance between the crusher boundaries and the boundary of the National / State Highways shall be as specified below :

Sl. No.	Cluster of crushers	Distance between crusher / cluster	Green belt area at the periphery
1.	Single crusher	50 mts.	10 mts.
2.	10 crushers	150 mts.	30 mts.
3.	25 crushers	250 mts.	50 mts.
4.	50 crushers	300 mts.	100 mts.

Note :-

- (a) There should be bilane road system to approach the crushers.
- (b) Within the cluster a minimum distance of 20 meters should be made for roads.
- (c) The crusher boundary implies the line joining all the emission sources such as jaw crusher, conveyer belt, head, rotary screen etc., in the crushing unit.
- 4. Existing crushers, which are near the National or State Highways and not meeting the above criteria should provide a 15 to 20 feet wall on all the three sides (parallel to National / State Highways and both the sides) and upto the length to be stipulated on the alignment of road and boundary of the crusher.
- 5. In respect of Residential area, No stone crushing industries are to be allowed to operate within 500 meters from Residential areas as per the orders of Honourable Supreme Court of India in the Civil Appeal No.10732/1995, dated 25.4.96.

: 6 :

6. The Board also decided that health aspects of the employees exposed to the stone crushing units must also be carried out in consultation with the Director of Public Health and Preventive Medicine.

Sd/-
For Member Secretary

To

All Joint Chief Environmental Engineers
District Environmental Engineers
Assistant Environmental Engineers (Udhagamandalam & Nagercoil)
Assistant Environmental Engineers & Asst. Engineers in the Districts, TNPC Board

Copy to :

P.C. to Chairman, TNPCB Board
P.C. to Member Secretary, TNPCB Board
Additional Chief Environmental Engineer I (i/c)
Additional Chief Environmental Engineer II
Financial Advisor
Joint Chief Environmental Engineer I&II
Deputy Director (Labs)
Senior Law Officer
Environmental Engineers
Assistant Environmental Engineer / Asst. Engineers in the Board Office, TNPC Board
B.P. File – 2 Nos.
Stock File, Spare copy

15
17

Copy of :-

TAMILNADU POLLUTION CONTROL BOARD

NORMS FOR THE LOCATION OF STONE CRUSHING INDUSTRIES IN VIEW OF THE ORDERS OF THE APPELLATE AUTHORITY CONSTITUTED UNDER WATER/AIR ACTS.

B.P.MS.No.4

Dated : 02.07.2004

Read :-

1. B.P.Ms.No.142, dated 10.10.1985.
2. B.P.Ms.No.609, dated 9.12.2002.
3. B.P.Ms.No.48, dated 9.9.1990.
4. Board's Resolution No.204-1-25, dated 22.6.2004.

ORDER

Tamil Nadu Pollution Control Board, in its proceedings B.P.Ms.No.142, dated 10.10.1986 fixed norms for location of stone crushing units based on studies conducted by the Central Pollution Control Board and subsequently fixed revised norms for location of stone crushing units in its proceedings, B.P.Ms.No.609, dated 9.12.1992 based on the report of the Committee constituted by the Tamil Nadu Pollution control Board, dated 3.7.1991 under the orders of the High Court of Madras, dated 30.11.1990 as follows :

1. No stone crushers units should be located within 500 M from any NH or SH or primary residential area or mixed residential area of places of public and religious importance.
2. The minimum distance between two stone crushers should be 1 K.M to avoid dust polluttional influence of one over the other.

Subsequently, the Board received representations from various Associations of stone crushing units in Tamil Nadu to consider relaxation in the above norms as the units have installed air pollution control measures. Hence, the Board entrusted a study to the National Environmental Engineering Research Institute (NEERI), Nagpur to assess the performance of the air pollution control measures provided by the stone crushing units, to assess the dust emission from the industry and to arrive at the optimum distance from the National / State highways and from the residential areas. The NEERI conducted the study during September and October 1997 and April and May 1998 and submitted a report with recommendations.

18

: 2 :

The Board in its Proceedings, B.P.Ms.No.48, dated 9.9.1998 decided to accept the recommendations of the NEERI and decided to adopt the norms except those for residential area. The Board decided that in respect of residential area, no stone crushing industries are to be allowed to operate within 500 metres from residential area as per the orders of Hon'ble Supreme Court of India, dated 25.4.1995 in the Civil Appeal No.10732/1995.

Subsequently, in the order, dated 10.5.1999 in SLP(C) No.13564/1998, the Hon'ble Supreme Court of India issue directions that the existing stone-crushers, who have valid licenses, are permitted to carry out their work subject to the complying with the conditions of the NEERI's Report. In another order dated 8.8.2000 in SLP(C) No.13564/1998, the Hon'ble Supreme Court of India has clarified that the earlier decision of the Supreme Court is confined to the facts of that case and will not stand in the way of the pollution control Board / State Government reconsidering amendment of Notification and or Resolution or Rule as the case may be and option is given to take into consideration the earlier expert committee report, dated 3.7.1991 and also the NEERI Report for framing appropriate Rule. No.13564/1998, the Hon'ble Supreme Court of India has clarified that the earlier decision of the Supreme Court is confined to the facts of that case and will not stand in the way of the pollution control Board / State Government reconsidering amendment of Notification and or Resolution or Rule as the case may be and option is given to take into consideration the earlier expert committee report, dated 3.7.1991 and also the NEERI Report for framing appropriate Rule.

The subject of revision of norms for the location of stone crushing units was placed before the Board at its meeting held on 22.12.2000. The Board in its Resolution No.102-3-9, dated 22.12.2000 decided to adopt the NEERI recommendations in case of existing stone crushing industries and in case of new stone crushing industries, it should be located atleast 500 metres away from habitations as per recommendations of the Expert Committee.

The details as furnished in the Agenda for the Board meeting held on 22.12.2000 and the decision taken by the Board have been filed before the Honble Supreme Court of India as an Affidavit dated 3.1.2001 by the Board in SLP (Civil) No.13564 of 1990 in which the Hon'ble Supreme Court of India issued final order, dated 25.9.2001. Regarding the final order, the Advocate on Record has clarified that the order of the Supreme Court is not strictly applicable to stone crushing units and the norms for existing and new stone crushers can be enforced as notified by the Board and as submitted by it in its affidavit, dated 3.1.2001.

19

: 3 :

The Board has been adopting the norms for new stone crushing units as per B.P.Ms.No.609, dated 9.12.92, and for existing stone crushing units, the norms stipulated in B.P.Ms.No.48, dated 9.9.90, considering the fact that the above B.P. dated 9.9.98 is issued based on the studies on the existing stone crushing units who have represented to relax norms stipulated in B.P.Ms.No.609, dated 9.12.92. Regarding new stone crushing units the B.P.Ms.No.48, dated 9.9.98 has strictly ordered that no stone crushing industries are to be allowed to operate within 500 metres from residential area. But BP was silent on the distance criteria for new stone crushing units from NH/SH and hence the distance criteria for new stone crushing units fixed in B.P.Ms.No.609, dated 9.12.92 continued to be adopted by the Board in practice.

However, the Appellate Authority in its order, dated 3.3.04 in the appeal filed by M/s.JVM Blue Metals, Thiruvannamalai has ordered as follows.

"It is clear from the proceedings that new norms was fixed for existing and proposed or new units and it was never the intention to maintain 1992 proceedings for any purpose: It is clear from para 3 of the proceedings". Appellate Authority has set aside the Board's rejection order and directed the Board to consider the application on the basis of B.P. dated 9.9.98. In this case the Board had rejected the issue of consent to a stone crushing units since it is located within 65 m from State highways thus violating the distance criteria of 500 m from state highways fixed in B.P.Ms.No.609, dated 9.12.92.

The ambiguity in B.P.Ms.No.48, dated 9.9.98 by which it was not clearly specified that this relaxation is applicable to existing stone crushing units only has resulted in this situation by allowing the mushrooming of new stone crushing units near the NH/SH. This will affect the travelling public in the NH/SH due to deep penetration of dust from stone crushing units into their eyes / lungs due to high vehicular speed and the dust will affect the visibility of motorists also.

In order to remove the lack of clarity the matter is again brought to the Board to clearly fix the norms for existing and new / proposed stone crushers and the air pollution control measures without ambiguity.

20

- 18 -

: 4 :

1.0 CRITERIA FOR EXISTING STONE CRUSHING UNITS : (AS RECOMMENDED BY NEERI)

1.1 Distance Criteria

Sl. No.	Type of clusters	Distance between crusher / cluster of crushers and habitations / NN or SH	Green belt area at the periphery
1.	Single crusher	50 mts.	10 mts.
2.	10 crushers	150 mts.	30 mts.
3.	25 crushers	250 mts.	50 mts.
4.	50 crushers	300 mts.	100 mts.

Note :-

- (a) For single crusher, the distance is to be measured from crusher boundary.
 - (b) In the case of cluster of crushers the distance is to be measured from the last crusher boundary.
 - (c) The crusher boundary implies the line joining all the emission sources in the crushing unit such as jaw crusher, conveyer belt, head, rotary screen etc.
- 1.2 If the distance between two existing crushers is more than 100 metres, it will be considered as a single crusher. If the distance between the existing crusher boundaries is less than 100 metres, it will be considered as a cluster.
- 1.3 Existing crushers, which are near the National or State highways and not meeting the distance criteria should provide a 15 to 20 feet wall on all the three sides (parallel to National / State highways and both sides) and upto the length to be stipulated on the alignment of road and boundary of the crusher in addition to the air pollution control measures.

Explanation

Existing stone crushing units are those which have valid licenses on the date of Supreme Court order namely 10.05.1999.



: 5 :

2.0 CRITERIA FOR NEW / PROPOSED STONE CRUSHING UNITS

- 2.1 No new / proposed stone crushers should be located within 500 metres from any National highways or State highways or 'inhabited site' or places of public and religious importance.

Note :-

'Inhabited site' shall mean a village site or town site or a house site as referred to in the revenue records or a house site or layout approved by a Local Body or Town or Country or Metropolitan Planning Authority, where the said Body or Authority is created under a statute and empowered to approve such an area as a house site or layout area (as desired in Rule 35 of Tamilnadu Minor Minerals Concession Rules, 1959).

- 2.2 The minimum distance between new / proposed stone crushers should be 1 km to avoid dust pollutional influence of one over the other.

2.3 Green belt development :

The stone - crushing unit shall provide adequate green belt cover around the periphery as suggested by the Board depending on site and meteorological conditions.

3.0 AIR POLLUTION CONTROL MEASURES

- 3.1 The existing and new / proposed stone crushing units should provide dust containment and dust suppression systems suggested by National Productivity Council as furnished in Annexure - I and should also adhere to the recommendations furnished in NEERI Report (vide Annexure - II).

The above consolidated proposal of earlier B.P.Ms.No.609, dated 9.12.1992 and B.P.Ms.No.48, dated 9.9.98 is contemplated to make clear the decisions of the Board regarding the siting criteria of the existing and new / proposed stone crushing units and hence this proposal may take effect from 10.5.1999, the date of Supreme Court order defining existing stone crushing units.

22

- 20 -

: 6 :

The above proposal was placed before the Board at its meeting held on 22.6.2004. The Board in its Resolution No.204-1-25, dated 22.6.2004 decided to approve the siting criteria of the existing and new proposed stone crushing units with date of effect from 10.5.99, the date of the Hon'ble Supreme Court order, defining the existing stone crushing units.

Sd/-
For Member Secretary

To

Joint Chief Environmental Engineers
District Environmental Engineers and
Assistant Environmental Engineers in District Offices

Copy to :

Additional Chief Environmental Engineer I
Additional Chief Environmental Engineer II
Financial Advisor
Joint Chief Environmental Engineer (P&D)
Joint Chief Environmental Engineer (Tech)
Joint Chief Environmental Engineer (BMW)
Joint Chief Environmental Engineer (HWM)
Director (ETI)
Law Officer
Manager (P&A)
Manager (AWC)
Deputy Director (IA)
Deputy Director (LAB) - I
Deputy Director (LAB) - II
Manager (Lab)
Environmental Engineers (BMS)
Environmental Engineers (HWM)
Environmental Engineers (GIS)
Deputy Manager (Tech), and
Assistant Engineers in Head Office
PC to Chairperson and
PC to Member Secretary
BP File - 2 Nos
Stoke file, Spare copy
P2 in perosnnel branch and
File No.P&D I / 24358 / 97

~~21~~

ANNEXURE - I

RECOMMENDED DUST CONTAINMENT AND DUST SUPPRESSION SYSTEM BY NATIONAL PRODUCTIVITY COUNCIL

DUST CONTAINMENT SYSTEM

Dust containment system comprise of building enclosures over the major dust emission sources so as to contain the dust emission sources so as to contain the dust within the housing. Only rotary screen is considered for dust containment enclosures. It is not recommended to enclose the jaw crusher as frequent manual intervention and attention is required.

SALIENT FEATURES OF DUST CONTAINMENT SYSTEM

- Enclosures to be constructed of G.I. sheets (1.66 mm and 1.25 mm thick) and supported on angle structures so that it can withstand strong wind.
- Roof to be given a gradual slope / curvature so as to prevent accumulation of water.
- Material transfer point such as hopper bottom / product unloading conveyor to be covered suitably to prevent dust release into the atmosphere.
- Locations where complete enclosures are not possible such as openings in jaw crushers side and bottom, are to be covered suitably (GI sheets / rubber flap or any other material) to prevent dust release into the atmosphere.
- Telescopic chutes are to be provided at product unloading conveyor to prevent dust release into the atmosphere during free fall off material from height. These chutes can be adjusted in length according to size of the heap.
- Openings in the enclosures over shafter motor driver conveyor belts etc., are to be covered with rubber flaps (wherever possible) to prevent release of dust.
- Openings fitted with doors are to be provided for inspection and access in the enclosures.

DUST SUPPRESSION SYSTEM

Effective housing at location such as material transfer points cannot be constructed because of resultant obstruction to material flow. Since dust generation from these points are quite substantial, dust suppression system, comprising of spraying of fine water mist through special nozzles, should be carried out over the dust generation sources to suppress the dust cloud.

There are two types of water spray systems (a) water spray on the generated dust cloud and (b) water spray directly on the material. The quantity of water spray should be sufficient to suppress dust without affecting the quality of the product. Too much water spray on the material will wetten dust completely and result in zero emission but the wet material is difficult to screen and has not market acceptance.

A water pump is required to spray the water at a minimum pressure of 2 to 4 kg/cm². The water consumption depends on type of nozzle chosen for application.

The various application points are :

- At raw stones unloading site (optional)
- At feed point of raw stones into jaw crusher
- At discharge of the screened stone fractions from rotary screens into respective conveyor belief.
- Stone dust discharge from conveyor on stock pile (optional).

23

ANNEXURE - II

RECOMMENDATIONS IN NERRI'S FINAL REPORT ON "ASSESSMENT OF DUST EMISSION FROM STONE CRUSHING INDUSTRY" IN JUNE 1998

1. Periodical cleaning of water spray nozzles should be carried out to avoid choking.
2. Fine dust accumulated in the crushing area should be periodically cleaned and the dumps should be covered with tarpaulins to arrest erosion by wind.
3. The drop height of the processed material should be kept at a minimum during loading and unloading.
4. Conveyor chutes should be provided at the discharge points.
5. There should be bilane road system to approach the crushers.
6. The approach road should be properly laid with tar and concrete and should be sprayed with water. Similarly, the approach roads to individual crusher should be made in good condition and watered.
7. Within the crusher, a minimum distance of 20 metres should be made for roads.
8. The green belt will restrict the spread of particulate matter and trees should be evergreen high foliage type like neem, tamarind, gold mohar, fire of the forest and any other local varieties are recommended. Cash crops like cashewnut, mango, lemon and sapota may be encouraged to get back financial benefits.
9. If two or more crushers are located within 100 metres, they may be considered to have a common green belt if they are border cases. The graph prepared from NEERI Reports if furnished in Annexure - III to fix the distance and green belt for any number of crushers in a cluster, limited to a maximum of 50 (Ex. For 5 crushers in a cluster, total area 100 m, green belt 20 m).
10. Ornamental trees like Asoka along the roads on both sides leading to crushing area should be encouraged to improve the aesthetics of the working environment.
11. As an occupational safety, all the workers should be provided with nose masks.

not be
dust
system,
uld be

on the
ntity of
ality of
pletely
has not

ure or 2
sen for

screens





Copy of :-

TAMIL NADU POLLUTION CONTROL BOARD
76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

TAMILNADU POLLUTION CONTROL BOARD - NORMS FOR THE LOCATION OF STONE CRUSHING INDUSTRIES IN VIEW OF THE ORDERS OF THE APPELLATE AUTHORITY CONSTITUTED UNDER WATER/AIR ACTS - REPLACING THE CLASS UNDER ITEM 2.1 OF B.P.M.S.NO.4, DATED 2.7.2004 AS EDUCATIONAL INSTITUTION / AND OTHER PUBLIC OFFICES AND RELIGIOUS IMPORTANCE - ORDERS ISSUED.

B.P.Ms.No.55

DATED: 06.10.2005

READ:

1. B.P.Ms.No.142, dated 10.10.1986.
2. B.P.Ms.No.609, dated 09.12.2002.
3. B.P.Ms.No.48, dated 09.09.1998.
4. Board's Resolution No.204-1-25, dated 22.06.2004.
5. Board's Resolution No.212-1-4, dated 13.07.2005.

In the B.P.Ms.No.4, dated 02.07.2004, the Board approved the norms for the location of stone crushing industry in the light of the guidelines stipulated by Appellate Authority constituted under water and Air Acts. Among other things Board examined the matter in detail with reference to distance criteria, criteria for new/proposed stone crushing unit and air pollution control measures. It has been mentioned that no new/proposed stone crusher should be located within 500 metres from any National Highways or State Highways or inhabited site or places of Public & religious importance.

In view of the above position and also to remove the ambiguity in the norms already stipulated, the following clarification to B.P.Ms.No.4, dated 2.7.2004 is proposed to be issued.

It is informed that the clause under item No.2.1 in the said B.P. which envisages the importance on 'inhabited site' did not highlight the explicit explanation on 'places of public and religious importance'.

Hence, it is considered that a clarification on the issue required to be given and the matter placed before the Board for information as detailed below.

Places of Public & religious Educational importance	:	This shall include the existence of Institutions and other Public Offices.
---	---	--

SD

21

: 2 :

The above matter was placed before Board at its meeting held on 23.09.2005. The Board after careful examination vide resolution No.212-1-4 dated 23.09.2005 resolved to approve the replacing the clause under Item No.2.1 of B.P.Ms.No.4, dated 02.07.2004 as "no new / proposed stone crusher should be located within 500 meters from any National Highways or State Highways or inhabited site or educational institutions / and other public offices and places of religious importance".

Sd/-R. RAMACHANDRAN
Member Secretary, I/C

To

Joint Chief Environmental Engineer,
District Environmental Engineers and
Assistant Environmental Engineers in District Offices.

Copy to:

Additional Chief Environmental Engineer-I.
Additional Chief Environmental Engineer - II
Financial Adviser
Joint Chief Environmental Engineer (P&D)
Joint Chief Environmental Engineer (Tech).
Joint Chief Environmental Engineer (BMW)
Joint Chief Environmental Engineer (HWM)
Director (ETI)
Law Officer
Manager (P&A)
Manager (AWC)
Deputy Director (IA)
Deputy Director (LAB) -I,
Deputy Director (LAB)-II/
Manager (LAB)
Environmental Engineer (BMW),
Environmental Engineer (HWM),
Environmental Engineer (GIS),
Deputy Manager (Tech), and
Assistant Engineers in Head Office
P.C. to Chairperson, and
P.C. to Member Secretary.
B.P.File - 2 Nos.
Stock File,
Spare copy,
P2 in personnel Branch and
L File No.P&D-I/24358/97.

Sd/-
For Member Secretary



TAMIL NADU POLLUTION CONTROL BOARD

ABSTRACT

TNPCB - CATEGORISATION OF M-SAND UNITS AND TO EVOLVE GUIDELINES TOWARDS SITING OF M-SAND UNITS AND ON PROCESSING OF CONSENT APPLICATION PERTAINING TO M-SAND UNITS – ORDER ISSUED.

B.P. No. 26

Dated: 30.07.2018

Read: Board Resolution No. 274-1-18 Dated 26.07.2018

The Committee constituted by Chairman, Tamil Nadu Pollution Control Board, to study the M-sand manufacturing units and to arrive the guidelines for the M-sand manufacturing units, has given report along with certain recommendations. Based on the Committee report, Agenda was prepared and got approved.

Later, during the Review meeting on 17.07.2018 conducted by the Hon'ble Minister for Environment and Principal Secretary / Chairman (FAC), Tamil Nadu Pollution Control Board, the said subject was discussed.

Based on that, suggestions regarding distance criteria, type of crushing machinery, APC Measures and Effluent Treatment and Disposal were obtained from the field officers.

With the inputs given by the field officials, the subject was discussed with the Head of the Departments of Corporate office and subsequently the following recommendations were arrived.

Recommendations For M-Sand Units

- 1) All M-sand units can be established either as an extended facility of existing stone crusher or newly establishing as an integrated facility of stone crusher or stand alone M-sand units.

29

- 2) Based on pollution index **M-sand units** with or without stone crushers shall be treated as "**Orange**" category.
- 3) Existing stone crushers, manufacturing M-sand within the consented quantity shall not be treated as expansion activities. Due to process modification, these units shall apply and obtain fresh consents of Board under Water and Air Acts to include M-sand as one of the products in the consent.
- 4) All consented stand alone M-sand units shall be verified and ensured to carry out its activities only with vertical shaft impactor (VSI) crusher machine. No primary crusher like jaw crusher, secondary crusher and cone crusher shall exist in the consented premises.
- 5) As in PWD circulars dated 30.08.2012, 14.09.2017 etc on the instructions to M-sand units inter alia, the following shall be complied.
 - Vertical shaft impactor (VSI) crusher is the best machine for making M-sand and this type of machinery alone should be permitted.
 - Crushed stone (M-sand) should comply with all provisions in the BIS codes.
 - Product approval certificate from PWD assessment committee.
 - Quality test report from the Government laboratories such as National Test House or MSME Laboratories and Laboratories of Government Academic Institutions such as IIT, IIT Incubator Laboratories, Anna University, etc., are to be obtained to fulfill notified BIS-standards.
- 6) As there is a practice of producing M-Sand by washing the stone dust generated from stone crushers, which will not satisfy the quality criteria prescribed by PWD for M-Sand, such units should not be allowed to set up.



TAMIL NADU POLLUTION CONTROL BOARD

- 7) All existing consented M-sand units operating with Horizontal shaft impactor (HIS) crushers shall change over to vertical shaft impactor (VSI) crusher machine by 31.12.2018.
- 8) M-sand units shall have adequate land area within the premises for storage of waste sediments till disposal for beneficial use.
- 9) M-sand units shall ensure complete recycling of wastewater generated.
- 10) All M-Sand units with the vertical shaft impactor (VSI) and vibratory screen shall be provided with adequate dust suction and collection arrangement with closed storage for the stone dust collection.
- 11) Siting criteria for M-Sand Units:

A. Distance Criteria:

I. **Stand alone M-Sand Units**

- a) The boundary of the Stand alone M-Sand units, shall be located at 300metres away from the approved habitations.
- b) Stand alone M-Sand Units shall be located 100 metres away from the boundary of NH/SH.
- c) There will be no distance criteria between the standalone M-sand units

II. **Stand alone M-Sand Units located within Stone crushers shall adopt the Criteria under B.P.Ms.No.4, dt. 02.07.2004 and the B.P.Ms.No.55, dt. 06.10.2005,**

31

B. Air Pollution Control Measures:

Air pollution control measures for M-sand units with or without stone crushers shall be as below:

I. Recommended Dust Containment And Dust Suppression System**a) Dust Containment System:**

Dust containment system comprises of building enclosures over the major dust emission sources such as crusher and sieve so as to contain the dust emission within the housing.

Salient Features of Dust Containment System:

- Enclosures to be constructed of G.I sheets (1.66 mm and 1.25 mm thick) and supported on angle structures so that it can with stand strong wind.
- Roof to be given a gradual slope / curvature so as to prevent accumulation of water. Material transfer point such as hopper bottom / product unloading conveyor to be covered suitably to prevent dust release into the atmosphere.
- Locations where complete enclosures are not possible such as openings in vertical shaft impactor (VSI) side and bottom, are to be covered suitably (GI sheets / rubber flap or any other material) to prevent dust release into the atmosphere.
- Openings fitted with doors are to be provided for inspection and access in the enclosures.

b) Dust Suppression System:

Since dust generation from transfer points are quite substantial, dust suppression system, comprising of spraying of fine water mist through special nozzles, should be carried out over the dust generation sources to suppress the dust cloud.



TAMIL NADU POLLUTION CONTROL BOARD

c) Construction of Compound Wall:

All M-Sand units shall construct Compound wall to a height of 10 feet all around its boundary and shall erect wind net/metal sheet of 5 feet height to prevent dust carryover to the nearby areas.

d) Green Belt:

Green belt of 5 meter width shall be provided all around the inner periphery of the unit premises.

II. General Conditions:

1. Periodical cleaning of water spray nozzles should be carried out to avoid choking.
2. Fine dust accumulated in the unit should be periodically cleaned and the dumps should be covered with tarpaulins to arrest erosion by wind.
3. The drop height of the processed material should be kept at a minimum during loading and unloading.
4. Conveyor chutes should be provided at the discharge points.
5. There should be bilane road system to approach the crusher.
6. The approach road should be properly laid with tar and concrete and should be sprayed with water. Similarly, the approach roads to individual crusher should be made in good condition and watered.
7. Within the unit, a minimum distance of 20 metres should be made for roads.
8. The green belt will restrict the spread of particulate matter and trees should be evergreen high foliage type like neem, tamarind, gold mohar, fire of the forest and any other local varieties are recommended.
9. Ornamental trees like Asoka along the roads on both sides leading to crushing area should be encouraged to improve the aesthetics of the working environment.

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141

Fax : 044-22353068

Email : tnpqb@md3.vsnl.net.in Web : www.tnpqb.gov.in

33

10. As an occupational safety, all the workers should be provided with personal protective equipments.

With the above recommendations the subject was placed before the Board at its 274th Board meeting held on 25.07.2018 and the Board vide item no.274-1-18 resolved to approve the proposal regarding categorization of M-Sand units, recommendations for M-Sand units, distance criteria, Air Pollution Control measures, dust containment and dust suppression system and general conditions as stipulated in the agenda for strict implementation.

Sd/-xxxxx
D. Sekar
Member Secretary

R. J. H.
30/7/18
For Member Secretary

M
30/7

To

1. Joint Chief Environmental Engineer (P&D) – For Necessary action.
2. All Joint Chief Environmental Engineers (Monitoring)
3. All District Environmental Engineers

Copy to

1. Sr. PA to Chairman
2. PA to Member Secretary
3. BMS
4. File
5. Spare



47
34

TAMIL NADU POLLUTION CONTROL BOARD

Proceeding No. TNPCB/O&G/F, 4792/2019/Stone Crusher/dated 07.3.2019

- Sub: TNPCB – Industries – Stone Crusher Units – Re-examining the distance criteria for existing and new stone crushers – Committee constituted - orders issued – Reg.
- Ref: 1. B.P. Ms. No. 4 dated 02.07.2004
2. B.P. Ms. No. 55 dated 06.10.2005
3. B.P. No. 26 dated 30.07.2018
4. B.P. No. 08 dated 05.03.2019.

The Board vide B.P. Ms. No. 4 dated 02.07.2004 (read with B.P. Ms. No. 55 dated 06.10.2005), has issued norms for the location of stone crushing industries. The highlights of the norms for New / Proposed Stone Crushing units are as follows:

- i). No new / proposed stone crushers should be located within 500 metres from any National Highways or State Highways or inhabited site or places of public and religious importance.
- ii). The minimum distance between new / proposed stone crushers should be 1 KM to avoid dust pollution influence of one over the other.
- iii). Green Belt Development: The stone crushing units shall provide adequate green belt cover around the periphery as suggested by the Board depending on site and meteorological conditions.
- iv). The stone crushing units should provide dust containment and dust suppression systems suggested by NPC.

River sand is the essential material for the construction activities. Extensive use of river sand as fine aggregate in the construction works results in scarcity of river sand. Further, indiscriminate mining of sand affects the river eco system and lowers the ground water table. Therefore, the Government is now encouraging the use of M-Sand in construction in place of river sand. M-sand is manufactured by crushing of blue metal jellies either in stone crushers along with blue metal jellies or in standalone M- Sand units. In order to regulate the activities of M- Sand units, the Board vide B.P. No. 26 dated 30.07.2018 has issued guidelines for M-Sand units.

Stone Crushers Associations have made representation to the Hon'ble Minister for Environment that the norms for maintaining 1 KM distance from crusher to crusher shall be waived off so that the existing crushers can go for expansion to manufacture M-Sand in addition to the existing consented production of blue metal jellies and new crushers can be permitted so as meet the demand for supply of blue metal and M-sand for construction activities. Further, they stated that all the existing stone crushers are functioning with full fledged Air Pollution Control measures as suggested by the NPC:

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141

Fax : 044-22353068

Email : tnpcb@md3.vsnl.net.in www.tnpcb.gov.in

35

- 48 -



TAMIL NADU POLLUTION CONTROL BOARD

In order to sort out the issue, a meeting was convened by the Hon'ble Minister for Environment with the Principal Secretary to Government, Environment & Forests Department & Chairman, TNPCB, and Member Secretary, TNPCB. After detailed discussion, it was decided to re-examine the 1 KM distance criteria mentioned in the B.P Ms No. 4 dated 02.07.2004 in view of the latest development in pollution control technologies, the present demand for construction materials and difficulties faced by the entrepreneurs to find suitable site.

In this regard, a proposal was placed before the Board. The Board vide circulation No. BM/CA/04/2019, dated 01.03.2019 has resolved to approve the proposal and to issue guidelines for the existing consented stone crushing units. Accordingly B.P. No. 8 dated 05.03.2019 was issued with the following guidelines for the existing consented stone crushing units

1. The existing consented stone crushing units shall be permitted to increase their production along with or without M-sand production unit, such units shall comply with all the norms as prescribed in B.P. Ms. No. 4 dated 02.07.2004 (read with B.P. Ms. No. 55 dated 06.10.2005) except 1 KM distance criteria from crusher to crusher.
2. The stone crushing units shall meet Ambient Air Quality standards at all times. The suspended particulate matter contribution value at a distance of 40 metres from a controlled isolated as well as from a unit located in a cluster should be less than 600mg/Nm³.
3. The Standalone M-Sand units (within / outside stone crushing unit) shall comply with all the norms as prescribed in B.P. No. 26 dated 30.07.2018 except the distance criteria as prescribed under A-II of said B.P.
4. The stone crushing units & M-Sand units shall not store raw materials & products more than one month capacity and all the open storage should be properly covered with Tarpaulin to avoid dust emanation due to wind action.

The Board has also approved the proposal to re-examine the 1 KM distance criteria for the new stone crushers by conducting a study through a reputed institution like NEERI.

The above subject matter was again discussed in the meeting held with Hon'ble Minister for Environment at TNPCB Head Office on 6.3.2019. In the meeting it was discussed that the stone crushing units are now adopting latest technologies for dust suppression. In view of the establishment of M-Sand unit as integral part of stone crushing unit, they adopt spraying of fine water mist through special nozzles which suppress the particulate matter emission effectively. In view of the above, it was decided to re-examine the 500 metre distance criteria fixed for the stone crushers from Habitations, NH (or) SH through a detailed study. It is decided to form a Committee for the study.

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141

Fax : 044-22353068

Email : tnpcb@md3.vsnl.net.in www.tnpcb.gov.in



TAMIL NADU POLLUTION CONTROL BOARD

In view of the above, a Committee with the following officers hereby constituted to carryout the study with above objective and submit a report.

Thiruvallargal

- 1 R.Vijayabaskaran, JCEE
- 2 G.Ramaraj, DEE, Sriperumpudur – Convenor of the Committee
- 3 A.Shanmugam, DEE, Tiruppur (South)
- 4 Dr M.Senthil Kumar, DEE, Thiruvannamalai
- 5 Dr R.Sivacoumar,
Senior Principal Scientist, CSIR-NEERI, Chennai
- 6 Dr D.Srinivasalu,
Deputy Director, NPC, Chennai.

Terms of Reference for Committee

1. The Committee shall study the performance of existing stone crushers (cluster and isolated) with M-sand unit and without M-sand unit.
2. The study shall focus on the air pollution control measures, dust suppression systems, green belt development, dust influence to the nearby habitations, National/State Highways etc.,
3. The Committee shall furnish its recommendation on the minimum distance criteria to be maintained between crusher to crusher, NH and SH, Habitations for the existing stone crushers and for the proposed stone crushers..
4. The Committee shall suggest pollution control measures to be adopted by the units.
5. The Committee can engage the service of TNPCB laboratories for carrying out AAQ survey.
6. The Committee shall furnish its report within 10 days.

Members under Sl. (5) and (6) are eligible for TA&DA and sitting fee as per the Government norms.

The receipt of this proceeding shall be acknowledged.

R. Vijayabaskaran
7/3/2019
For Chairman

To

All the Committee Members.

Copy to

ACEEs, TNPCB

JCEE (M), TNPCB, Chennai, Salem, Coimbatore.

PS to Chairman & PA to Member Secretary

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

Tel : 22353134, 22353135, 22353138, 22353137, 22353138, 22353139, 22353140, 22353141

Fax : 044-22353068

Email : tnpqb@md3.vsnl.net.in www.tnpqb.gov.in

Handwritten marks or scribbles at the top right of the page.

Faint, illegible text covering the majority of the page, likely bleed-through from the reverse side.





TAMIL NADU POLLUTION CONTROL BOARD

ABSTRACT

TNPCB - Relaxing 1 KM distance criteria for the existing and new stone crushers in the state of Tamil Nadu – Orders issued – Reg.

B.P. No. 21

Dated 31.07.2019

- Read:
1. B.P. Ms. No. 4 dated 02.07.2004
 2. B.P. Ms. No. 55 dated 06.10.2005
 3. B.P. No. 26 dated 30.07.2018
 4. B.P. No. 8 dated 05.03.2019
 5. Board Resolution No. 277-1-7, dated 24.4.2019
 6. Board Resolution No. 278-1-6, dated 22.7.2019

The Tamil Nadu Pollution Control Board vide B.P. Ms. No. 4 dated 02.07.2004 (read with B.P. Ms. No. 55 dated 06.10.2005), has issued norms for the location of stone crushing industries. The highlights of the norms for New / Proposed Stone Crushing units are as follows:

- No new / proposed stone crushers should be located within 500 metres from any National Highways or State Highways or inhabited site or places of public and religious importance.
- The minimum distance between new / proposed stone crushers should be 1 KM to avoid dust pollution influence of one over the other.
- Green Belt Development: The stone crushing units shall provide adequate green belt cover around the periphery as suggested by the Board depending on site and meteorological conditions.
- The stone crushing units should provide dust containment and dust suppression systems suggested by National Productivity Council and should also adhere to the recommendations furnished in the NEERI report.

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141

Fax : 044-22353068

Email : tnpcb@md3.vsnl.net.in Web : www.tnpcb.gov.in



TAMIL NADU POLLUTION CONTROL BOARD

River sand is the essential material for the construction activities. Extensive use of river sand as fine aggregate in the construction works results in scarcity of river sand. Further, indiscriminate mining of sand affects the river eco system and lowers the ground water table. Therefore, the Government is now encouraging the use of M-Sand in construction in place of river sand. M-sand is manufactured by crushing of blue metal jellies either in stone crushers as an extended facility or in standalone M- Sand units. In order to regulate the activities of M- Sand units, the Board vide B.P. No. 26 dated 30.07.2018 has issued guidelines for M-Sand units.

Stone Crushers Associations have made representation to the Hon'ble Minister for Environment that the norms for maintaining 1 KM distance from crusher to crusher shall be waived off so that the existing crushers can go for expansion to manufacture M-Sand in addition to the existing consented production of blue metal jellies and new crushers can be permitted so as to meet the demand for supply of blue metal and M-sand for construction activities.

In order to sort out the issue, a meeting was convened by the Hon'ble Minister for Environment with the Principal Secretary to Government, Environment & Forests Department & Chairman, TNPCB, and Member Secretary, TNPCB. After detailed discussion, it was decided to re-examine the 1 KM distance criteria mentioned in the B.P Ms No. 4 dated 02.07.2004 in view of the latest development in pollution control technologies, the present demand for construction materials and difficulties faced by the entrepreneurs to find suitable site.

In this regard, a proposal was placed before the Board. The Board vide circulation No. BM/CA/04/2019, dated 01.03.2019 has resolved to approve the proposal and to issue guidelines for the existing consented stone crushing units. Accordingly B.P. No. 8 dated 05.03.2019 was issued by the Board by issuing following guidelines for the existing consented stone crushing units:



TAMIL NADU POLLUTION CONTROL BOARD

- The existing consented stone crushing units shall be permitted to increase their production along with or without M-sand production unit, such units shall comply with all the norms as prescribed in B.P. Ms. No. 4 dated 02.07.2004 (read with B.P. Ms. No. 55 dated 06.10.2005) except 1 KM distance criteria from crusher to crusher.
- The stone crushing units shall meet Ambient Air Quality standards at all times. The suspended particulate matter (measured between three metres and ten metres from any processes equipment of stone crushing unit shall not exceed 600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than $600\mu\text{g}/\text{m}^3$.
- The Standalone M-Sand units (within / outside stone crushing unit) shall comply with all the norms as prescribed in B.P. No. 26 dated 30.07.2018 except the distance criteria as prescribed under A-II of said B.P.
- The stone crushing units & M-Sand units shall not store raw materials & products of more than one month capacity and all the open storage should be properly covered with Tarpaulin to avoid dust emanation due to wind action.

The Board has also approved the proposal to re-examine the 1 KM distance criteria for the new stone crushers by conducting a study through a reputed institution like NEERI.

The above subject matter was again discussed in the meeting held with Hon'ble Minister for Environment at TNPCB Head Office on 6.3.2019. In the meeting it was discussed that the stone crushing units are now adopting latest technologies for dust suppression. In view of the establishment of M-Sand unit as integral part of stone crushing unit, they adopt spraying of fine water mist through special nozzles which suppress the particulate matter emission. In view of the above, it was decided to re-examine the 500 metre distance criteria fixed for the stone crushers from Habitations, NH (or) SH through a detailed study.

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141

Fax : 044-22353068

Email : tnpceb@md3.vsnl.net.in Web : www.tnpceb.gov.in



TAMIL NADU POLLUTION CONTROL BOARD

Considering the above, the Board vide proceeding No. TNPCB/O&G/F. 4792/2019/Stone Crusher/dated 07.03.2019 has constituted a technical expert Committee comprising of officers from TNPCB, NEERI and NPC. The Terms of Reference for Committee is as follows:

- The Committee shall study the performance of existing stone crushers (cluster and isolated) with M-sand unit and without M-sand unit.
- The study shall focus on the air pollution control measures, dust suppression systems, green belt development, dust influence to the nearby habitations, National/State Highways.
- The Committee shall furnish its recommendation on the minimum distance criteria to be maintained between crusher to crusher, NH and SH, Habitations for the existing stone crushers and for the proposed stone crushers.
- The Committee shall suggest pollution control measures to be adopted by the units.
- The Committee can engage the service of TNPCB laboratories for carrying out AAQ survey.
- The Committee shall furnish its report with 10 days.

Committee Report

The committee has carried out a detailed study in the existing stone crushers on air pollution control measures provided and the ambient air quality in the vicinity of the crushers. AAQ survey was conducted in single stone crusher and cluster of stone crushers located in Kancheepuram, Tiruppur, Thiruvannamalai and Madurai districts. The committee has also gone through the guidelines issued by other SPCBs. After detailed study, the Committee has given the following recommendations.

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141

Fax : 044-22353068

Email : tnpcb@md3.vsnl.net.in Web : www.tnpcb.gov.in



TAMIL NADU POLLUTION CONTROL BOARD

- The minimum distance of 1 KM between New / Proposed crushers as prescribed in the B.P. Ms No.4 dated 02.07.2004 may be dispensed with.
- The stone crushing units shall meet Ambient Air Quality standards at all times. The suspended particulate matter (measured between three metres and ten metres from any processes equipment of stone crushing unit shall not exceed 600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than $600\mu\text{g}/\text{m}^3$.
- The crushers may be encouraged to establish nearby quarry site so as to avoid transportation and to reduce air pollution.
- All the existing and the new crushers shall provide air pollution control measures as suggested by National Productivity Council, NEERI and Board circular as mentioned in this report.
- A detailed scientific study may be taken-up again through a reputed technical institution like NEERI. Based on the detailed study the minimum distance to be maintained from inhabited site, National Highway, State Highway, Places of public and religious importance may be decided. Until such time, the existing distance norms (500 metres from NH and SH, Habitations) as prescribed in B.P. Ms No.4 dated 02.07.2004 may be continued.

The Committee report was placed before the Board in the meeting held on 24.4.2019. The Board vide resolution No. 277-1-7 has stated that *'The Board has gone through the Committee Report and had a detailed discussion. The Board has observed that dispensing of the minimum distance of 1 KM between New / Proposed stone crushers may lead to mushrooming of crushers which will have dust pollution influence of one over the other and may have impact on the surrounding environment. At the same time, the supply of blue metal is also to be ensured for the development of construction industry. Hence the Board has instructed to conduct a*

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141

Fax : 044-22353068

Email : tnpcb@md3.vsnl.net.in Web : www.tnpcb.gov.in



TAMIL NADU POLLUTION CONTROL BOARD

further detailed study to identify the notified areas and furnish a report so as to examine the relaxing of distance criteria of 1 KM from crusher to crusher of those notified areas only”.

In this connection, the Board vide letter dated 3.5.2019, has addressed CSIR-NEERI, Taramani to furnish proposal to take-up the detailed scientific study and give its recommendations on the distance criteria and dust control measures to be provided by the stone crushers. The CSIR-NEERI vide letter dated 29.5.2019, has submitted a proposal to carry out a detailed study with project duration of 6 months.

In the meantime, meeting was convened by the Hon'ble Minister for Environment with the Member Secretary. In the meeting it was instructed that a decision should be taken at the earliest on the 1 KM distance criteria so as to permit the new stone crushers to meet the M-sand demand for the construction projects in the State. In view of the above the following are submitted.

The subject was discussed with the Senior Officers of the Board on 28.5.2019. TNPCB has no power to notify the areas for establishing the stone crushers. The notification of land use shall be done by the competent authority (i.e) CMDA and Director of Town and Country Planning. With respect to relaxing the 1 KM distance from crusher to crusher, it is opined that the MoEF&CC, Gol has prescribed standards for the stone crushers in the Environment (Protection) Rules, 1986, as follows:

For control of suspended Particulate Matter – The standards consists of two parts:

- i. Implementation of the following pollution control measures:
 - a) Dust containment cum suppression system for the equipment.
 - b) Construction of wind breaking walls.
 - c) Construction of the metalled roads within the premises.
 - d) Regular cleaning and wetting of the ground within the premises.
 - e) Growing of a green belt along the periphery.

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141

Fax : 044-22353068

Email : tnpceb@md3.vsnl.net.in Web : www.tnpceb.gov.in



TAMIL NADU POLLUTION CONTROL BOARD

ii. Quantitative standard for the SPM

The suspended particulate matter (measured between three metres and ten metres from any process equipment of stone crushing unit shall not exceed 600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than 600 microgram per cubic meter.

When the units meet the standard of suspended particulate matter 600 µg/m³ in the ambient air at 10 metres from the process equipment, there will not be dust pollution influence of one over the other. To meet the above standards, the stone crushers shall provide adequate air pollution control measures.

Further, as per the existing guidelines, no new/proposed stone crushers should be located within 500 metres from any National Highways or State Highways or inhabited site or places of public and religious importance.

Therefore, considering the M-sand demand for which new stone crushers are to be allowed, and at the same time without compromising the environmental quality, the distance criteria of keeping minimum 1 KM distance between new/proposed stone may be dispensed.

In view of the above the following proposal is submitted to the Board for consideration.

1. The minimum distance of 1 KM between New / Proposed crushers as prescribed in the B.P. Ms No.4 dated 02.07.2004 may be dispensed with. This relaxation is also applicable to the existing stone crushers and the M-Sand units.
2. The stone crushing units shall meet Ambient Air Quality standards at all times. The suspended particulate matter (measured between three metres and ten metres from any process equipment of stone crushing unit shall not exceed

44



8

TAMIL NADU POLLUTION CONTROL BOARD

600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than $600\mu\text{g}/\text{m}^3$.

3. The crushers may be encouraged to establish nearby quarry site so as to avoid transportation and to reduce air pollution.
4. All the existing and the new crushers shall provide air pollution control measures as suggested by National Productivity Council, NEERI and Board circular as mentioned below:

Recommendation given by National Productivity Council

- Dust containment system comprises of building enclosures over the major dust emission sources so as to contain the dust within the housing.
- Enclosures to be constructed of G.I. sheets (1.66 mm and 1.25 mm thick) and supported on angle structures so that it can withstand strong wind.
- Wherever there is a persistent of wind speed is blowing in particular direction or high wind speed in a particular sector/directions construction wind breaking wall or net in such a way that it will bring down wind speed by 90%.
- Roof to be given a gradual slope / curvature so as to prevent accumulation of water.
- Material transfer point such as hopper bottom / product unloading conveyor to be covered suitably to prevent dust release into the atmosphere.
- Locations where complete enclosures are not possible such as openings in jaw crushers side and bottom, are to be covered suitably (GI sheets / rubber flap or any other material) to prevent dust release into the atmosphere.
- Telescopic chutes are to be provided at product unloading conveyor to prevent dust release into the atmosphere during free fall off material from height. These chutes can be adjusted in length according to size of the heap.

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141

Fax : 044-22353068

Email : tnpcb@md3.vsnl.net.in Web : www.tnpcb.gov.in



TAMIL NADU POLLUTION CONTROL BOARD

- Openings in the enclosures over shafter, motor driver, conveyor belts etc., are to be covered with rubber flaps (wherever possible) to prevent release of dust.
- Openings fitted with doors are to be provided for inspection and access in the enclosures
- Paving of all the roads inside the crushing units and transport areas to avoid re-entrainment of dust into the atmosphere
- All fine dust other than aggregates need to be collected below the ground level or completely covered to avoid blow away of fine dust which suspends in air for longer time and behaves like gas.
- Dust generation from material transfer points is quite substantial. Therefore dust suppression system shall be provided in these points. Dust suppression system, comprising of spraying of fine water mist through special nozzles. It should be carried out over the dust generation sources to suppress the dust cloud.

Recommendations given by NEERI

- Periodical cleaning of water spray nozzles should be carried out to avoid choking.
- Fine dust accumulated in the crushing area should be periodically cleaned and the dumps should be covered with tarpaulins to arrest erosion by wind.
- The drop height of the processed material should be kept at a minimum during loading and unloading.
- Conveyor chutes should be provided at the discharge points.
- There should be bilane road system to approach the crushers.



TAMIL NADU POLLUTION CONTROL BOARD

- The approach road should be properly laid with tar and concrete and should be sprayed with water. Similarly, the approach roads to individual crusher should be made in good condition and watered.
- Within the crusher, a minimum distance of 20 metres should be made for roads.
- The green belt will restrict the spread of particulate matter and trees should be evergreen high foliage type like neem, tamarind, gold-mohar, fire of the forest and any other local varieties are recommended. Cash crops like cashewnut, mango, lemon and sapota may be encouraged to get back financial benefits.
- Ornamental trees like Asoka along the roads on both sides leading to crushing area should be encouraged to improve the aesthetics of the working environment.
- As an occupational safety, all the workers should be provided with nose masks.

TNPCB's circular Memo No. T16/TNPCB/13086/2008/ Orange, dated 22.4.2008

- All the stone crushing units shall provide enclosures to the primary, secondary crushers. The entire conveyor belt shall be covered with GI sheet. Telescopic chute is to be provided at the product unloading conveyor so as to adjust the length according to size of heap.
- Water sprinkler arrangement at appropriate transfer points shall be provided.
- All the units shall provide compound wall / wind net arrestor of 20 feet height all around the unit premises.
- Green belt of evergreen high foliage type like neem, tamarind, and gold-mohar shall be developed within and outside the boundary of the unit.

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141

Fax : 044-22353068

Email : tnpceb@md3.vsnl.net.in Web : www.tnpcb.gov.in



TAMIL NADU POLLUTION CONTROL BOARD

5. With respect to 500 metre distance to be maintained from any National Highways or State Highways or inhabited site or places of public and religious importance, a detailed scientific study shall be taken-up through a reputed technical institution like NEERI. Based on the detailed study, the minimum distance to be maintained from inhabited site, National Highway, State Highway, Places of public and religious importance shall be decided. Until such time, the existing distance norms 500 metres as prescribed in B.P. Ms No.4 dated 02.07.2004 shall be continued.

The above proposal was placed before the Board in the meeting held on 22.7.2019. The Board vide Resolution No. 278-1-6 dt. 22.7.2019, resolved to approve the proposal of relaxing 1 KM distance criteria for the existing and new stone crushers in the state of Tamil Nadu as follows:

1. The minimum distance of 1 KM between New / Proposed crushers as prescribed in the B.P. Ms No.4 dated 02.07.2004 is dispensed off. This relaxation is also applicable to the existing stone crushers and the M-Sand units.
2. The stone crushing units shall meet Ambient Air Quality standards at all times. The suspended particulate matter (measured between three metres and ten metres from any process equipment of stone crushing unit shall not exceed 600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than $600\mu\text{g}/\text{m}^3$.
3. The crushers may be encouraged to establish nearby quarry site so as to avoid transportation and to reduce air pollution.
4. All the existing and the new crushers shall provide air pollution control measures as suggested by National Productivity Council, NEERI and Board circular dated 22.4.2008.

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141

Fax : 044-22353068

Email : tnpcb@md3.vsnl.net.in Web : www.tnpcb.gov.in



12

TAMIL NADU POLLUTION CONTROL BOARD

5. The stone crushing units & M-Sand units shall not store raw materials & products more than one month capacity and all the open storage should be properly covered with Tarpaulin to avoid dust emanation due to wind action.
6. No new / proposed stone crushers should be located within 500 metre from any National Highways or State Highways or inhabited site or educational institutions / and other public offices and places of religious importance.

The Board will review the performance of installation and operation of air pollution control measures and the compliance of standards by the stone crushing units after one year.

Sd/- dt. 31.7.2019
D.Sekar
Member Secretary

To

All JCEEs (Monitoring), TNPCB
All DEEs, TNPCB.

Copy to

ACEE, TNPCB, Chennai-32.
All JCEEs, TNPCB, Chennai-32
All EEs, AEs & AEs, TNPCB, Chennai-32
BMS Section
Legal Section
PS to Chairman & Member Secretary

AS
31.7.19
For Member Secretary

2.6.
31.7.19

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141

Fax : 044-22353068

Email : tnpceb@md3.vsnl.net.in Web : www.tnpceb.gov.in

13
121
11
11

1

IN THE HIGH COURT OF JUDICATURE AT MADRAS
(Special Original Jurisdiction)

W.P. No. 26786 of 2019

E.V. Sampath,
S/o. Varadhan,
No. 1/113, Bajanai Kovil Street,
Erumaiyur,
Chennai - 600 044.
Petitioner

Vs.

Tamil Nadu Pollution Control Board,
Rep. by its Member Secretary,
76, Mount Salai,
Guindy, Chennai - 600 032.

... Respondent

AFFIDAVIT OF THE PETITIONER

I, E.V. Sampath, Son of Varadhan, Hindu, aged about 60 years residing at No. 1/113, Bajanai Kovil Street, Erumaiyur, Chennai - 600 044, do hereby solemnly affirm and sincerely state as follows :

1. I am the petitioner herein and as such am well acquainted with the facts of the case.
2. I state that the present writ petition is filed in Public Interest. I have no personal interest in the litigation and the petition is not guided by self-gain or gain of any other institution/ body and that there is no oblique motive other than of public interest in filing this writ petition. I state that no other Public Interest Litigation seeking the same relief has been filed to my knowledge. I state that I am willing to pay costs, if any imposed by this Hon'ble Court. I have filed the present affidavit from my personal knowledge and from the documents that I have acquainted myself with. I state that I own agricultural land bearing in S.F. No.418/1 in pazhandalam village, which is adjacent to Erumaiyur Village. My annual income is Rs.3 lakhs. I submit that my Aadhaar number is 40142961781 and my PAN is DECPS66832.
3. I submit that I am filing this writ petition seeking a Writ in the nature of Certiorari to call for the records of the respondent relating to B.P. No. 21 dated 31.07.2019, and quash the same with respect to clause

50

2

No. 1 in the said records which states that the "minimum distance of 1 km between new / proposed crushers as prescribed in the B.P. Ms. No. 4 dated 2.7.2004 is dispensed off and this relaxation is also applicable to the existing stone crushers and the M. sand units."

4. The present writ petition arises in the following circumstances. I submit that originally, the respondent Board in its board proceeding bearing B.P.Ms.No.609 dated 09.12.1992 adopted the following norms for the location of new stone crushing units in our State:

"1. No stone crushing units should be located within 500 M from any NH or SH or Primary residential area or mixed residential area or places of public and religious importance.

2. The minimum distance between two stone crushers should be 1 K.M to avoid dust pollutional influence of one over the other."

5. I submit that subsequently, the respondent Board issued certain conditions vide B.P.Ms.No.48 dated 09.09.1998. In the said proceedings B.P.Ms.No.48 dated 09.09.1998, there is no reference about waiving the said minimum distance between two stone crushers as 1 km to avoid dust pollution influence of one over the other. Meanwhile, National Environmental Engineering Research Institute (herein referred to as NEERI), Nagpur was entrusted with the study to assess the performance of air pollution control measures provided by the stone crushing units, to assess the dust emission from the industry and to arrive at the optimum distance from the National / State Highways and from the residential areas. NEERI conducted the study during September and October 1997 and April and May 1998 and submitted a report with recommendations.

6. Thereafter, the respondent Board laid down new norms for the location of stone crushing industries in the State vide B.P.Ms.No.4 dated 02.07.2004. The respondent Board fixed the norm under clause 2.1 that no new / proposed stone crusher should be located within 500 meters from any National highways or State highways or 'inhabited site' or places of public and religious importance. The criteria for new/ proposed stone crushing units in respect of the distance between new and proposed stone crusher is entailed in clause No. 2.2 that reads as follows :

3

"2.2 The minimum distance between new / proposed stone crushers should be 1 km to avoid dust polluttional influence of one over the other".

7. I state that for the purpose of including the educational institutions and other public offices and places of religious of importance within the ambit of the above clause, the respondent Board issued board proceedings bearing B.P.Ms.No.55 dated 06.10.2005 replaced and amended clause 2.1 in B.P.Ms.No.4 dated 02.07.2004. As the said clause envisaged the importance on 'inhabited site' but did not highlight the explicit explanation on 'places of public and religious importance', the respondent clarified and issued the new norm under clause 2.1 that now reads:

"no new / proposed stone crusher should be located within 500 meters from any National Highways or State Highways or inhabited site or educational institutions / and other public offices and places of religious importance".

8. I submit that clause 2.1 providing that no new / proposed stone crusher should be located within 500 meters from any National Highways or State Highways or inhabited site or educational institutions / and other public offices and places of religious importance and clause No.2.2 providing that the minimum distance between new / proposed stone crushers should be 1 km to avoid dust polluttional influence of one over the other under B.P. Ms. No. 4 dated 02.07.2004 were being followed by the respondent Board all along.
9. I state that to my shock and surprise, the respondent Board, without any valid reason, issued the impugned proceedings bearing B.P.No.21 dated 31.07.2019 dispensing with the minimum distance of 1 km between new / proposed crushers as prescribed in the B.P. Ms. No. 4 dated 2.7.2004. The reason for dispensing with the said distance criteria is totally arbitrary and illegal. It seems from the impugned B.P that Stone Crushers Associations have made representation to the Hon'ble Minister for Environment that the norms for maintaining 1 km distance from crusher to crusher shall be waived off so that the existing crushers can go for expansion to manufacture M.sand in addition to the existing consented production of blue metal jellies and new crushers can be permitted so as to meet

52

4

the demand for supply of blue metal and M.sand for construction activities. In order to sort out the issue, a meeting was convened by the Hon'ble Minister for Environment with the Principal Secretary to Government, Environment and Forests Department and Chairman, TNPCB, and Member Secretary, TNPCB and after a discussion it was decided to re-examine the 1 km distance criteria mentioned in the B.P.Ms.No.4 dated 02.07.2004 in view of the latest development in pollution control technologies and the present demand for construction materials. In this regard a proposal was placed before the respondent Board. The respondent Board vide circulation No. BM/CA/04/2019, dated 01.03.2019 resolved to approve the proposal and to issue guidelines for the existing consented stone crushing units. Accordingly, B.P.No.8 dated 05.03.2019 was issued by the Board issuing guidelines mentioned therein for the existing consented stone crushing units and the respondent Board also approved the proposal to re-examine the 1 km distance criteria for the new stone crushers by conducting a study through a reputed institution like NEERI.

10. I submit that, it is understood from the impugned proceedings bearing B.P.No.21 dated 31.07.2019 that the matter was again discussed in the meeting held with Hon'ble Minister for Environment at TNPCB Head Office on 06.03.2019. In the meeting it was discussed that the stone crushing units are now adopting latest technologies for dust suppression. Also, In view of the establishment of M.sand unit as integral part of stone crushing units, they adopt spraying of fine water mist through special nozzles which suppresses the particulate matter emission and in view of the above, it was decided to re-examine the 500 meters distance criteria fixed for the stone crushers from Habitations, National Highways or State Highways through a detailed study. It seems that the respondent Board vide proceedings No. TNPCB/O&G/F, 4792/2019/Stone Crusher / dated 07.03.2019 had constituted a technical expert committee comprising of officers from TNPCB, NEERI and National Productivity Council (herein referred to as NPC) for their report/recommendations for the terms of reference mentioned therein. One of the references for the committee was that the committee shall furnish its recommendation

5

on the minimum distance criteria to be maintained between crusher to crusher, National Highway State Highway, habitations for the existing stone crushers and for the proposed stone crusher. The committee by its report appears to have recommended that the minimum distance of 1 km between new / proposed crushers as prescribed in the B.P.Ms.No.4 dated 02.07.2004 may be dispensed with. It is not known why the officers of the said committee recommended for dispensing with the said minimum distance of 1 km. The same committee report had also stated as mentioned in the impugned proceeding:

"A detailed scientific study may be taken-up again through a reputed technical institution like NEERI. Based on the detailed study the minimum distance to be maintained from inhabited site, National Highway, State Highway, Places of public and religious importance may be decided. Until such time, the existing distance norms (500 metres from NH and SH, Habitations) as prescribed in B.P.Ms.No.4 dated 2.7.2004 may be continued."

11. I state that it is very clear that NEERI and NPC did not conduct any study and only chosen officers from the above institutions who would submit a report to suit the Hon'ble Minister and vested interests. There is no reason for the said officers in their report (no reason given in the impugned B.P) for dispensing with the minimum distance of 1 km between new / proposed crushers as prescribed in the B.P.Ms.No.4 dated 02.07.2004.

12. I submit that the said report appears to have been placed before the respondent Board on 24.4.2019 and the respondent Board vide Resolution No. 277-1-7 has stated that the Board has gone through the said report and had a detailed discussion. The observation of the respondent Board, as contained in the impugned B.P., reads as below:

"The Board has gone through the committee report and had a detailed discussion. The Board has observed that dispensing of the minimum distance of 1 km between new / proposed stone crushers may lead to mushrooming of crushers which will have dust pollution influence of one over the other and may have impact on the surrounding environment. At the same time, the supply of blue metal is also to be ensured for the development of construction industry. Hence, the Board has instructed to conduct a

Page No. 5
Corms :

5A

6

further detailed study to identify the notified areas and furnish a report so as to examine the relaxing of distance criteria of 1 km from crusher to crusher of those notified areas only".

13. I submit that the respondent Board vide letter dated 03.05.2019 addressed CSIR-NEERI, Taramani to furnish a proposal to undertake a detailed scientific study and give its recommendations on the distance criteria and dust control measures to be provided by the stone crushers. The CSIR - NEERI vide letter dated 29.05.2019 submitted a proposal to carry out a detailed study within a project duration of 6 months. Without waiting for 6 months and without getting any report from the CSIR-NEERI, the meeting was convened by the Hon'ble Minister for Environment in a haste manner with the Member Secretary of the Board. In the said meeting, it was instructed that a decision should be taken at the earliest on the 1 km distance criteria so as to permit the new stone crushers to meet the M.sand demand for the construction projects in the State. In these circumstances, the proposal with regard to dispensing with the minimum distance of 1 km between new / proposed crushers as prescribed in B.P.Ms.No.4 dated 02.07.2004 along with other proposals were placed before the respondent Board on 22.07.2019. The respondent Board vide Resolution No. 278-1-6 dated 22.07.2019 resolved to approve the proposal of relaxing 1 km distance criteria for the existing and new stone crushers in the state of Tamil Nadu as follows :

"1. The minimum distance of 1 km between New / Proposed crushers as prescribed in the B.P. Ms. No. 4 dated 2.7.2004 is dispensed off. This relaxation is also applicable to the existing stone crushers and the M.sand units."

14. I state that the validity of B.P.No.4 was challenged before the Hon'ble High Court of Judicature at Madras in W.P.Nos.1560 and 12264 of 2006 and in the order dated 08.10.2010, the Hon'ble Division Bench of the Madras High Court has considered the entire issue and concluded that B.P.No.4 dated 2.7.2004 cannot be held to be invalid. It is pertinent to state here that the respondent Board, while framing norms for the location of the stone crushing units by introducing B.P.No.4 dated 02.07.2004 has in fact, taken note of

7

certain observations made by the Hon'ble Supreme Court in the order dated 25.04.1996 passed in Civil Appeal No.10732 of 1995 and also the subsequent order of the Hon'ble Supreme Court dated 10.05.1999 made in SLP (C) No.13564 of 1998 issuing certain directions and after consideration of those observations made by the Hon'ble Supreme Court, the Board having felt that there has been an ambiguity in B.P.No.48 dated 09.09.1998, formulated B.P.No.4. Therefore, it is clear that B.P.No.4, apart from having been upheld by the Division Bench of the Hon'ble High Court of Madras has been passed by the Board after due application of mind and considering all the relevant issues. The respondent Board cannot now go backwards on the subject of standards of protection and alter the condition at its whims and fancies.

15. I respectfully submit that the action of the respondent Board dispensing with the minimum distance of 1 km between the new / proposed crushers in the absence of any scientific and expert report, is illegal and arbitrary. The same respondent Board, in the meeting held on 24.04.2019 observed that dispensing of the minimum distance of 1 km between new / proposed crushers may lead to mushrooming of crushers which will have dust pollution influence of one over the other and may have impact on the surrounding environment. The respondent Board ought not to have taken a decision to dispense with the condition of minimum distance of 1 km between the new / proposed crushers without considering the detailed scientific study and report to be submitted by CSIR - NEERI, Taramani. This resolution is only at the behest of the Hon'ble Minister for Environment. Left with no other efficacious alternative remedy and in interest of public at large, I am constrained to file this writ petition for relief by invoking the extra ordinary jurisdiction of this Hon'ble Court under Article 226 of the Constitution of India.

16. I submit that the impugned proceedings of the respondent Board in the B.P.No.21 dated 31.07.2019 in so far as it relates to relaxing the minimum distance of 1 km between the new / proposed crushers as prescribed in B.P.No.4 dated 02.07.2004 is liable to be quashed by this Hon'ble Court for the following among other

56

to

grant consent to operate within the distance of 1 km from the existing stone crushers and in that event, the public will be put to great hardships and irreparable loss. In the interest of justice and public, it is just and necessary to issue interim stay of the operation of the clause relaxing the minimum distance of 1 km new / proposed crushers as prescribed in the B.P.No.4 dated 2.7.2004 issued by the respondent pending disposal of the Writ petition.

18. It is therefore prayed that this Hon'ble Court may be pleased to stay the operation of the order of the respondent issued in the B.P. No. 21 dated 31.07.2019 in so far as it relates to the condition No. 1, i.e. "The minimum distance of 1 km between new / proposed crushers as prescribed in the B.P. Ms. No. 4 dated 2.7.2004 is dispensed off. This relaxation is also applicable to the existing stone crushers and the M.sand units", pending disposal of the above writ petition and thus render justice.

19. I respectfully state that I came to know recently about the impugned B.P.No. 21 dated 31.07.2019 issued by the respondent Board. I submit that the original Impugned B.P. No. 21 dated 31.07.2019 has not been provided by the Respondent and hence the same could not be filed before this Hon'ble Court. Hence, I could not produce the said original impugned order (B.P.No.21 dated 31.07.2019) . I am filing copy of the said impugned order. The non-filing of the Original impugned order(B.P.No.21 dated 31.07.2019) is neither willful nor wanton, but due to the bonafide reason stated above.it is therefore just and necessary to dispense with the production of original impugned B.P.No.31.07.2019 issued by the respondent .

It is therefore prayed that this Hon'ble Court may be pleased to dispense with the production of the original impugned B.P.No.21 dated 31.07.2019 issued by the respondent for the present and thus render justice.

For the reasons stated above, it is prayed that this Hon'ble Court may be pleased to issue a WRIT OF CERTIORARI or any other writ or order or direction in the nature of writ, calling for the records of the respondent relating to the proceeding passed in the B.P. No. 21 dated

9

minimum distance of 1 km between the new / proposed crushers by the impugned the B.P. No. 21 dated 31.07.2019.

- G. The respondent Board should have seen that the demand for M.sand or blue metal is not on account of maintaining minimum distance of 1 km between the two crushers. Even assuming without admitting the same, the respondent Board is in gross violation of the principle of non-regression that prohibits any recession of existing environmental law, and comprises its protective norms in the category of non-revocable and intangible legal rules, in the common interest of humanity.
- H. The respondent Board failed to note that maintaining minimum distance of 1 km between the two crushers would reduce the dust pollution and that more crushers within the distance of 1 km would result in transport of crushing materials in many lorries and in that event it may result in causing more air pollution and detriment to the Environment and Ecology.
- I. The respondent Board failed to note that maintaining a minimum distance of 1 km between the two crushers will protect the agriculture and with the more crushers in operation within 1 km, the surrounding agricultural lands will be affected and the maintenance of minimum 1 km buffer is in furtherance of interest of agriculturists and the general public.
- J. I submit that the action of the respondent Board in so far as relaxing the 1 km minimum distance between the new / proposed stone crushers condition is totally arbitrary, illegal and bereft of reasons. The said act of the respondent Board dispensing with the minimum 1 km between the crushers is unreasonable. The impugned proceeding is totally unsustainable as it is issued in haste to please certain vested interests who are anxious to set up new crushers. There is no rationale behind relaxing the said minimum distance.
17. I respectfully state that there exists a prima - facie case in the writ petition and for issue of interim stay pending disposal of the above writ petition. If the interim stay, pending disposal of the above writ petition, is not granted, the officers of the respondent Board will

10

grant consent to operate within the distance of 1 km from the existing stone crushers and in that event, the public will be put to great hardships and irreparable loss. In the interest of justice and public, it is just and necessary to issue interim stay of the operation of the clause relaxing the minimum distance of 1 km new / proposed crushers as prescribed in the B.P.No.4 dated 2.7.2004 issued by the respondent pending disposal of the Writ petition.

18. It is therefore prayed that this Hon'ble Court may be pleased to stay the operation of the order of the respondent issued in the B.P. No. 21 dated 31.07.2019 in so far as it relates to the condition No. 1, i.e. "The minimum distance of 1 km between new / proposed crushers as prescribed in the B.P. Ms. No. 4 dated 2.7.2004 is dispensed off. This relaxation is also applicable to the existing stone crushers and the M.sand units", pending disposal of the above writ petition and thus render justice.

19. I respectfully state that I came to know recently about the impugned B.P.No. 21 dated 31.07.2019 issued by the respondent Board. I submit that the original Impugned B.P. No. 21 dated 31.07.2019 has not been provided by the Respondent and hence the same could not be filed before this Hon'ble Court. Hence, I could not produce the said original impugned order (B.P.No.21 dated 31.07.2019) . I am filing copy of the said impugned order. The non-filing of the Original impugned order(B.P.No.21 dated 31.07.2019) is neither willful nor wanton, but due to the bonafide reason stated above, it is therefore just and necessary to dispense with the production of original impugned B.P.No.31.07.2019 issued by the respondent .

It is therefore prayed that this Hon'ble Court may be pleased to dispense with the production of the original impugned B.P.No.21 dated 31.07.2019 issued by the respondent for the present and thus render justice.

For the reasons stated above, it is prayed that this Hon'ble Court may be pleased to issue a WRIT OF CERTIORARI or any other writ or order or direction in the nature of writ, calling for the records of the respondent relating to the proceeding passed in the B.P. No. 21 dated

59

23 131 5

11

31.07.2019 in so far as it relates to the condition No.1 i.e. "The minimum distance of 1 km between new / proposed crushers as prescribed in the B.P. Ms. No. 4 dated 2.7.2004 is dispensed off. This relaxation is also applicable to the existing stone crushers and the M.sand units", quash the same as illegal and arbitrary, pass such further or other order as this Hon'ble Court may deem fit and proper in the circumstances of the case and thus render justice.

Solemnly affirmed at Chennai on this the day of August 2019 and signed his name in my presence

Before Me,

Advocate : : Chennai

W.P.No.26786 of 2019

THE HON'BLE CHIEF JUSTICE
and
SENTHILKUMAR RAMAMOORTHY, J.

The matter will appear six weeks hence.

In the meantime, the Pollution Control Board should appoint experts with expertise in environmental studies to consider the criteria that should be evolved for granting future permission for stone-crushing units, including the minimum distance to be maintained between two units, the distance from places of dense habitation and the like.

An additional affidavit has been filed on behalf of the first respondent Pollution Control Board.

List on 11.06.2021.

(S.B., CJ.) (S.K.R., J.)
01.04.2021

kpl/hvk

WEB COPY

Faint, illegible text at the top of the page, possibly a header or title.

Second block of faint, illegible text in the middle of the page.

Third block of faint, illegible text in the lower middle section of the page.

Final block of faint, illegible text at the bottom of the page.

W.M.P.Nos. 26175 & 29648 of 2019
in W.P.No. 26786 of 2019

4. Learned counsel appearing for the other parties submitted that the arrangement will have to be extended in favour of all those who got consent to operate in the interregnum but could not start the crushing operation in view of the interim order passed.

5. Taking note of the submissions made, we are inclined to pass a clarificatory order making it clear that such of those units which were in operation with valid consent both for establishing and for crushing operation in currency and already in operation, the interim order passed will have no application. This is also for the reason that they being in operation already by indulging in crushing cannot be prevented by the interim order without even making them as parties. Their rights had already been accrued and were indulging in the crushing operation even prior to the interim order.

6. Thus, with the above said clarification, we are not inclined to modify the orders passed otherwise. We are also not inclined to undertake the exercise of fixing any distance Rule by ourselves as that would involve the exercise which the expert body based upon the data

W.M.P.Nos.26175 & 29648 of 2019 in W.P.No. 26786 of 2019

M.M.SUNDRESH.,J
and
R.HEMALATHA.,J

(Order of the Court was made by *M.M.SUNDRESH.,J*)

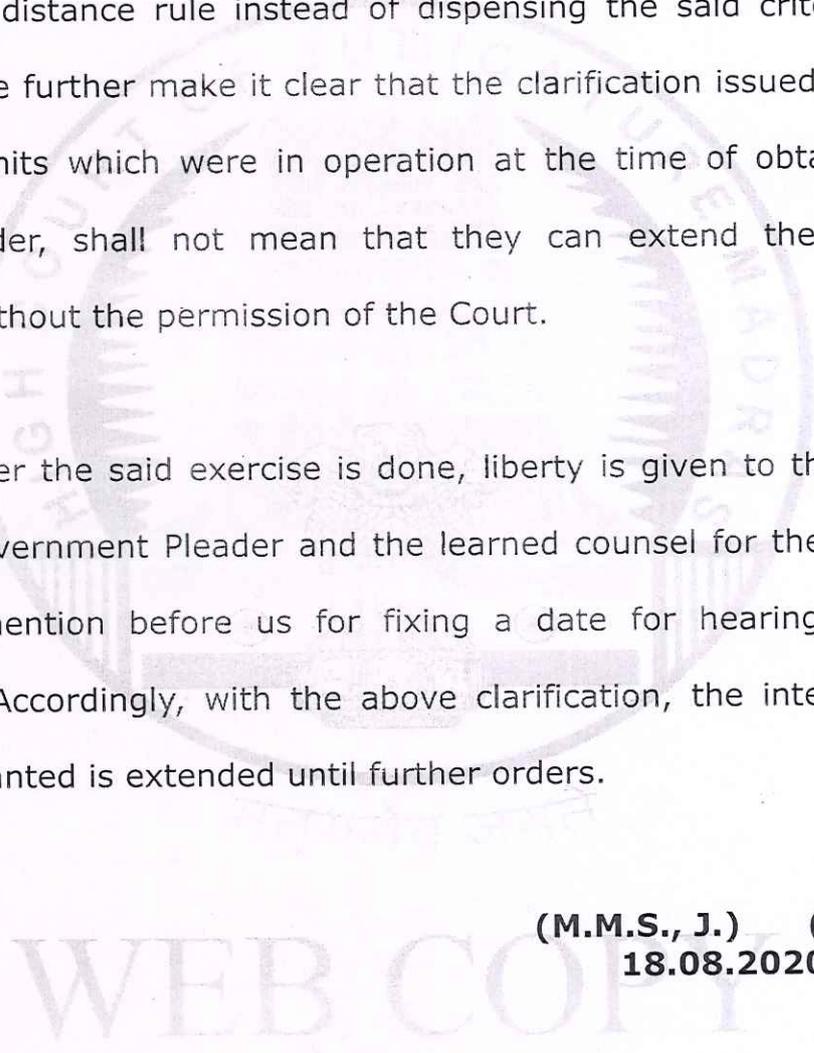
Heard the learned counsel appearing for the parties including the learned counsel appearing for the petitioner and the learned Advocate General.

2. Learned Advocate General submitted that the interim order passed will have to be clarified insofar as the new units and the units which are already in existence with consent to establish and consent to operate. Thus, the latter units are already doing crushing operation on which date the interim order has been obtained.

3. Mr.T.Mohan, learned counsel appearing for the petitioner submitted that insofar as the new units are concerned, this Court cannot modify the order since the issue will have to be decided at the time of hearing the writ petition and any interim arrangement would become *fiat accompli* and no reliance can be made on the methodology adopted by the other States where there are some new conditions are also imposed.

is expected to do so. However, we make it clear that the State Government and the Tamil Nadu Pollution Control Board can undertake the said exercise in the meanwhile so that appropriate final orders can be passed. Needless to state, such exercise is with respect to fixing any lesser distance rule instead of dispensing the said criteria in its entirety. We further make it clear that the clarification issued in favour of those units which were in operation at the time of obtaining the interim order, shall not mean that they can extend the crushing capacity without the permission of the Court.

7. After the said exercise is done, liberty is given to the learned Special Government Pleader and the learned counsel for the Board to make a mention before us for fixing a date for hearing the writ petition. Accordingly, with the above clarification, the interim order already granted is extended until further orders.



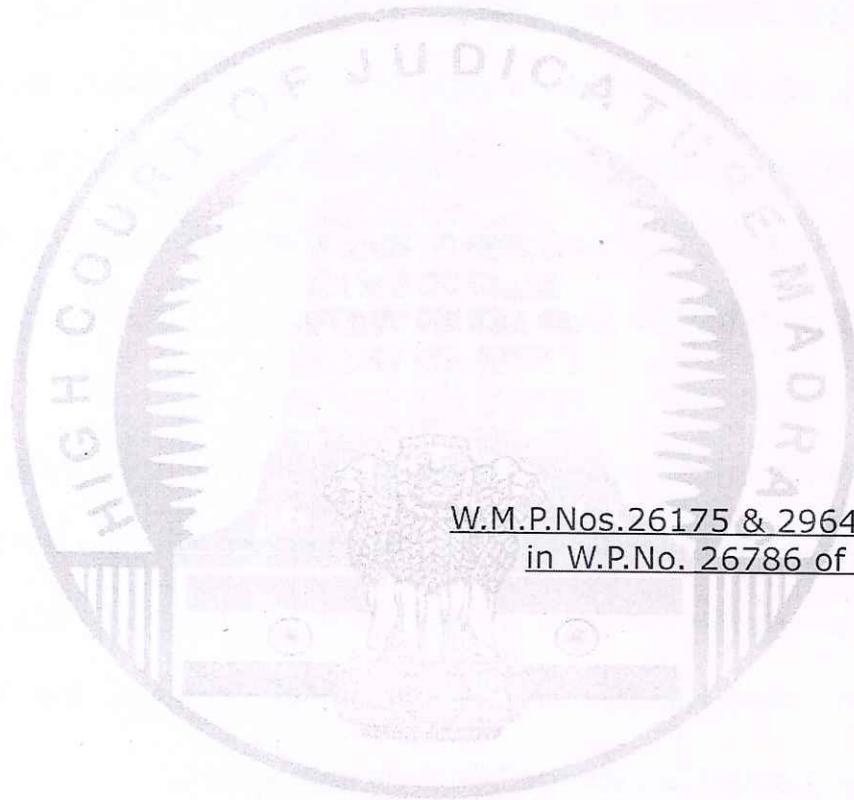
(M.M.S., J.) (R.H., J.)
18.08.2020

mml/ssm

W.M.P.Nos. 26175 & 29648 of 2019
in W.P.No. 26786 of 2019

**M.M.SUNDRESH, J
AND
R.HEMALATHA, J.**

mmi/ssm



W.M.P.Nos.26175 & 29648 of 2019
in W.P.No. 26786 of 2019

सत्यमेव जयते

WEB COPY

18.08.2020

W.P.No.26786 of 2019

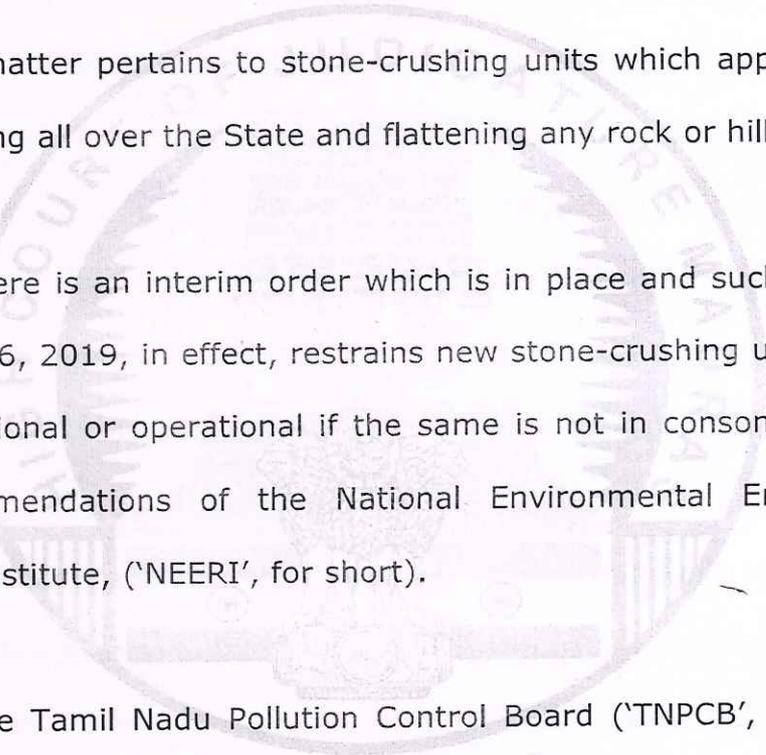
THE HON'BLE CHIEF JUSTICE
and
SENTHILKUMAR RAMAMOORTHY, J.

(made by the Hon'ble Chief Justice)

The matter pertains to stone-crushing units which appear to be mushrooming all over the State and flattening any rock or hill in view.

2. There is an interim order which is in place and such order of September 6, 2019, in effect, restrains new stone-crushing units being made functional or operational if the same is not in consonance with the recommendations of the National Environmental Engineering Research Institute, ('NEERI', for short).

3. The Tamil Nadu Pollution Control Board ('TNPCB', for short) appears to have acted contrary to the NEERI recommendations in the resolutions adopted by the Board on July 31, 2019. NEERI had earlier recommended, inter alia, that the minimum distance between a stone-crushing unit and the next ought to be one kilometer. Such recommendation was made in 2004. However, in the resolutions adopted by the TNPCB on July 31, 2019, such distance norm was



WEB COPY

W.P.No.26786 of 2019

dispensed with. To boot, the relaxation was also made applicable to existing stone-crushers and the M-sand units.

4. Several applications have been filed, whether by existing stone-crushing units or by other entities which had obtained a no objection certificate and had expended substantial sums to set up crushing units. It is even suggested by some of the existing stone-crushing unit owners that instead of spreading stone-crushing units all over the State and risking greater air pollution, it may be better to dispense with the distance norms and have clusters of stone-crushing units within a short radius and larger gap between two clusters.

5. The apparently insatiable demand for building construction material fuels the industry. Since the real estate industry is intricately associated with stone-crushing units, the usual lawlessness that prevails in the real estate market also prevails in the stone-crushing industry. It has been noticed in other matters that licenses are obtained over limited territories and the operations expand far and beyond the territorial limits in double quick time with officials who ought to protect and preserve the resources of the State turning a Nelson's eye to such activities for obvious extraneous considerations.

6. The petitioner suggests that the impugned resolutions passed at the TNPCB meeting on July 31, 2019, may be no different.

7. It is submitted on behalf of the TNPCB that the TNPCB will seek expert opinion and the future course of action pertaining to stone-crushing units to be adopted by TNPCB will be strictly in accordance with such expert opinion received. The TNPCB also says that in view of the subsisting interim order, no new stone-crushing unit has been made functional with the modified norms as contained in the impugned resolution of July 31, 2019.

8. Despite the considerable clamour by some existing crushing units and by others who claim to have obtained no objection certificates prior to the issuance of the interim order, public interest demands that the individual interests of such business entities may even be prejudiced and the expert opinion awaited before rushing into any decision to open or reopen any stone-crushing unit.

9. Let the matter appear eight weeks hence, as requested by the TNPCB. The subsisting injunction will continue without any relaxation.

WEB COPY

68

95

W.P.No.26786 of 2019

10. List on 20.09.2021.

(S.B., CJ.) (S.K.R., J.)
19.07.2021

tar

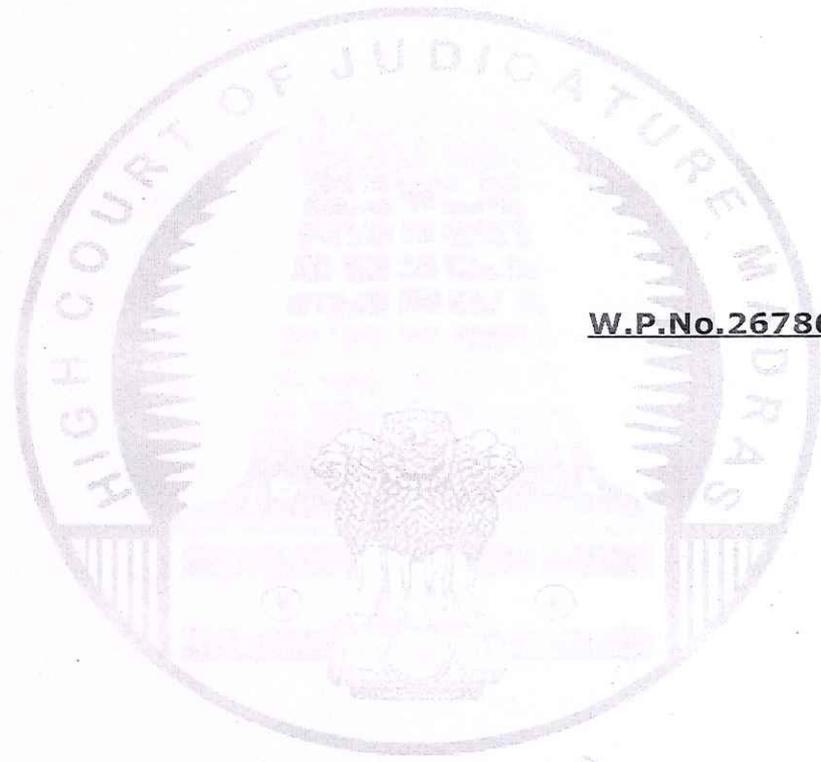


सत्यमेव जयते

WEB COPY

W.P.No.26786 of 2019

THE HON'BLE CHIEF JUSTICE
and
SENTHILKUMAR RAMAMOORTHY, J.
(tar)



W.P.No.26786 of 2019

WEB COPY

19.07.2021



Faint, illegible text or markings in the upper left quadrant.



राष्ट्रीय पर्यावरण अभियांत्रिकी अनुसंधान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्)

चेन्नई क्षेत्र प्रयोगशाला, सीएसआईआर मद्रास कॉम्प्लेक्स, तारामणी पी.ओ.

चेन्नई - 600 113, भारत

NATIONAL ENVIRONMENTAL ENGINEERING RESEARCH INSTITUTE

(Council of Scientific & Industrial Research)

Chennai Zonal Laboratory, CSIR Madras Complex, Taramani P.O.

Chennai - 600 113, India



CHZL/2(4)/SCIs/2022

June 09, 2022

The Chairperson
Tamil Nadu Pollution Control Board, TNPCB
Guindy
Chennai - 600 032

Sub: Submission of Final Report - Assessment of Dust Emissions from Stone Crushing Industries and Distance Criteria in Tamil Nadu

Dear Madam,

This has reference to the above subject.

Please find the attached final report of the project - Assessment of Dust Emissions from Stone Crushing Industries and Distance Criteria in Tamil Nadu.

Kindly release final and third installment of the project constituting 10% of the project cost (4,00,000) and its corresponding service tax @ 18% (72,000) totally 4,72,000/-.

Please do the needful.

Thanking you,

Yours sincerely,

R. Sivacoumar

(Dr. R. Sivacoumar)
Chief Scientist

टेलिफोन : 22541964, 22541250 टेलिफैक्स : 22541964 ग्राम्स : कानसेर्च, चेन्नई
Telephone : 22541964, 22541250 Telefax : 22541964 Grams: CONSEARCH, CHENNAI
ई-मेल / E-mail : neerichzl@yahoo.com, neeri_chzl@yahoo.com, sic.neeri.chzl@vsnl.net
Website : www.csirmadrascomplex.gov.in, www.neeri.nic.in, www.neeri.res.in

राष्ट्रीय पर्यावरण अभियांत्रिकी अनुसंधान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्)

चेन्नई क्षेत्र प्रयोगशाला, सीएसआईआर मद्रास कॉम्प्लेक्स, तारामणी पी.ओ.

चेन्नई - 600 113, भारत

NATIONAL ENVIRONMENTAL ENGINEERING RESEARCH INSTITUTE

(Council of Scientific & Industrial Research)

Chennai Zonal Laboratory, CSIR Madras Complex, Taramani P.O.

Chennai - 600 113, India



CHZL/2(4)/SCIs/2022

June 09, 2022

DEMAND NOTE/INVOICE

The Chairman
Tamil Nadu Pollution Control Board, TNPCB
Guindy
Chennai - 600 032

Sub: Demand Note/Invoice towards final and third installment for the Assessment of Dust Emissions from Stone Crushing Industries and Distance Criteria in the State of Tamil Nadu

Particulars	Project Cost, Rs.	3rd Installment @ 10%, Rs.	Service Tax (GSTIN: 27AAATC2716R2ZE) @ 18%, Rs.	Grand Total, Rs.
Installment - I	40,00,000/-	4,00,000	72,000/-	4,72,000/-

The payment may be made in favor of Director, NEERI, Nagpur, payable at SBI, NEERI branch, Nagpur and the details may please be sent to Scientist and Head, NEERI, Chennai Zonal Centre, CSIR Madras complex, Chennai - 600 113 as early as possible for onward transmission to Director, NEERI, Nagpur or by e-payment (details attached as separate sheet).

R. Sivacoumar

(Dr. R. Sivacoumar)
Chief Scientist

टेलिफोन : 22541964, 22541250 टेलिफैक्स : 22541964 ग्राम्स : कानसेर्च, चेन्नई
Telephone : 22541964, 22541250 Telefax : 22541964 Grams: CONSEARCH, CHENNAI
ई-मेल / E-mail : neerichzl@yahoo.com, neeri_chzl@yahoo.com, sic.neeri.chzl@vsnl.net
Website : www.csirmadrascomplex.gov.in, www.neeri.nic.in, www.neeri.res.in

IN THE HIGH COURT OF JUDICATURE AT MADRAS**(Special Original Jurisdiction)****W.P.No. 26786 of 2019**

E.V.Sampath,
S/o. Varadhan,
No. 1/113, BajanaiKovil Street,
Erumaiyur, Chennai – 600 044.

... Petitioner

-Vs-

Tamil Nadu Pollution Control Board,
Rep. by its Member Secretary,
76, Mount Salai,
Guindy, Chennai – 600 032.

.... Respondent

**COUNTER AFFIDAVIT OF THE RESPONDENT TAMIL NADU POLLUTION
CONTROL BOARD**

I, R.Ramasubbu son of Thiru V.Ramasamy, aged about 56 years, having office at No.76, Anna Salai, Guindy, Chennai-32, do hereby solemnly affirm and sincerely state as follows:-

1. I am the Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board, Chennai and I am filing this status report on behalf of Respondent Board and as such I am well acquainted with the facts of the case as per records.

2. It is respectfully submitted that the petitioner has prayed to quash the impugned proceeding of the respondent Board in the B.P No. 21, dated 31.07.2019 in so far as it relates to relaxing the minimum distance of 1 KM between the new / proposed crushers as prescribed in B.P Ms. No. 4, dated 02.07.2004.

73

3. It is respectfully submitted that stone crushing is a mechanical operation by which large size stone as mined from quarries in size range of 200 – 300 mm is crushed to smaller usable sizes, generally 6, 15, 25 mm. The crushed material is segregated size wise by screening and is then ready for dispatch and use in road and building construction. Quarried stone is normally delivered to the processing plant (Stone crusher) by truck and is dumped in storage pit or bunker. The stone crusher is usually a jaw crusher.

The crushed material from the jaw crusher is separated from various fractions i.e 25mm, 15mm, 6mm and stone dust in a rotary / vibratory screen. The oversized material is sent back to the jaw crusher for further crushing, reducing the size of the stones to below 20mm. The different sized products are transferred from the bottom of the screen by belt conveyors to the stockpiles and further transported, usually trucks to the consumer. The only pollutant emission of concern from stone crushing is particulate matter. Emission from stone processing should be considered to be fugitive as the sources are not vented to a bag house or contained in an enclosure with a forced air vent stack. Emission points for dust release from stone crushing typically include the following: loading of trucks, truck travel on dusty roads, fugitive dust loss from trucks, dumping into crusher, crushing, screening, transfer points on conveyor system, loading onto storage piles from conveyors, wind blowing dust from storage piles and conveyors.

4. It is respectfully submitted that in year 1986, TNPCB issued siting criteria for the stone crushers vide B.P. No. 142 dated 10.10.1986, based on the study

carried out by the CPCB in the stone crushing units in Haryana state. The sitting criteria were as follows:

- No stone crushers should be located within two kilometres from any National and State Highways.
- The distance between two stone crushers should be four kilometres to avoid dust pollution influence of one over the other.
- If for other pressing reasons more than one stone crusher is required to come in existence, then they should be as much close to each other as may be permitted without causing difficulty in operation. In such a situation the source should be recognized as a collective one and the distance is to be estimated accordingly.

5. It is respectfully submitted that in year 1992, the Board has conducted ambient air quality survey in a stone crushing unit at various distances from source. Based on the results arrived, the Board has revised the norms for setting on new stone crushing units vide B.P. No. 609, dated 09.12.1992, as follows:

- No stone crushing units should be located within 500 metres from any NH or SH or Primary residential area or mixed residential area or places of public and religious importance.
- The minimum distance between two stone crushers should be 1 K.M to avoid dust pollution influence of one over the other.

6. It is respectfully submitted that the Hon'ble Supreme Court of India in its order dated 25.04.1996 in the Civil Appeal No. 10732/1995 (Kennedy Valley Case) has banned the operation of stone crushers and quarries within the radius of 500 metres of the residential area. Subsequently the Board received representations

form various Associations of stone crushing industries in the State to consider relaxation of the above norms. Therefore the Board entrusted a study to National Environmental Engineer Research Institute (NEERI), Nagpur to assess the performance of air pollution control measures provided by the stone crushing industries and to assess the dust emission from the industry and also to arrive at the optimum distance from the National / State Highways and from the residential area. NEERI has conducted the study and made recommendations. Based on the above, the Board vide B.P. No. 48 dated 09.09.1998 has issued the following norms for the stone crushers.

- All the stone crushing units should provide air pollution control measures as suggested by the National Productivity Council.
- If the distance between two crushers is more than 100 meters, each one will be considered as a single crusher. If the distance between the crusher boundaries is less than 100 meters, combinedly they will be considered as a cluster.
- The distance between the crusher boundaries and the boundary of the National / State Highways shall be as specified below.

Sl.No.	Cluster of crushers	Distance between crusher / cluster	Green belt area at the periphery
1	Single crusher	50 metres	10 metres
2	10 Crushers	150 metres	30 metres
3	25 Crushers	250 metres	50 metres
4	50 Crushers	300 metres	100 metres

Note :-

- a. There should be bilane road system to approach the crushers.
- b. Within the cluster a minimum distance of 20 meters should be made for roads.

- c. The crusher boundary implies the line joining all the emission sources such as jaw crusher, conveyer belt, head, rotary screen etc., in the crushing unit.
- Existing crushers, which are near the National or State Highways and not meeting the above criteria should provide a 15 to 20 feet wall on all the three sides (parallel to National / State Highways and both the sides) and upto the length to be stipulated on the alignment of road and boundary of the crusher.
 - In respect of residential area, no stone crushing industries are to be allowed to operate within 500 meters from residential areas as per the orders of Hon'ble Supreme Court of India in the Civil Appeal No.10732/1995, dated 25.4.1996.

7. It is respectfully submitted that in the order, dated 10.5.1999 in SLP(C) No.13564/1998 filed by Tamil Nadu Building Materials Manufactures and Transporters Association, the Hon'ble Supreme Court of India issue directions that the existing stone-crushers, who have valid licenses, are permitted to carry out their work subject to the complying with the conditions of the NEERI's Report. In another order dated 8.8.2000 in SLP(C) No.13564/1998, the Hon'ble Supreme Court of India has clarified that the earlier decision of the Supreme Court is confined to the facts of that case and will not stand in the way of the pollution control Board / State Government reconsidering amendment of Notification and or Resolution or Rule as the case may be and option is given to take into consideration the earlier expert committee report, dated 3.7.1991 and also the NEERI report for framing appropriate Rule.

8. It is respectfully submitted that the Board vide B.P. Ms. No. 4 dated 02.07.2004 has issued criteria for the existing stone crushing units and new / proposed stone crushing units as follows:

Criteria for existing stone crushing units: (as recommended by NEERI)

Distance Criteria

Sl. No.	Type of clusters	Distance between crusher / cluster of crushers and habitations / NN or SH	Green belt area at the periphery
1.	Single crusher	50 mts.	10 mts.
2.	10 crushers	150 mts.	30 mts.
3.	25 crushers	250 mts.	50 mts.
4.	50 crushers	300 mts.	100 mts.

Note :-

- (a) For single crusher, the distance is to be measured from crusher boundary.
 - (b) In the case of cluster of crushers the distance is to be measured from the last crusher boundary.
 - (c) The crusher boundary implies the line joining all the emission sources in the crushing unit such as jaw crusher, conveyer belt, head, rotary screen etc.
- If the distance between two existing crushers is more than 100 metres, it will be considered as a single crusher. If the distance between the existing crusher boundaries is less than 100 metres, it will be considered as a cluster.
 - Existing crushers, which are near the National or State highways and not meeting the distance criteria should provide a 15 to 20 feet wall on all the three sides (parallel to National / State highways and both sides) and upto the

length to be stipulated on the alignment of road and boundary of the crusher in addition to the air pollution control measures.

Explanation

Existing stone crushing units are those which have valid licenses on the date of Supreme Court order namely 10.05.1999.

Criteria for new / proposed stone crushing units

- No new / proposed stone crushers should be located within 500 metres from any National highways or State highways or inhabited site or educational institutions / and other public offices and places of religious importance.

Note :- 'Inhabited site' shall mean a village site or town site or a house site as referred to in the revenue records or a house site or layout approved by a Local Body or Town or Country or Metropolitan Planning Authority, where the said Body or Authority is created under a statute and empowered to approve such an area as a house site or layout area (as desired in Rule 35 of Tamilnadu Minor Minerals Concession Rules, 1959).

- The minimum distance between new / proposed stone crushers should be 1 km to avoid dust pollution influence of one over the other.
- Green belt development: The stone – crushing unit shall provide adequate green belt cover around the periphery as suggested by the Board depending on site and meteorological conditions.

Air pollution control measures

79

The existing and new / proposed stone crushing units should provide dust containment and dust suppression systems suggested by National Productivity Council and should also adhere to the recommendations furnished in NEERI Report.

9. It is respectfully submitted that River sand is the essential material for the construction activities. Extensive use of river sand as fine aggregate in the construction works results in scarcity of river sand. Further, indiscriminate mining of sand affects the river eco system and lowers the ground water table. Therefore, the Government is now encouraging the use of M-Sand in construction in place of river sand. M-sand is manufactured by crushing of blue metal jellies either in stone crushers as an extended facility or in standalone M- Sand units. In order to regulate the activities of M- Sand units, the Board vide B.P. No. 26 dated 30.07.2018 has issued guidelines for M-Sand units.

Stone Crushers Associations have made representation that the norms for maintaining 1 KM distance from crusher to crusher shall be waived off so that the existing crushers can go for expansion to manufacture M-Sand in addition to the existing consented production of blue metal jellies and new crushers can be permitted so as to meet the demand for supply of blue metal and M-sand for construction activities.

Considering latest development in pollution control technologies, stringent emission standard, the present demand for construction materials and difficulties faced by the entrepreneurs to find suitable site to locate the stone crushers, the

Board vide B.P. No. 8 dated 05.03.2019 issued the following guidelines for the existing consented stone crushing units:

- The existing consented stone crushing units shall be permitted to increase their production along with or without M-sand production unit, such units shall comply with all the norms as prescribed in B.P. Ms. No. 4 dated 02.07.2004 (read with B.P. Ms. No. 55 dated 06.10.2005) except 1 KM distance criteria from crusher to crusher.
- The stone crushing units shall meet Ambient Air Quality standards at all times. The suspended particulate matter (measured between three metres and ten metres from any processes equipment of stone crushing unit shall not exceed 600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than $600\mu\text{g}/\text{m}^3$.
- The Standalone M-Sand units (within / outside stone crushing unit) shall comply with all the norms as prescribed in B.P. No. 26 dated 30.07.2018 except the distance criteria as prescribed under A-II of said B.P.
- The stone crushing units & M-Sand units shall not store raw materials & products of more than one month capacity and all the open storage should be properly covered with Tarpaulin to avoid dust emanation due to wind action.

The Board has also approved the proposal to re-examine the 1 KM distance criteria for the new stone crushers by conducting a study through a reputed institution like NEERI.

81

Latter the Board vide proceeding No. TNPCB/O&G/F. 4792/2019/Stone Crusher/dated 07.03.2019 has constituted a technical expert Committee comprising of officers from TNPCB, NEERI and NPC. The Terms of Reference for Committee is as follows:

- The Committee shall study the performance of existing stone crushers (cluster and isolated) with M-sand unit and without M-sand unit.
- The study shall focus on the air pollution control measures, dust suppression systems, green belt development, dust influence to the nearby habitations, National/State Highways.
- The Committee shall furnish its recommendation on the minimum distance criteria to be maintained between crusher to crusher, NH and SH, Habitations for the existing stone crushers and for the proposed stone crushers.
- The Committee shall suggest pollution control measures to be adopted by the units.

Committee Report

The committee has carried out a detailed study in the existing stone crushers on air pollution control measures provided and the ambient air quality in the vicinity of the crushers. AAQ survey was conducted in single stone crusher and cluster of stone crushers located in Kancheepuram, Tiruppur, Thiruvannamalai and Madurai districts. The committee has also gone through the guidelines issued by other SPCBs. After detailed study, the Committee has given the following recommendations.

- The minimum distance of 1 KM between New / Proposed crushers as prescribed in the B.P. Ms No.4 dated 02.07.2004 may be dispensed with.
- The stone crushing units shall meet Ambient Air Quality standards at all times. The suspended particulate matter (measured between three metres and ten metres from any processes equipment of stone crushing unit shall not exceed 600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than $600\mu\text{g}/\text{m}^3$.
- The crushers may be encouraged to establish nearby quarry site so as to avoid transportation and to reduce air pollution.
- All the existing and the new crushers shall provide air pollution control measures as suggested by National Productivity Council, NEERI and Board circular as mentioned in this report.
- A detailed scientific study may be taken-up again through a reputed technical institution like NEERI. Based on the detailed study the minimum distance to be maintained from inhabited site, National Highway, State Highway, Places of public and religious importance may be decided. Until such time, the existing distance norms (500 metres from NH and SH, Habitations) as prescribed in B.P. Ms No.4 dated 02.07.2004 may be continued.

The Committee report was placed before the Board in the meeting held on 24.4.2019. The Board vide resolution No. 277-1-7 has stated that *'The Board has gone through the Committee Report and had a detailed discussion. The Board has observed that dispensing of the minimum distance of 1 KM between New / Proposed stone crushers may lead to mushrooming of crushers which will have dust pollution*



influence of one over the other and may have impact on the surrounding environment. At the same time, the supply of blue metal is also to be ensured for the development of construction industry. Hence the Board has instructed to conduct a further detailed study to identify the notified areas and furnish a report so as to examine the relaxing of distance criteria of 1 KM from crusher to crusher of those notified areas only”.

The subject was discussed with the Senior Officers of the Board. TNPCB has no power to notify the areas for establishing the stone crushers. The notification of land use shall be done by the competent authority (i.e) CMDA and Director of Town and Country Planning. With respect to relaxing the 1 KM distance from crusher to crusher, it is opined that the MoEF&CC, Gol has prescribed standards for the stone crushers in the Environment (Protection) Rules, 1986, as follows:

For control of suspended Particulate Matter – The standards consists of two parts:

- i. Implementation of the following pollution control measures:
 - a) Dust containment cum suppression system for the equipment.
 - b) Construction of wind breaking walls.
 - c) Construction of the metalled roads within the premises.
 - d) Regular cleaning and wetting of the ground within the premises.
 - e) Growing of a green belt along the periphery.
- ii. Quantitative standard for the suspended particulate matter:

The suspended particulate matter (measured between three metres and ten metres from any process equipment of stone crushing unit shall not exceed

600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than 600 microgram per cubic meter.

When the units meet the standard of suspended particulate matter 600 $\mu\text{g}/\text{m}^3$ in the ambient air at 10 metres from the process equipment, there will not be dust pollution influence of one over the other. To meet the above standards, the stone crushers shall provide adequate air pollution control measures. Further, as per the existing guidelines, no new/proposed stone crushers should be located within 500 metres from any National Highways or State Highways or inhabited site or places of public and religious importance. Therefore, it was opined that considering the M-sand demand for which new stone crushers are to be allowed, and at the same time without compromising the environmental quality, the distance criteria of keeping minimum 1 KM distance between new/proposed stone may be dispensed. Based on that a proposal was placed before the Board.

10. It is respectfully submitted that the Board vide B.P No. 21 dated 31.07.2019 has issued the siting criteria for the stone crushers as follows:

- The minimum distance of 1 KM between New / Proposed crushers as prescribed in the B.P. Ms No.4 dated 02.07.2004 is dispensed off. This relaxation is also applicable to the existing stone crushers and the M-Sand units.
- The stone crushing units shall meet Ambient Air Quality standards at all times. The suspended particulate matter (measured between three metres and ten metres from any process equipment of stone crushing unit shall not exceed

600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than $600\mu\text{g}/\text{m}^3$.

- The crushers may be encouraged to establish nearby quarry site so as to avoid transportation and to reduce air pollution.
- All the existing and the new crushers shall provide air pollution control measures as suggested by National Productivity Council, NEERI and Board circular dated 22.4.2008.
- The stone crushing units & M-Sand units shall not store raw materials & products more than one month capacity and all the open storage should be properly covered with Tarpaulin to avoid dust emanation due to wind action.
- No new / proposed stone crushers should be located within 500 metre from any National Highways or State Highways or inhabited site or educational institutions / and other public offices and places of religious importance.

The Board will review the performance of installation and operation of air pollution control measures and the compliance of standards by the stone crushing units after one year.

11. It is respectfully submitted that as per the B.P. No. 21 dated 31.07.2019, the stone crushing units shall provide pollution control measures as follow:

As per the National Productivity Council's recommendation

- Dust containment system comprises of building enclosures over the major dust emission sources so as to contain the dust within the housing.
- Enclosures to be constructed of G.I. sheets (1.66 mm and 1.25 mm thick) and supported on angle structures so that it can withstand strong wind.

- Wherever there is a persistent of wind speed is blowing in particular direction or high wind speed in a particular sector/directions construction wind breaking wall or net in such a way that it will bring down wind speed by 90%.
- Roof to be given a gradual slope / curvature so as to prevent accumulation of water.
- Material transfer point such as hopper bottom / product unloading conveyor to be covered suitably to prevent dust release into the atmosphere.
- Locations where complete enclosures are not possible such as openings in jaw crushers side and bottom, are to be covered suitably (GI sheets / rubber flap or any other material) to prevent dust release into the atmosphere.
- Telescopic chutes are to be provided at product unloading conveyor to prevent dust release into the atmosphere during free fall off material from height. These chutes can be adjusted in length according to size of the heap.
- Openings in the enclosures over shafter, motor driver, conveyor belts etc., are to be covered with rubber flaps (wherever possible) to prevent release of dust.
- Openings fitted with doors are to be provided for inspection and access in the enclosures
- Paving of all the roads inside the crushing units and transport areas to avoid re-entrainment of dust into the atmosphere
- All fine dust other than aggregates need to be collected below the ground level or completely covered to avoid blow away of fine dust which suspends in air for longer time and behaves like gas.

- (81)
- Dust generation from material transfer points is quite substantial. Therefore dust suppression system shall be provided in these points. Dust suppression system, comprising of spraying of fine water mist through special nozzles. It should be carried out over the dust generation sources to suppress the dust cloud.

As per by NEERI's recommendation

- Periodical cleaning of water spray nozzles should be carried out to avoid choking.
- Fine dust accumulated in the crushing area should be periodically cleaned and the dumps should be covered with tarpaulins to arrest erosion by wind.
- The drop height of the processed material should be kept at a minimum during loading and unloading.
- Conveyor chutes should be provided at the discharge points.
- There should be bilane road system to approach the crushers.
- The approach road should be properly laid with tar and concrete and should be sprayed with water. Similarly, the approach roads to individual crusher should be made in good condition and watered.
- Within the crusher, a minimum distance of 20 metres should be made for roads.
- The green belt will restrict the spread of particulate matter and trees should be evergreen high foliage type like neem, tarmarind, gold-mohar, fire of the forest and any other local varieties are recommended. Cash crops like cashewnut, mango, lemon and sapota may be encouraged to get back financial benefits.

- Ornamental trees like Asoka along the roads on both sides leading to crushing area should be encouraged to improve the aesthetics of the working environment.
- As an occupational safety, all the workers should be provided with nose masks.

As per TNPCB's circular dated 22.4.2008

- All the stone crushing units shall provide enclosures to the primary, secondary crushers. The entire conveyor belt shall be covered with GI sheet. Telescopic chute is to be provided at the product unloading conveyor so as to adjust the length according to size of heap.
- Water sprinkler arrangement at appropriate transfer points shall be provided.
- All the units shall provide compound wall / wind net arrestor of 20 feet height all around the unit premises.
- Green belt of evergreen high foliage type like neem, tamarind, and gold-mohar shall be developed within and outside the boundary of the unit.

12. It is respectfully submitted that the petitioner has stated in para (11) that no reason is given in the B.P. No. 21 dated 31.7.2019, for dispensing with the minimum distance of 1 KM between new / proposed crushers as prescribed in the B.P. Ms. No. 4 dated 2.7.2004. In this connection it is respectfully submitted that the Board vide proceeding dated 07.03.2019 constituted a Committee comprising of officers from TNPCB, National Productivity Council and NEERI with terms of reference as mentioned in para (9) above. The Committee has submitted the report after carrying out detailed study in the existing operational stone crushers. With

89

respect to 1 KM distance criteria, the committee has given the recommendation as follows:

The Board in B.P. Ms. No. 4 dated 02.07.2004 has fixed that the minimum distance between new / proposed stone crushers should be 1 KM to avoid dust pollution influence of one over the other.

The dust pollution influence depends on various factors including wind speed, wind direction, humidity, and ambient temperature. It is to be noted that the MoEF&CC has notified the standards for the stone crushers that the suspended particulate matter (measured between three metres and ten metres from any processes equipment of stone crushing unit shall not exceed 600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than 600 $\mu\text{g}/\text{m}^3$.

NEERI in the study report 1998 conducted in stone crushing units in Pammal made one of the recommendations that the stone crushers should be located only near the quarries. The consideration for this recommendation being the cluster of stone crushers nearby the stone quarry site will reduce the transportation, vehicle movement which ultimately reduces the air pollution. When the crushers are in cluster, they can develop green belt jointly, use common approach road, watering of roads etc.,

Due to boom in infrastructure sector especially roads, highways, and buildings, several stone crushing units are coming-up. If 1KM distance from crusher to crusher is insisted, then at the quarry site one crusher can only be permitted and

other crushers have to move to far-away places from quarry site posing difficulties in finding a suitable site, due to the present urbanization, land use pattern and public awareness.

While reviewing the distance criteria prescribed by other States, it is found that other than Kerala and Assam no other State prescribed distance criteria for crusher to crusher. Whereas Kerala has fixed 100 metres and Assam has fixed 300 metres from crusher to crusher. Telangana SPCB states that stone crushers shall preferably be located near the quarries.

Considering the need to balance infrastructure requirements and economic growth with environmental protection and keeping in view the availability of advanced pollution control technologies and capability of units to deploy them to meet the SPM levels of $600 \mu\text{g}/\text{m}^3$, it is recommended that the minimum distance of 1 KM between New / Proposed crushers as stipulated in B.P. MS No. 4 dated 02.07.2004 may be dispensed with.

In view of the above reasons, the Board has dispensed off the minimum distance of 1 KM between New / Proposed crushers as prescribed in the B.P Ms No. 4 dated 2.7.2004, subject to compliance of pollution control measures by the stone crushing units. Further, it is submitted that the Board will review the performance of installation and operation of air pollution control measures and the compliance of standards by the stone crushing units after one year.

91

Under the above circumstances, it is humbly prayed that this Hon'ble Court may be pleased to pass such further or other orders as this Hon'ble Court may deem fit and proper in the facts and circumstances of this case and thus render justice.

BEFORE ME.

Solemnly affirmed at Chennai
on this day of September, 2019
and signed his name in my presence.

Advocate

215 (92)

IN THE HIGH COURT OF JUDICATURE AT MADRAS
(Special Original Jurisdiction)

W.P. No. 26786 of 2019

E.V.Sampath,
S/o. Varadhan,
No. 1/113, BajanaiKovil Street,
Erumaiyur, Chennai - 600 044.

... Petitioner

Versus

Tamil Nadu Pollution Control Board,
Rep. by its Member Secretary,
76, Mount Salai,
Guindy, Chennai - 600 032.

.... Respondent

AFFIDAVIT FILED ON BEHALF OF THE RESPONDENT

I, R.Ramasubbu, son of Thiru.V.Ramasamy, aged about, 57 years having office at No.76, Anna Salai, Guindy, Chennai-32, do hereby solemnly affirm and sincerely state as follows:-

1. I state that I am the Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board (Board), Chennai and as such I am well acquainted with the facts and circumstances of the case from available records. I am filing this Affidavit on behalf of the Respondent in my official capacity and I am authorized to do so.
2. I humbly submit that the above main Writ Petition has been filed seeking the following relief:-

"to issue a WRIT OF CERTIORARI or any other writ or order or direction in the nature of writ, calling for the records of the respondent relating to the proceeding passed in the B.P. No. 21 dated 31.07.2019 in so far as it related to the condition No. 1 i.e. "The minimum distance of 1 km between new / proposed crushers as prescribed in the B.P. Ms No. 4 dated 2.7.2004 is dispensed off. This relaxation is also applicable to the existing stone crushers and the M.Sand units", quash the same as illegal and arbitrary..."

93

3. I humbly state that this Hon'ble Court has granted an order of Interim Stay of the impugned order in B.P. No. 21 dated 31.07.2019 on 06.09.2019. I hereby pray that the Counter Affidavit filed by this Respondent in the above Writ Petition and Affidavit filed in support of the Vacate Stay Petition in WMP No. 29648 of 2019 may be read as part and parcel of this affidavit.

4. I submit that due to scarcity of river sand in the State and since indiscriminate mining of sand affects the river eco system and lowers the ground water table, the State Government is now encouraging the use of M-Sand (manufactured sand) in construction activities in place of river sand. In order to regulate the activities of M-Sand units, the Board vide B.P. No. 26 dated 30.07.2018 has issued guidelines for M-Sand units.

5. I humbly submit that considering latest development in pollution control technologies, the stringent emission standard, the present soaring demand for construction materials and the difficulties faced by the entrepreneurs to find suitable site to locate the stone crushers, the Board vide B.P. No. 8 dated 05.03.2019 issued certain guidelines for the existing consented stone crushing units.

6. I humbly submit that due to boom in infrastructure sector especially, roads, highways, and buildings, several stone crushing units are coming-up. If 1KM distance from crusher to crusher is insisted, then at the quarry site one crusher can only be permitted and other crushers have to move to far-away places from quarry site posing difficulties in finding a suitable site, due to the present urbanization, land use pattern and public awareness and moreover, it would expand the area of cluster of stone crushing units.

7. I humbly submit that while reviewing the distance criteria prescribed by other States, it is found that other than Kerala and Assam no other State has prescribed distance criteria between two crushers. The state of Kerala has fixed 100 metres and the state of Assam has fixed 300 metres from crusher to crusher. The Telangana Pollution Control Board states that stone crushers shall preferably be located near the quarries.

8. I humbly submit that considering the need to balance infrastructure requirements and economic growth with environmental protection and keeping in view the availability of advanced pollution control technologies and capability of units to deploy them to meet the PM levels of $600 \mu\text{g}/\text{m}^3$ as prescribed by the Ministry of Environment and Forest and Climate Change (MoEF & CC), the minimum distance of 1 KM between New / Proposed crushers as stipulated in B.P. MS No. 4 dated 02.07.2004 was dispensed with in the impugned Board Proceedings, subject to compliance of pollution control measures by the stone crushing units.

9. I humbly submit that the following are the list of Stone Crusher/M Sands units in the State of Tamil Nadu, with its production capacity:

Sl.No	Description	Number/Quantity
a	Number of stone crushers located in Tamilnadu	2831 units
b	Total production capacity of stone jelly manufactured per month by these crushers	Blue Metal Jelly – 1,60,72,694.4 T/Month (One Crore Sixty Lakhs Seventy Two Thousand Six Hundred and Ninety Four POINT Four Tonnes/Month) In Average: 5677.39 T/M of Blue Metal Jelly Production per unit

95

c	Number of stone crushers installed with M-Sand	406 Units
d	Total production capacity of stone jelly and M-Sand manufactured per month by these crushers	<p>Blue Metal Jelly and M-Sand – 1,38,59,966 T/Month (One Crore Thirty Eight Lakhs Fifty Nine Thousand Nine Hundred and Sixty Six Tonnes/Month)</p> <p>In Average: 34,137.85 T/M of Blue Metal Jelly & M sand Production per unit</p>
e	Number of standalone M-Sand manufacture	100 Units
f	Total production capacity of standalone M-Sand manufacture per month by these crushers	<p>Standalone M-Sand – 12,20,230 T/Month (Twelve Lakhs Twenty Thousand Two Hundred and Thirty Tonnes/Month)</p> <p>In Average: 12,202.3 T/M of M sand Production per unit</p>
g	Details of APC measures installed by stone crushers with M-Sand	<ol style="list-style-type: none"> 1. Bunker – Water sprinklers 2. Jaw Crusher – G.I enclosure with water sprinklers. 3. Screens - G.I enclosure with water sprinklers. 4. Conveyor belt - G.I metal sheet with Water sprinklers. <p>Note: Recycling arrangement for wash water</p>

		<p>5. Vertical Shaft impactor (VSI) - Metal sheet covered with inbuilt Water sprinklers.</p> <p>6. Pro Wash – Inbuilt cyclone separator</p> <p>7. Metal Falling point - Tele chutes, Dust collection tank</p> <p>8. Loading and unloading section – Water sprinkling arrangements.</p>
	Significance of the APC measures	<p>Air Pollution Control Measures</p> <p>These Air Pollution Control Measures control dust emissions and surrounding green belt to control dust emissions</p>

10. I humbly submit that the following are the data regarding procurement of River sand, M-sand and Imported sand in the State of Tamil Nadu:

a	Total quantity of river sand quarried / excavated / sold out from the year 2003-2004 to 2019-2020	2,99,39,630 lorry loads of 2 units (1 unit=100 Cu.ft) (Two Crore Ninety Nine Lakhs Thirty nine Thousand Six Hundred and thirty lorry loads)
b	Total revenue cost to the Government due to sand excavation	Rs.1899.76 Crore (Rupees One Thousand Eight Hundred And Ninety Nine Crores Seventy Six Lakhs Only)

c	Total production capacity of M-Sand for which issued Products Approval Certificates	216 Crushed Stone sand Capacity 1,31,450 MT per Day
d	Imported Sand from Ports of VOC Port, Thoothukudi and Ennore and Kattupalli Ports during 2018-2020	4,66,740 Tonnes (51,860 lorry loads of 2 units) With sand value of Rs.10,549 lakhs

11. I humbly submit that ongoing/in pipe line projects in the State of Tamil Nadu as per the records of the Public Works Department are as follows:

Sl.No.	Projects	Total in numbers
a	On-going Government building/construction projects in the year 2020-2021	914
b	In pipe line Government building/construction projects in the year 2020-2021	693

12. I humbly submit that due to ban in excavating and sale of river sand in the State, it is essential to supply M-Sand to meet heavy demand/requirement in the State for the completion of above projects of the State Government and also various other projects of private sectors.

13. I humbly submit that introduction of M-Sand in the State, has resulted in reduced excavation of river sand and river and its ecology is being protected. Due to the present interim order, almost all the projects of public interest like roads, bridges, community centres, hospitals, etc., have come to standstill.

14. I humbly submit that this Respondent is put to severe loss and hardship and hence, it is just and necessary to vacate the interim order of stay against the impugned order in B.P. No. 21 dated 31.07.2019 in W.M.P. No. 26175 of 2019 in W.P.No.26786 of 2019.

Under these circumstances, it is prayed that this Hon'ble Court may be pleased to accept this affidavit on file and vacate the interim order of stay dated 06.09.2019 granted in W.M.P. No. 26175 of 2019 in W.P.No.26786 of 2019 and pass such further order or orders as this Hon'ble Court may deem fit and proper in the circumstances of the case and thus render justice.


JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMILNADU POLLUTION CONTROL BOARD
76, MOUNT SALAI, GUINDY,
CHENNAI - 600 032.

Solemnly affirmed at Chennai }
this the ____ day of June, 2020 }
and signed his name in my presence }

BEFORE ME

ADVOCATE: CHENNAI

21/21

13. The first part of the report is devoted to a description of the general situation of the country and the position of the various provinces. It is followed by a detailed account of the political and administrative organization of the country.

14. The second part of the report is devoted to a description of the economic situation of the country. It is followed by a detailed account of the various industries and the position of the different classes of the population.

15. The third part of the report is devoted to a description of the social situation of the country. It is followed by a detailed account of the various social classes and the position of the different groups of the population.

16. The fourth part of the report is devoted to a description of the military situation of the country. It is followed by a detailed account of the various military forces and the position of the different branches of the service.

DFA

1

325

99 128

IN THE HIGH COURT OF JUDICATURE AT MADRAS
(SPECIAL ORIGINAL JURISDICTION)
W.P.No.26786 of 2019

E.V.Samapth,
S/o. Varadhan,
No.1/113, Bajanai Kovil Street,
Erumaiyur,
Chennai – 600 044.

...Petitioner

Vs

Tamil Nadu Pollution Control Board,
Rep by its Member Secretary,
No.76, Anna Salai, Guindy,
Chennai- 600032.

...Respondent

ADDITIONAL AFFIDAVIT FILED ON BEHALF OF THE 1ST RESPONDENT
-TAMIL NADU POLLUTION CONTROL BOARD

I, G. Gopalakrishnan, S/o. Thiru V. Gandhi, Hindu, aged about 58 years, having office at 76, Mount Salai, Guindy, Chennai-600 032 do hereby solemnly affirm and sincerely state as follows:

I am the Joint Chief Environmental Engineer of the Tamil Nadu Pollution Board and as such I am well acquainted with the facts and circumstances of the case and I am authorized to file this counter affidavit on behalf of the 1st Respondent-TNPCB.

2) It is respectfully submitted that, the present writ has been filed by the petitioners herein seeking the following relief:

“To issue a WRIT of CERTITORARI or any other writ or order or direction in the nature of writ, calling for the records of the respondent relating to the proceeding passed in the B.P.No.21 dated 31.07.2019 in so far as it related to the condition No.1 i.e “The minimum distance of 1 km between new/proposed crushers as prescribed in the B.P.Ms No. 4 dated: 2.7.2004 is dispensed off. This relaxation is also applicable to the existing stone crushers and the M.Sand units”, quash the same as illegal and arbitrary..”

100

3) It is respectfully submitted that an interim stay was granted by the Hon'ble High Court of Madras on 06.09.2019. I hereby pray that the Counter affidavit filed by this Respondent in the above writ petition and Affidavit filed in support of the Vacate Stay Petition in WMP No. 29648 of 2019 may be read as part & parcel of this affidavit.

4) It is respectfully submitted that the Hon'ble High Court of Madras in its Order dt: 18.08.2020 in the WP No. 26786 of 2019 has ordered the following inter alia:

"5. We are inclined to pass a clarificatory order making it clear that such of those units which were in operation with valid consent both for establishing and for crushing operation in currency and already in operation, the interim order passed will have no application. This is also for the reason that they being in operation already by indulging in crushing cannot be prevented by the interim order without even making them as parties. Their rights had already been accrued and were indulging in the crushing operation even prior to the interim order.

6. Thus, with the above said clarification, we are not inclined to modify the orders passed otherwise. We are also not inclined to undertake the exercise of fixing any distance rule by ourselves as that would involve the exercise which expert body based upon the data expected to do so. However, we make it clear that the State Government and the Tamil Nadu Pollution Control Board can undertake the said exercise in the meanwhile so that appropriate final orders can be passed. Needless to state, such exercise is with respect to fixing any lesser distance rules instead of dispensing the said criteria in its entirety. We further make it clear that the clarification issued in favour of those units which were in operation at the time of obtaining the interim order shall not mean that they can extend the crushing capacity without the permission of the Court.

7. After the said exercise is done, liberty is given to learned Special Government Pleader and the learned counsel for the Board to make a mention before us for fixing a date for hearing the writ petition. Accordingly with the above clarification, the interim order already granted is extended until further orders"

5) It is respectfully submitted that the in view of the Hon'ble High Court Order dt: 18.08.2020, the following action has been taken by the Board:

- In order to carryout scientific study to review the distance criteria of the existing and new stone crushers, a meeting was held with NEERI on 24.06.2020. Based on that, the NEERI vide letter dated: 30.06.2020 has submitted proposal to the Board titled "Assessment of Dust emissions from Stone Crushing Industries and Distance Criteria in the State of Tamil Nadu" at a total project cost not exceeding Rs.40 Lakhs. The proposal was placed before the Board and the Board in Resolution No. 281-2-9 has resolved to approve the proposal for issue of work order to the NEERI, Chennai and before issuing work order, approval shall be obtained from the Government under Section 16 (bb) of Tamil Nadu Transparency in Tenders Act, 1998 for the single source service vide B.P.no.36 dated 12.08.2020.
 - Therefore, the Government was requested to constitute a Committee under Section 16 (bb) of Tamil Nadu Transparency in Tenders Act, 1998 for selecting NEERI , Chennai for the Assessment of Dust emissions from Stone Crushing Industries and Distance Criteria in the State of Tamil Nadu" at a total project cost not exceeding Rs.40 Lakhs vide letter dated: 24.11.2020.
 - The Government vide G.O.(Rt) No. 540 E&F Dept (EC.2) dt: 21.12.2020 has constituted a Committee under Section 16 (bb) of Tamil Nadu Transparency in Tenders Act, 1998 to examine the proposal to select NEERI , Chennai for the Assessment of Dust emissions from Stone Crushing Industries and Distance Criteria in the State of Tamil Nadu.
 - The Committee meeting was held on 19.01.2021 and the Committee has decided to entrust the work on Assessment of Dust emissions from Stone Crushing Industries and Distance Criteria in the State of Tamil Nadu to NEERI, Chennai.
 - Based on the minutes of the meeting, the Government was requested to issue G.O to award the work to NEERI, Chennai under Section 16 (bb) of Tamil Nadu Transparency in Tenders Act, 1998 vide letter dated: 09.02.2021. The G.O is yet to be received.
- 6) It is respectfully submitted that 48 number of Stone Crushing units have been issued with Consent to Establish (New, Expansion) between the period of issue of B.P.No.21 dated 31.07.2019 to the date of stay issued on 06.09.2019. These units have invested & established as per the CTE order issued by the Board and are applying for Consent to operate of the Board. Since there is

102

order of stay granted by the Hon'ble High Court, the Board is rejecting the Consent to Operate to these units.

- 7) It is respectfully submitted that also the existing Stone Crushing units have applied for expansion and the same are rejected by the Board Since there is order of stay granted by the Hon'ble High Court
- 8) It is respectfully submitted that aggrieved by rejection order of the Board, these units are preferring appeal before the Hon'ble Appellate Authority.
- 9) It is humbly requested therefore the Hon'ble Court may please be clarify to permit the processing & issue of Consent to Operate for which the CTE was issued by the Board before the interim stay granted i.e before 06.09.2019 and CTE (expansion) for existing units.

In the above mentioned circumstances, it is humbly prayed that this Hon'ble Court may be pleased to pass such other order or orders as this Hon'ble Court may deem fit and necessary in the circumstances of the case and thereby render justice.

[Signature]
DM
2/12/21

[Signature]
AEE
31/3/21

[Signature]
JCEE/M(L)
2/2

[Signature]
M.S
2/2

[Signature]
CHAIRMAN
2/2

BEFORE ME

Solemnly affirmed at Chennai
on this the day of March 2021
and signed his name in my presence

IN THE HIGH COURT OF JUDICATURE AT MADRAS

(Special Original Jurisdiction)

W.P.No. 26786 of 2019

E.V.Sampath,
S/o. Varadhan,
No. 1/113, Bajanai Kovil Street,
Erumaiyur, Chennai – 600 044.

... Petitioner

-Vs-

Tamil Nadu Pollution Control Board,
Rep. by its Member Secretary,
76, Mount Salai,
Guindy, Chennai – 600 032.

.... Respondent

REPORT OF THE RESPONDENT TAMIL NADU POLLUTION CONTROL BOARD

I, R.Rajamanickam son of Thiru P.M.Ramasamy, aged about 57 years, having office at No.76, Anna Salai, Guindy, Chennai-32, do hereby solemnly affirm and sincerely state as follows:-

1. I am the Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board, Chennai and I am filing this status report on behalf of Respondent Board and as such I am well acquainted with the facts of the case as per records.

2. It is respectfully submitted that this Hon'ble Court in its order dated 10.08.2020 *inter alia* mentioned that, "(6) Thus, with the above said clarification, we are not inclined to undertake the exercise of fixing any distance rules by ourselves as that would involve the exercise which expert body based upon the data expected to do so. However, we make it clear that the State Government and the Tamil Nadu Pollution Control Board can undertake the said exercise in the meanwhile so that appropriate final orders can be passed. Needless to state, such exercise is with respect to fixing any lesser distance rules instead of dispensing the said criteria in its entirety....".

3. It is respectfully submitted that this Hon'ble Court in its order dated 19.07.2021 *inter alia* mentioned that, "the TNPCB will seek expert opinion and the future course of

R. Raj 15/9/2024
JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMILNADU POLLUTION CONTROL BOARD
76, MOUNT SALAI, GUINDY,
CHENNAI - 600 032.

12/13

action pertaining to stone-crushing units to be adopted by TNPCB will be strictly in accordance with such expert opinion received..."

4. It is respectively submitted that the Government vide G.O. (D) No. 115 Environment, Climate Change and Forest Department dated 30.07.2021 have issued orders permitting the Tamil Nadu Pollution Control Board to award the work to National Environmental Engineering Research Institute (NEERI), Chennai for conducting the study titled 'Assessment of Dust Emissions from Stone Crushing Industries and Distance criteria in the State of Tamil Nadu' at a total cost of Rs. 40,00,000/- (Rupees Forty Lakhs only). Based on that, the Board vide Proceeding No. TNPCB/T11/F.4792/2019, dated 11.08.2021 has issued work order along with a part payment of Rs. 28,32,000/- to NEERI to carry out the study. The project duration is six months. In this regard, TNPCB has convened a meeting with NEERI on 09.09.2021 and finalized the study area. Based on that the NEERI is in the process of carrying out the field survey.

Under the above circumstances, it is humbly prayed that this Hon'ble Court may be pleased to pass such further or other orders as this Hon'ble Court may deem fit and proper in the facts and circumstances of this case and thus render justice.

R. Kumar 15/9/2021
JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMILNADU POLLUTION CONTROL BOARD
76, MOUNT SALAI, GUINDY,
CHENNAI - 600 032.

Solemnly affirmed at Chennai
on this 15th day of September, 2021
and signed his name in my presence.

BEFORE ME.

Advocate

**IN THE HIGH COURT OF
JUDICATURE AT MADRAS
(Special Original Jurisdiction)**

W.P. No. 26786 of 2019

**REPORT OF THE RESPONDENT TAMIL
NADU POLLUTION CONTROL BOARD**

**Advocate for Respondent:
Ms. Shanmugavalli Sekar
Board Standing Counsel**

Dated: .09.2021

197

do so. However, we make it clear that the State Government and the Tamil Nadu Pollution Control Board can undertake the said exercise in the meanwhile so that appropriate final orders can be passed. Needless to state, such exercise is with respect to fixing any lesser distance rules instead of dispensing the said criteria in its entirety....”.

3. It is respectfully submitted that this Hon'ble Court in its order dated 19.07.2021 *inter alia* mentioned that, “the TNPCB will seek expert opinion and the future course of action pertaining to stone-crushing units to be adopted by TNPCB will be strictly in accordance with such expert opinion received...”

4. It is respectfully submitted that the TNPCB vide Proceeding No.: TNPCB/T1/F.4792/2019 dated: 11.08.2021 has issued work order to National Environmental Engineering Research Institute (NEERI), Chennai to carryout a study titled “Assessment of Dust Emission from stone crushing industries and Distance Criteria in the State of Tamil Nadu”. The project duration is six months.

5. It is respectfully submitted that the Hon'ble high Court vide its order dated: 20.09.2021 has mentioned the following *inter alia* that “The time sought by TNPCB on the basis of the representation of NEERI appears to be far too long. While NEERI is permitted to furnish its detailed, final report within six months from date, a preliminary report with possible *prima facie* findings should be made available towards the end of October, 2021. This is to ensure that those entities which may have substantially invested in machines and equipment in contemplation of the imminent commencement of the quarrying business, may then to be allowed to

commence the business if a prima facie view is expressed in support of the recommendations of July 31, 2019 adopted by TNPCB which have been stayed in course of the present proceedings."

6. It is respectively submitted that the NEERI, Chennai submitted its interim report on 29.11.2021 for conducting the study 'Assessment of Dust Emissions from Stone Crushing Industries and Distance criteria in the State of Tamil Nadu', wherein it is reported that the study area is selected i.e Stone Crushing Industries, Trisulam. Based on the micro-meteorological data recorded at Stone Crushing Industries, Trisulam using network design criteria, 12 Ambient Air Quality Monitoring locations were selected at stone crushing area and 8 locations at surrounding residential area using network design criteria for the purpose of carrying out ambient air quality at source (stone crushing industries) and its surrounding areas (residential). Further, 'Weather' station was also installed at Stone Crushing Industries, Trisulam to monitor the meteorological datas. Also, it is reported that the monitoring and analysis of SPM, RSPM and PM_{2.5} are in progress and the results shall be presented in the next report. As per the work order issued, the NEERI should submit the final report by February 2022.

Under the above circumstances, it is humbly prayed that this Hon'ble Court may be pleased to pass such further or other orders as this Hon'ble Court may deem fit and proper in the facts and circumstances of this case and thus render justice.

Solemnly affirmed at Chennai
on this day of December, 2021
and signed his name in my presence.

BEFORE ME.

Advocate

IN THE HIGH COURT OF JUDICATURE AT MADRAS**(Special Original Jurisdiction)****W.P.No. 26786 of 2019**

E.V.Sampath,
S/o. Varadhan,
No. 1/113, Bajanai Kovil Street,
Erumaiyur, Chennai – 600 044.

... Petitioner**-Vs-**

Tamil Nadu Pollution Control Board,
Rep. by its Member Secretary,
76, Mount Salai,
Guindy, Chennai – 600 032.

.... Respondent**REPORT OF THE RESPONDENT TAMIL NADU POLLUTION CONTROL BOARD**

I, R.Rajamanickam son of Thiru P.M.Ramasamy, aged about 57 years, having office at No.76, Anna Salai, Guindy, Chennai-32, do hereby solemnly affirm and sincerely state as follows:-

1. I am the Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board, Chennai and I am filing this status report on behalf of Respondent Board and as such I am well acquainted with the facts of the case as per records.

2. It is respectfully submitted that this Hon'ble Court in its order dated 10.08.2020 *interalia* mentioned that, "(6) Thus, with the above said clarification, we are not inclined to undertake the exercise of fixing any distance rules by ourselves as that would involve the exercise which expert body based upon the data expected to

do so. However, we make it clear that the State Government and the Tamil Nadu Pollution Control Board can undertake the said exercise in the meanwhile so that appropriate final orders can be passed. Needless to state, such exercise is with respect to fixing any lesser distance rules instead of dispensing the said criteria in its entirety....”.

3. It is respectfully submitted that this Hon'ble Court in its order dated 19.07.2021 *inter alia* mentioned that, “the TNPCB will seek expert opinion and the future course of action pertaining to stone-crushing units to be adopted by TNPCB will be strictly in accordance with such expert opinion received...”

4. It is respectfully submitted that the TNPCB vide Proceeding No.: TNPCB/T1/F.4792/2019 dated: 11.08.2021 has issued work order to National Environmental Engineering Research Institute (NEERI), Chennai to carryout a study titled “Assessment of Dust Emission from stone crushing industries and Distance Criteria in the State of Tamil Nadu”. The project duration is six months.

5. It is respectfully submitted that the Hon'ble high Court vide its order dated: 20.09.2021 has mentioned the following *inter-alia* that “The time sought by TNPCB on the basis of the representation of NEERI appears to be far too long. While NEERI is permitted to furnish its detailed, final report within six months from date, a preliminary report with possible *prima facie* findings should be made available towards the end of October, 2021. This is to ensure that those entities which may have substantially invested in machines and equipment in contemplation of the imminent commencement of the quarrying business, may then to be allowed to

commence the business if a prima facie view is expressed in support of the recommendations of July 31, 2019 adopted by TNPCB which have been stayed in course of the present proceedings."

6. It is respectively submitted that on 4th March 2022, the CSIR-NEERI, Chennai have submitted DRAFT REPORT titled '*Assessment of Dust Emissions from Stone Crushing Industries and Distance criteria in the State of Tamil Nadu*'.

7. It is respectfully submitted that from the Draft Report, the following are submitted.

- (i) As per the objective and scope of the study, the NEERI have identified two clusters of stone crushers located, one in the coastal area (i.e) Trisoolam in Chengalpattu district and another in inland area (i.e) Kodangipallayam, Tiruppur district.
- (ii) In Trisoolam cluster, there are 58 stone crushers. Out of which thirteen stone crushers were selected for source sampling and eight locations in surrounding area of the cluster were selected for ambient air quality sampling. The parameters selected for the study are Total suspended particulate matter (TSPM), Respirable suspended particulate matter (RSPM-PM₁₀) and Particulate matter 2.5 (PM_{2.5}) which are the predominant pollutants from the stone crushing activities. Sampling was done for 20 days in the month of December 2021.
- (iii) Similarly in the Kodangipallayam cluster, there are 46 stone cursers. Out of which fifteen stone crushers were selected for source sampling and fifteen

203

locations in surrounding area of the cluster were selected for ambient air quality sampling. The parameters selected for the study are TSPM, RSPM (PM₁₀) and PM_{2.5}. Sampling was done for 20 days in the month of January 2022.

8. It is respectfully submitted that in the DRAFT REPORT the NEERI have made various recommendations on dust control measures, green belt development and minimum distance criteria from crusher to crusher etc. The TNPCB has requested the NEERI to the furnish the FINAL REPORT at the earliest. Once the FINAL REPORT is received, the findings and the recommendations of the NEERI will be submitted to this Hon'ble Court.

Under the above circumstances, it is humbly prayed that this Hon'ble Court may be pleased to pass such further or other orders as this Hon'ble Court may deem fit and proper in the facts and circumstances of this case and thus render justice.

Solemnly affirmed at Chennai
on this day of March, 2022
and signed his name in my presence.

BEFORE ME.

Advocate

IN THE HIGH COURT OF JUDICATURE AT MADRAS

(Special Original Jurisdiction)

W.P.No. 26786 of 2019

E.V.Sampath,
S/o. Varadhan,
No. 1/113, Bajanai Kovil Street,
Erumaiyur, Chennai – 600 044.

... Petitioner

-Vs-

Tamil Nadu Pollution Control Board,
Rep. by its Member Secretary,
76, Mount Salai,
Guindy, Chennai – 600 032.

... Respondent

**REPORT OF THE RESPONDENT TAMIL NADU POLLUTION
CONTROL BOARD**

I, R.Rajamanickam son of P.M.Ramasamy, aged about 57 years, having office at No.76, Anna Salai, Guindy, Chennai-32, do hereby solemnly affirm and sincerely state as follows:-

1. I am the Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board, Chennai and I am filing this report on behalf of Respondent Board and as such I am well acquainted with the facts of the case as per records.

205

2. It is respectfully submitted that the petitioner has prayer to quash the impugned proceeding of the respondent Board in B.P.No. 21 dated 31.07.2019 in so far as it relates to relaxing the minimum distance of 1 KM between the new / proposed crushers as prescribed in B.P. Ms. No. 4, dated 02.07.2004.

3. It is respectfully submitted that this Hon'ble Court in its order dated 06.09.2019 ordered *interalia* that, "*there shall be an order of interim stay of operation of the impugned order in B.P. MS. No. 21 dated 31.07.2019, till 04.10.2019*". The interim stay is extended from time to time and till date the stay is in force.

4. It is respectfully submitted that this Hon'ble Court in its order dated 10.08.2020 *interalia* mentioned that, "*(6) Thus, with the above said clarification, we are not inclined to undertake the exercise of fixing any distance rules by ourselves as that would involve the exercise which expert body based upon the data expected to do so. However, we make it clear that the State Government and the Tamil Nadu Pollution Control Board can undertake the said exercise in the meanwhile so that appropriate final orders can be passed. Needless to state, such exercise is with respect to fixing any lesser distance rules instead of dispensing the said criteria in its entirety....*".

5. It is respectfully submitted that this Hon'ble Court in its order dated 19.07.2021 *interalia* mentioned that, "*the TNPCB will seek expert opinion and the future course of action pertaining to stone-crushing units to be adopted by TNPCB will be strictly in accordance with such expert opinion received...*"

6. It is respectfully submitted that the TNPCB vide Proceeding No.: TNPCB/T1/F.4792/2019 dated:11.08.2021 has issued work order to CSIR National Environmental Engineering Research Institute (NEERI), Chennai to carryout a study titled "*Assessment of Dust Emission from stone crushing industries and Distance Criteria in the State of Tamil Nadu*". The Terms of Reference for the study is as follows:

- (i) Review the distance criteria between new / proposed / existing stone crushers so as to meet the source and ambient air quality standards for the stone crushing industries and to avoid dust pollution influence of one over the other.
- (ii) Review the minimum distance to be maintained from any National Highways or State Highways or inhabited site or places of public and religious importance.
- (iii) Identify the notified areas in Tamil Nadu and furnish a report so as to examine the relaxing of distance criteria of 1 kilometer from crusher to crusher of those identified notified areas only, where the stone crushers can be permitted as clusters with adequate pollution control measures.
- (iv) Dust control measures, green belt development, etc. to be provided by the crushers.
- (v) Recommendation shall include the pollution control measures for the single crusher as well as the cluster of crushers.
- (vi) The project duration is six months.

207

7. It is respectively submitted that in June 2022, the CSIR-NEERI, Chennai have submitted the FINAL REPORT titled '*Assessment of Dust Emissions from Stone Crushing Industries and Distance criteria in the State of Tamil Nadu*'. Copy of the report is submitted as Annexure. From the Final Report the following are submitted.

8. It is respectfully submitted that the objective of CSIR-NEERI study is to assess the dust pollution concentration and its fallout in and around the work place and in the ambient air and delineation of control measures and review of the distance criteria to arrest the dust pollution within permissible limits.

As per the objective and scope of the study, two locations are identified (i.e) one in coastal area and another in inland area to access the dispersion pattern of dust pollution from stone crushing units considering the meteorological conditions. Accordingly, Tirusulam in Chengalpattu district is selected for coastal area monitoring and Kodangipalayam in Palladam taluk, Tiruppur district is selected for inland area monitoring.

Tirusulam area is at a distance of 20 km to the southwest of Chennai city. The study area covered 57 crushers, each with a daily crushing capacity of about 50Tons operating very close to each other by the side of a quarry. The extent of the area is about 10 km² for stone crushing operation.

In Kodangipalayam area, there are 29 stone crushing units are in operation with daily crushing capacity varying from 50 Tons to 300

Tons. All the crushers are operating for six days in a week except Sunday with operating time of 9:00 am to 6:00 pm and is considered as one shift.

Ambient air quality survey was carried out in 21 locations in Tirusulam area and in 30 locations in Kodangipalayam area by engaging High Volume Samplers. The level of Total Suspended Particulate Matter (TSPM), Respirable Suspended Particulate Matter 10 (PM₁₀) and Particulate Matter 2.5 (PM_{2.5}) were monitored at different distances from the source of pollution. Using the survey results as input parameters, mathematical model 'AERMOD' were run for different scenarios and safe distance are predicted. The safe distance refers to the impact zone which is demarcated by drawing isopleths of concentration of 200µg/m³ for TSPM and 100µg/m³ for PM₁₀ and 60 µg/m³ for PM_{2.5} which are the standard limit set by the CPCB

9. It is respectfully submitted that with the detailed scientific field study and mathematical model prediction, the CSIR-NEERI have made recommendations for stone crusher clusters in coastal area (Tirusulam) and inland area (Kodangipalayam). With respect to the distance between from one stone crusher to another stone crusher, the NEERI have mentioned that

“The distance from stone crushing industry to stone crushing industry as mentioned in the TNPCB Proceeding (BP No. 4, dated 02.07.2004) is not important & significant and can be withdrawn considering the following facts:

- 209
- (i) *Be specifying inter distance between the stone crushing industries shall lead to the dispersal of stone crushing industries across in the state of Tamil Nadu resulting into spreading of dust pollutants.*
 - (ii) *Inter distance between stone crushing industries is not as significant and governing criteria compared to specifying distance from stone crushing industries to habitation areas (approved residences/inhabited site, Educational Institutions, Places of public offices and religious importance, State/National Highways etc.)*
 - (iii) *Specifying inter distance between stone crushing industries as a limiting criteria is a way against cluster of industries, which is not preferable leading to spread and increase in the dust pollutants*
 - (iv) *Considering the above, the minimum distance between crusher to crusher is dispensed so as to avoid mushrooming of single clusters over a larger area and paving way for favorable condition for cluster of crushers in a compact area closed to each other, their by reducing the minimum distance between the crushers, confining the pollution levels within a smaller area so*
 - (v) *that prevention measures (control/mitigation) can be adopted more effectively”.*

10. It is respectfully submitted that the CSIR-NEERI have made the following recommendations as per the TOR for the stone crushing units in the State of Tamil Nadu.

1. *The stone crushing units shall provide for dust containment and dust suppression system as recommended by the National Productivity Council. They shall provide green belt of 5 to 10m width at the periphery for meeting the national ambient air quality standards in terms of PM_{10} and $PM_{2.5}$.*
2. *The stone crushing units shall provide*
 - (i) *Evergreen trees like Neem, Ashoka, Tamarind and other local trees belonging to the family cesalpinaceae like Gul Mohar and Fire of the Forest may be planted all around the crushing area. Similarly trees may be planted along the roads to arrest the spread of particulate arising from vehicular movement inside the area.*
 - (ii) *Good house-keeping by way of spraying water at the vulnerable points/locations to arrest the spread of dust particles should be practiced.*
 - (iii) *Paving of roads should be adopted*
 - (iv) *Fine powder should be collected at the ground level.*
 - (v) *The fine powder should be disposed off periodically*
 - (vi) *Conveyor chute should be provided at the discharge points*

- (vii) *Drop height for conveyor operations should be kept at the minimum*
- (viii) *Covering of fine dust with tarpaulin during storage and transport to final destination should be practiced.*
- (ix) *Wind breaking structures (wall or net) preferably adjustable, moveable wind breaking nets based on the topography and the prevailing meteorological conditions shall be provided.*
- (x) *Ambient air quality monitoring with respect to PM_{10} and $PM_{2.5}$ should be carried out in both the downwind and upwind directions during summer.*
- (xi) *As an occupational safety measures, all the workers should be provided with nose masks to avoid dust entering the respiratory system.*
3. *A minimum 500m safe distance is to be maintained from any National Highways or State Highways or inhabited site or educational institutions / and other public offices and places of religious importance so as to avoid influence of dust emission from the stone crushing units.*
4. *The minimum 1 KM distance between one stone crushing unit to another stone crushing unit shall be dispensed so as to avoid mushrooming of single crushers over a larger area. This will pave the way for favorable condition for cluster of crushers in a compact area close to each other, their by reducing the*

minimum distance between the crushers, confining the pollution levels within a smaller area so that prevention measures (control/mitigation) can be adopted more effectively.

9. It is respectfully submitted that at present, while granting consent to establish (CTE), TNPCB verifies the distance criteria and imposes conditions for air pollution control measures as per the existing guidelines. After compliance of CTE conditions, the Board grants consent to operate (CTO) to the units. The recommendations now made by the CSIR-NEERI for air pollution control, will be considered by the Board while granting CTE to new / proposed stone crushing units. The existing consented stone crushers will also be addressed to improve their air pollution control measures as suggested by the NEERI.

With respect to the distance criteria, (i) dispensing of 1KM distance from crusher to crusher and (ii) maintaining minimum 500 metres distance from stone crusher to National Highways or State Highways or inhabited site or educational institutions / and other public offices and places of religious importance, the recommendations made by the NEERI is accepted by the Board.

213

Under the above circumstances, it is humbly prayed that this Hon'ble Court may be pleased to pass such further or other orders as this Hon'ble Court may deem fit and proper in the facts and circumstances of this case and thus render justice.

Solemnly affirmed at Chennai
on this day of June, 2022
and signed his name in my presence.

BEFORE ME. 



IN THE HIGH COURT OF JUDICATURE AT MADRAS
(Special Original Jurisdiction)
W.P.No.26786 of 2019

E.V.Samapth,
S/o. Varadhan,
No.1/113, BajanaiKovil Street,
Erumaiyur,
Chennai – 600 044

...Petitioner

Vs

Tamil Nadu Pollution Control Board,
Rep by its Member Secretary,
No.76, Anna Salai, Guindy,
Chennai- 600032.

...Respondent

REPLY OF THE TAMIL NADU POLLUTION CONTROL BOARD ON THE
OBJECTIONS OF THE PETITIONER TO THE ASSESSMENT REPORT OF NEERI

I, R. Sarasavani, Daughter of Thiru. J. Raghavan, Hindu, aged about 58 years having office at No.76, Mount Salai, Guindy, Chennai 600 032 do hereby solemnly affirm and sincerely state as follows:

1. I am the Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board, Chennai and I am filing this report on behalf of Respondent Board and as such I am well acquainted with the facts of the case as per records.
2. It is respectfully submitted that the petitioner has prayer to quash the impugned proceeding of the respondent Board in B.P.No. 21 dated 31.07.2019 in so far as it relates to relaxing the minimum distance of 1 KM between the new / proposed crushers as prescribed in B.P. Ms. No. 4, dated 02.07.2004.
3. It is respectfully submitted that this Hon'ble Court in its order dated 06.09.2019 ordered *interalia* that, "*there shall be an order of interim stay of operation of the impugned order in B.P. MS. No. 21 dated 31.07.2019, till 04.10.2019*". The interim stay is extended from time to time and till date the stay is in force.

4. It is respectfully submitted that this Hon'ble Court in its order dated 19.07.2021 *interalia* mentioned that, "*the TNPCB will seek expert opinion and the future course of action pertaining to stone-crushing units to be adopted by TNPCB will be strictly in accordance with such expert opinion received...*"
5. It is respectfully submitted that the TNPCB vide Proceeding No.: TNPCB/T1/F.4792/2019 dated:11.08.2021 has issued work order to CSIR National Environmental Engineering Research Institute (NEERI), Chennai to carry out a study titled "*Assessment of Dust Emission from stone crushing industries and Distance Criteria in the State of Tamil Nadu*".
6. It is respectfully submitted that in June 2022, the CSIR-NEERI, Chennai have submitted the FINAL REPORT titled '*Assessment of Dust Emissions from Stone Crushing Industries and Distance criteria in the State of Tamil Nadu*' to the respondent Board and the same was submitted to the Hon'ble Court during June 2022.
7. It is respectfully submitted that the counter affidavit filed by the respondent Board during September 2019, the affidavit filed by the respondent during June 2020, the additional affidavit filed by the respondent during March 2021, the reports dated 15.09.2021, 07.12.2021, 07.03.2022 & 17.06.2022 filed by the respondent Board may please be taken in to consideration as part and parcel along with this reply filed by the respondent Board.
8. It is respectfully submitted that the petitioner has filed his objection on the final report of the CSIR-NEERI, Chennai titled "*Assessment of Dust Emissions from Stone Crushing Industries and Distance criteria*" on 15.04.2023, even though the above said report has already been filed before the Hon'ble High Court of Madras during June 2022.

9. It is respectively submitted that the respondent Board is hereby submitting its reply to the objection raised by the petitioner on the report of the CSIR-NEERI as follows

Para No.	Objection raised by the petitioner	Reply furnished
4.	DELAY IN ASSESSMENT	
	<p>➤ TNPCB addressed a letter on 03.05.2019 to CSIR-NEERI to furnish detailed scientific study and sought for its recommendation on the distance criteria and dust control measures. On 29.05.2019, CSIR-NEERI submitted a proposal for the same with project duration of 6 months. (Para 2, page 6 of impugned BP). Despite requesting time to conduct further assessment, the 1st respondent hurriedly issued the impugned BP for the reasons best known to them.</p>	<p>This respondent Board denied the averment of the petitioner made in the objection petition. The Board has not issued the impugned BP hurriedly. However the respondent Board was already in the process of reexamining the 1km distance from crusher to crusher in view of the latest development in pollution control technology and issued the BP by following the due process as follows.</p> <p>➤ Extensive use of river sand as fine aggregate in the construction works results in scarcity of river sand. Further, indiscriminate mining of sand affects the river eco system and lowers the ground water table. Therefore, the Government is now encouraging the use of M-Sand in construction in place of river sand.</p> <p>➤ M-sand is manufactured by crushing of blue metal jellies either in stone crushers as an extended facility or in standalone M- Sand units.</p>
	<p>➤ Even though interim orders were granted by this Hon'ble Court as early as on 05.09.2019, TNPCB had approached NEERI for detailed study only in the year 2021. (1.0 at page xvi of the report). NEERI submitted its final report in May, 2022 after a delay of 3 years</p>	

217

	<ul style="list-style-type: none">➤ Stone Crushers Associations have made representation with a request to waive the 1 KM distance from crusher to crusher so that the existing crushers can go for expansion to manufacture M-Sand in addition to the existing consented production of blue metal jellies and new crushers can be permitted so as to meet the demand for supply of blue metal and M-sand for construction activities,➤ In order to sort out the issue, after held discussion with Government, it was decided to re-examine the 1 KM distance criteria mentioned in the B.P Ms No. 4 dated 02.07.2004 in view of the latest development in pollution control technologies, the present demand for construction materials and difficulties faced by the entrepreneurs to find suitable site.➤ Therefore, the Board has issued B.P. No. 8 dated 05.03,2019 with following guidelines for the existing consented stone crushing units among others.<ol style="list-style-type: none">1. The existing consented stone crushing units shall be permitted to increase their production along with or without M-sand production unit, such units shall comply with all the norms as prescribed
--	--

in B.P. Ms. No. 4 dated 02.07.2004 (read with B.P. Ms. No. 55 dated 06.10.2005) except 1 KM distance criteria from crusher to crusher.

2. The stone crushing units shall meet Ambient Air Quality standards at all times. The suspended particulate matter (measured between three metres and ten metres from any processes equipment of stone crushing unit shall not exceed 600 microgram per cubic metre) from a controlled isolated as well as from a unit Located in a cluster should be less than 600pg/m3.

- In the above BP, the Board has also approved the proposal to re-examine the 1 KM distance criteria for the **new stone crushers** by conducting a study through a reputed institution like NEERI.
- The stone crushing units are now adopting latest technologies for dust suppression by spraying of fine water mist through special nozzles which suppress the particulate matter emission.
- Considering the above, the Board vide proceeding No. TNPCB/O&G/F4792/2019/ Stone Crusher / dated 07.03.2019 has

219

constituted a technical expert Committee comprising of officers from TNPCB, NEERI and NPC. After detailed study, the Committee has given the following recommendations

1. The minimum distance of 1 KM between New / Proposed crushers as prescribed in the B.P. Ms No.4 dated 02.07.2004 may be dispensed with.
2. The stone crushing units shall meet Ambient Air Quality standards at all times. The suspended particulate matter (measured between three metres and ten metres from any processes equipment of stone crushing unit shall not exceed 600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than 600 μ g/m³
3. The crushers may be encouraged to establish nearby quarry site so as to avoid transportation and to reduce air pollution.
4. A detailed scientific study may be taken-up again through a reputed technical institution like NEERI. Based on the detailed study the minimum distance to

be maintained from inhabited site, National Highway, State Highway, Places of public and religious importance may be decided. Until such time, the existing distance norms (500m from NH and SH, Habitations) as prescribed in B.P. Ms No.4 dated 02.07.2004 may be continued

- In this connection, the Board vide letter dated 3.05.2019, has addressed CSIR--NEERI, Taramani to furnish proposal to take-up the detailed scientific study and give its recommendations on the distance criteria and dust control measures to be provided by the stone crushers. The CSIR-NEERI vide letter dated 29.5.2019, has submitted a proposal to carry out a detailed study with project duration of 6 months.
- In the meantime, the Government has instructed to take a decision at the earliest on the 1KM distance criteria so as to permit the new stone crushers to meet the M-sand demand for the construction projects in the State.
- Accordingly, meeting was conducted with the Senior Officers of the Board on 28.5.2019 and arrived the following

221

decisions.

1. TNPCB has no power to notify the areas for establishing the stone crushers. The notification of land use shall be done by the competent authority (Le) CMDA and Director of Town and Country Planning.
2. With respect to relaxing the 1 KM distance from crusher to crusher, it is opined that the MoEF&CC, Gol has prescribed standards for the stone crushers in the Environment (Protection) Rules, 1986, as follows
3. Rule 3 of the E (P) Rules 1986, prescribe the Standards for emissions or discharge of environmental Pollutants [Schedule I to IV]. In schedule I, serial No.37, described the Standards for emission of Suspended Particulate Matter (SPM) which consists of two paras as follows
 - i. Implementation of the following Pollution Control measures:
 - a) Dust containment cum suppression system for the equipment.
 - b) Construction of wind breaking walls.
 - c) Construction of the metalled roads within the premises.
 - d) Regular cleaning and wetting of the ground within the premises.

e) Growing of a green belt along the periphery.

ii. Quantitative standard for SPM :

[measured between three meters and ten metres from any processes equipment of a stone crushing unit shall not exceed 600 microgrammes per cubic meter] from a controlled isolated as well as from a unit located in a cluster should be less than 600 mg/Nm³ [xxx....]

4. When the units meet the standard of suspended particulate matter 600 $\mu\text{g}/\text{m}^3$ in the ambient air at 10m from the process equipment, there will not be dust pollution influence of one over the other. To meet the above standards, the stone crushers shall provide adequate air pollution control measures.

5. Further, as per the existing guidelines, no new/proposed stone crushers should be located within 500 metres from any National Highways or State Highways or inhabited site or places of public and religious importance.

6. Therefore, considering the M-sand demand for which new stone crushers are to be

223

allowed and at the same time without compromising the environmental quality, the distance criteria of keeping minimum 1 KM distance between new/proposed stone may be dispensed.

7. The National Productivity Council has recommended the following air pollution control measures among others.
 - i. Dust containment system comprises of building enclosures over the major dust emission sources so as to contain the dust within the housing.
 - ii. Paving of all the roads inside the crushing units and transport areas to avoid re-entrainment of dust into the atmosphere.
 - iii. Dust generation from material transfer points is quite substantial. Therefore dust suppression system shall be provided in these points. Dust suppression system, comprising of spraying of fine water mist through special nozzles. It should be carried out over the dust generation sources to suppress the dust cloud
8. The NEERI has recommended the detailed air pollution control measures to be

provided in the stone crushers.

9. The TNPCB has issued circular memo about the air pollution control measures to be provided in detail in the stone crushers vide circular Memo No. 116/TNPCB/13086/2008/ Orange, dated 22.04.2008.
 10. With respect to 500m distance to be maintained from any National Highways or State Highways or inhabited site or places of public and religious importance, a detailed scientific study shall be taken-up through a reputed technical institution like NEERI. Based on the detailed study, the minimum distance to be maintained from inhabited site, National Highway, State Highway, Places of public and religious importance shall be decided. Until such time, the existing distance norms 500m as prescribed in BP Ms No.4 dated 02.07.2004 shall be continued.
- Considering all the above facts and figures, the Board has issued the BP No.21 dated 31.07.2019 based on the Board Resolution No. 278-1- 6 dated 22.7.2019 by relaxing 1KM distance criteria for the existing and new stone crushers in the state of Tamil Nadu as follows:

		<ul style="list-style-type: none">i. The minimum distance of 1 KM between New / Proposed crushers as prescribed in the B.P. Ms No.4 dated 02.07.2004 is dispensed off. This relaxation is also applicable to the existing stone crushers and the M-Sand units.ii. The stone crushing units shall meet Ambient Air Quality standards at all times. The suspended particulate matter (measured between three metres and ten metres from any process equipment of stone crushing unit shall not exceed 600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than 600pg/m3.iii. The crushers may be encouraged to establish nearby quarry site so as to avoid transportation and to reduce air pollution.iv. All the existing and the new crushers shall provide air pollution control measures as suggested by National Productivity Council, NEERI and Board circular dated 22.4.2008.v. The stone crushing units & M-Sand
--	--	--

		<p>units shall not store raw materials & products more than one month capacity and all the open storage should be properly covered with Tarpaulin to avoid dust emanation due to wind action.</p> <p>vi. No new / proposed stone crushers should be located within 500m from any National Highways or State Highways or inhabited site or educational institutions / and other public offices and places of religious importance,</p> <p>vii. The Board will review the performance of installation and operation of air pollution control measures and the compliance of standards by the stone crushing units after one year.</p> <p>In view of above reasons, this respondent Board denied the averment of the petitioner made in the objection petition stating that the respondent Board hurriedly issued the impugned BP.</p>
5.	Powers of TNPCB	
	<p>➤ Under the Environment Protection Rules, the State Pollution Control Board could not relax the standard in existence but could make the same more stringent. The same has been</p>	<p>➤ Rule 3 of the E (P) Rules 1986, prescribe the Standards for emissions or discharge of environmental Pollutants [Schedule I to IV]. In schedule I, serial No.37, described the Standards for emission of Suspended</p>

	<p>held in plethora of judgments both by the Hon'ble NGT as well as the Hon'ble Supreme Court [Akhil Bharat Goseva Sangh & Ors. Vs. State of AP & Other (2006) 4 SCC 162 (Para 38)</p>	<p>Particulate Matter (SPM) which consists of two paras as follows</p>
	<p>➤ Rule 3 of the E(P) Rules The Section 3 of the E(P) Rules describes the Standards for emissions or discharge of environmental Pollutants</p>	<p>1. Implementation of the following Pollution Control measures:</p> <ul style="list-style-type: none"> a) Dust containment cum suppression system for the equipment. b) Construction of wind breaking walls. c) Construction of the metalled roads within the premises. d) Regular cleaning and wetting the ground within the premises. e) Growing of a green belt along the periphery.
	<p>❖ (1) For the purpose of protecting and improving the quality of the environment and preventing and abating environmental pollution, the standards for emission or discharge of environmental pollutants from the industries, operations or processes shall be as specified in 2[Schedule I to IV].</p>	<p>ii. Quantitative standard for SPM : [measured between three meters and ten metres from any processes equipment of a stone crushing unit shall not exceed 600 microgrammes per cubic meter] from a controlled isolated as well as from a unit located in a cluster should be less than 500 mg/Nm³ [xxx....]</p> <p><i>However, in the above said Rule/Act itself does not specify any distance criteria to be maintained between crusher to crusher</i></p>
	<p>❖ (2) Notwithstanding anything contained in sub-rule (1),the Central Board or a State Board may specify more stringent standards from those provided in 3[Schedule I to IV] in respect of any specific industry, operation or process depending upon the</p>	<p>➤ The Honourable Supreme Court of India in</p>

	<p>quality of the recipient system and after recording reasons therefore in writing.</p>	<p>its order dated 25.4.1996 in the Civil Appeal No.10732/1995 restored the earlier Judgment of Honourable High Court of Madras and banned the operation of stone crushers and quarries within the radius of 500 meters of the residential area. {<i>not mentioned any distance criteria to be maintained between crusher to crusher</i>}</p>								
	<p>❖ [(3) The standards for emission or discharge of environmental pollutants specified under sub-rule (1) or sub-rule (2) shall be complied with by an industry, operation or process within a period of one year of being so specified.]</p>	<p>➤ The Board entrusted a study to National Environmental Engineering Research Institute (NEERI), Nagpur to assess the performance of air Pollution Control Measures provided by the stone crushing industries and to assess the dust emission from the industry and also to arrive at the optimum distance from the National / State Highways and from the Residential area. Based on the NEERI recommendations, Board has issued B.P.MS.No.4 Dated: 02.07.2004 with the following features among others.</p>								
	<p>❖ [(3A) (i) Notwithstanding anything contained in sub-rules (1) and (2), on and from the 1st day of January, 1994, emission or discharge of environmental pollutants from the 2[industries, operations or processes other than those industries, operations or processes for which standards have been specified in Schedule-I] shall not exceed the relevant parameters and standards specified in schedule VI.</p> <p>Provided that the State Boards may specify more stringent standards for the relevant parameters with</p>	<p>1. Criteria For Existing Stone Crushing Units : (As Recommended By NEERI)</p> <p>1.1 Distance Criteria</p> <table border="1" data-bbox="874 1688 1506 1892"> <thead> <tr> <th>Sl . No.</th> <th>Type of clusters</th> <th>Distance between crusher / cluster of crushers and</th> <th>Green belt area at the periphe</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Sl . No.	Type of clusters	Distance between crusher / cluster of crushers and	Green belt area at the periphe				
Sl . No.	Type of clusters	Distance between crusher / cluster of crushers and	Green belt area at the periphe							

respect to specific industry or locations after recording reasons therefore in writing.

❖ (ii) The State Board shall while enforcing the standards specified in Schedule VI follow the guidelines specified in Annexure I and II in that Schedule.]

❖ Schedule VI for specific industry (stone Crushing unit-11) deals with - "the suspended particulate matter measured between 3 meters and 10 meters from any process equipment of a stone crushing unit shall not exceed 600 micrograms per cubic metre."

		habitations / NH or SH	ry
1	Single crusher	50m	10m.
2	10 crushers	150m	30m
3	25 crushers	250m	50m
4	50 crushers	300m	100m

1.2 If the distance between two existing crushers is more than 100m, it will be considered as a single crusher. If the distance between the existing crusher boundaries is less than 100m, it will be considered as a cluster.

The NEERI has not recommended any distance criteria to be maintained between crusher to crusher in their report. however it recommends cluster and accordingly suggested required width of greenbelt to be maintained depending up on the number of crusher units in that particular cluster

2. Criteria for New / Proposed Stone Crushing Units.(as prescribed by the Board)
 - i. No new / proposed stone crushers should be located within 500m from any National highways or State highways or "inhabited site" or places of public and religious importance.

ii. The minimum distance between new / proposed stone crushers should be 1 km to avoid dust polluttional influence of one over the other.

3. Air Pollution Control Measures

The existing and new / proposed stone crushing units should provide dust containment and dust suppression systems suggested by National Productivity Council as furnished in Annexure – I and should also adhere to the recommendations furnished in NEERI Report as Annexure – II

➤ The Comprehensive Industry Document on Stone Crushers is latest among Central Pollution Control Board publication in the above series with the main objective of this to impart an overall view of Stone Crushers operating in the country, to develop the National Environmental Standards, to provide cleaner technologies and to specify Guidelines / Code of Practice for Pollution Prevention & Control. The Report has been finalized after a series of discussion with the industry representatives, industry associations, State Pollution Control Boards and other statutory bodies associated with

		<p>the Stone Crushing Sector.</p> <ul style="list-style-type: none">➤ In the above Comprehensive Industry Document on Stone Crushers (Series: COINDS/78/2007-08), the CPCB has not mentioned any distance criteria to be maintained between crusher to crusher.➤ No other state has fixed any distance criteria to be maintained between crusher to crusher except Kerala & Assam State.<ol style="list-style-type: none">1. The Assam State prescribe the distance between two stone crusher boundaries shall not be less than 300 meters to avoid clustering of stone crushers in an area if a new stone crusher is being installed.2. The Kerala State fixed distance between two stone crusher boundaries as 100 meters. <p>The above facts were already submitted to this Hon'ble Court in the counter affidavit of respondent Board filed during September 2019.</p> <p>In view of above reasons, this respondent Board has followed the standards specified in Schedule VI and followed the guidelines specified in Annexure I and II in that Schedule and not diluted the standards or guidelines prescribed in</p>
--	--	---

		the said Acts and rules as stated by the petitioner.
	<p>➤ Unfortunately, however, the report filed by NEERI is tailor made to suit conclusions already reached in the impugned Board Proceedings. This report does not consider several pertinent issues like cumulative impact of air pollutants in an air shed, the impact of SPM (suspended particulate matter) and RSPM (respirable suspended particulate matter) on health of people in the vicinity of stone crushers and that of the workers in these crushing units.</p>	<p>It is respectfully submitted that while carrying out study on the stone crushers units, monitoring of air pollutants (TSPM, PM₁₀, PM_{2.5}) at source (0-3m), nearby source (3-10m) and in ambient air (>10m) includes concentration of dust pollutants from stone crushers and other possible sources including background concentration has been taken into account. At any point of sampling location, the monitoring concentration depicts all the concentration arising from the emission of stone crushing and allied activities and other sources. The measured concentrations are compared with standards for delineation of safe distance and the standards are derived based on the health impact on the people. Hence by comparing the standards, the effect of dust concentration on health of the people is considered.</p>
	<p>➤ The report is also oblivious to pollutants from other sources stationary and mobile, particulate matter pollution from SO₂, NO_x, and meteorological factors impacting pollution in a given area.</p>	<p>It is respectfully submitted that the major pollutants arising from crushers and allied activities (transport) are dust particles in the form of TSPM, PM₁₀, and PM_{2.5} which are significant pollutants as compared to SO₂ and NO_x. There is no contribution of SO₂ and NO_x.</p>

		<p>from stone crushers and allied activities, whereas the contribution of SO₂ and NO_x from other sources are insignificant (below detectable limit) in the study area considering all the sources of emissions.</p>
	<p>➤ The report is based on ambient air quality monitoring at Tirusulam for a period of only one month (Dec 2021 Pg. xix of the report) and Kodangipalayam (January 2022). This limited period of monitoring cannot form the basis of any scientific assessment of impact of pollution from the subject crushers. A comprehensive impact assessment report is a report that is based upon 3 season data collection (except monsoon season). Only when pollution levels at a monitoring station are monitored throughout the year will a true picture of impact of an activity be known. Wind direction and speed differs from time to time, moisture in the air, temperature also play an important role. The assessment during December in Tirusulam cannot be the basis to forecast the likely pollution during</p>	<p>It is respectfully submitted that though the monitoring was carried out for one season at Tirusulam, Chennai (December 2021) and Kodangipalayam, Tirupur (January 2022), the prediction was carried out for all the seasons in the year to assess the maximum impact from the stone crusher and other sources considering the dynamic nature of meteorological conditions throughout the year.</p> <p>It is further submitted that the Board has already entrusted a study to National Environmental Engineering Research Institute (NEERI), Nagpur to assess the performance of air Pollution Control Measures provided by the stone crushing industries and to assess the dust emission from the industry and also to arrive at the optimum distance from the National / State Highways and from the Residential area.</p> <p>Accordingly the NEERI has conducted the study on assessment of dust emissions from Stone Crushing Industries during September 1997, October 1997, April 1998 and May 1998</p>

	<p>other months.</p>	<p>in the cluster of stone crushing industries located in Pammal, Kancheepuram District and submitted the report. During the study period, 50 stone crushing industries having 40T capacity each, were in operation and all these units adopted the pollution control system (dust suppression and containment system comprising of building enclosures over the dust emission sources with spraying of water through special nozzles) of National Productivity Council (NPC). In the study areas, the ambient air quality locations were selected based on the prevailing wind directions, wind speed and also the historical wind rose in that study area. During the study period, micrometeorological observations, transport vehicle counts and meteorological observations were also made simultaneously.</p>
	<p>➤ Further, such assessment has to take into account other sources of pollution in an area and an effective cumulative impact assessment needs to be conducted in order to predict the pollution levels in a given air shed. This exercise is woefully absent in the NEERI report. The report does not even seek to provide a list of</p>	<p>It is respectfully submitted that all the other sources of contributing pollution in the nearby crusher area are taken into account by monitoring of dust concentration which gives the total concentration from all the sources at any sampling location. The advantage of doing air quality monitoring is that it gives the assessment of concentration from all the sources in the downwind direction, whereas the</p>

236

	<p>proximate sources of pollution for each crusher unit monitored.</p>	<p>sampling location located in the upwind direction gives concentration from all the sources other than stone crushing and allied activities which is included in the report as background concentration from other sources except stone crushing activities.</p>
	<p>➤ The report at 5.1 discusses the manner in which they have arrived at a "safe distance" i.e. - this exercise takes into account the maximum limits of PM₁₀ and PM_{2.5} permitted in the NAAQS, 2009. NEERI fails to see that fixing safe distances using the maximum permitted levels is unreasonable, illegal and fails to take into account the health impact on the people and the contribution of other sources to pollution in the air shed. Even though NEERI recommends that no specific distance is required between crusher to crusher, at page 3.89, 5.42 safe distances was demarcated clearly indicating the need for spatial distance crusher to crusher.</p>	<p>It is respectfully submitted that the safe distance is fixed based on the standards of NAQS, 2009 which is based on the health impact on the people as stipulated by Regulatory Agency CPCB. The standards stipulated by the Indian government are based on health impact on the people. Accordingly a safe distance of 500m is fixed from stone crushers to any National highways or State highways or "inhabited site" or places of public and religious importance. Hence NEERI recommends that no specific distance is required between crusher to crusher.</p>
	<p>➤ The report states that AERMOD predictions for PM₁₀ varied between 200-900 mtrs and 81-2000 meters for</p>	<p>It is respectfully submitted that the worst-case scenario (critical case) is based on critical meteorological conditions whose occurrence is</p>

<p>critical case. The safe distance for RSPM2.5, the safe distance is said to have varied from 258-2000 meters. The report also provides predictions by ISCST3 model. Similar prediction and modeling for Kondangipallayam, Tiruppur have also been provided. Strangely, the report refers to the mean values from the modeling exercise. Averaging pollution levels is frowned upon because it masks peaks and locations which are subject to extreme pollution. However, NEERI's flawed report resorts to this thoroughly unscientific methodology</p>	<p>very rare and is allowed to exceed 2% of time period at the study area. These highest peak concentrations were very well controlled by adopting wind breaking net (wall) and proper enclosures at the source and developing sufficient green belt (10m).</p>
<p>➤ Thereafter, the report proceeds to suggest prediction of impact from pollution control measures. It is a known fact that existing crushers do not have adequate pollution control measures in place. Even green belts are absent around these crushers and as evidenced by the report itself, other pollution control measures are absent as well (page xl -9.1)</p>	<p>It is respectfully submitted that the Stone crushing industries come under unorganized and labour-intensive sector leading to fugitive emissions which are difficult to monitor and control unlike emissions vented through proper stacks. Hence there is a scope for further improving pollution control measures around the stone crushing industries which can be implemented by good housekeeping practices, proper enclosures at the source, providing water sprinklers at appropriate places, movable wind breaking net and green cover (green belt)</p>

		<p>around stone crushing industries in addition to the following regular air pollution control measures and practices to be followed as recommended by NEERI, NPC & TNPCB.</p> <ol style="list-style-type: none">1. Periodical cleaning of water spray nozzles should be carried out to avoid choking.2. Fine dust accumulated in the crushing area should be periodically cleaned and the dumps should be covered with tarpaulins to arrest erosion by wind.3. The drop height of the processed material should be kept at a minimum during loading and unloading.4. Conveyor chutes should be provided at the discharge points.5. There should be bi-lane road system to approach the crushers.6. The approach road should be properly laid with tar and concrete and should be sprayed with water. Similarly, the approach roads to individual crusher should be made in good condition and watered.7. Within the crusher, a minimum distance of 20 metres should be made for roads.8. The green belt will restrict the spread of particulate matter and trees should be evergreen high foliage type like neem,
--	--	---

		<p>tamarind, gold mohar, fire of the forest and any other local varieties are recommended. Cash crops like cashew nut, mango, lemon and sapota may be encouraged to get back financial benefits.</p> <p>9. If two or more crushers are located within 100 metres, they may be considered to have a common green belt if they are border cases. The graph prepared from NEERI Reports if furnished in Annexure – III to fix the distance and green belt for any number of crushers in a cluster, limited to a maximum of 50 (Ex. For 5 crushers in a cluster, total area 100 m, green belt 20 m).</p> <p>10. Ornamental trees like Asoka along the roads on both sides leading to crushing area should be encouraged to improve the aesthetics of the working environment.</p> <p>11. As an occupational safety, all the workers should be provided with nose masks.</p> <p>In view of the above fact, it is evidenced that all the existing consented stone crushing units have provided more adequate air pollution control measures including adequate green belt in and around the periphery of the unit and it was regularly monitored by the TNPCB.</p>
	<p>➤ Modeling exercise assuming pollution</p>	<p>It is respectfully submitted that the Modeling</p>

	<p>control measures (which are non-existent at crusher units) itself is a ploy to present a sanitized picture of the pollution caused by these units. The entire modeling exercise at 5.2 of the report is irrelevant and cannot inform any decision making.</p>	<p>exercise was carried out both for business-as-usual scenario (crusher operating at present condition) and as well as crusher with proper controlled measures viz., enclosures at the source, green cover and boundary wall around the crushers as in the case of Kodangipalayam, Tirupur district for the crusher of Palaniappa Blue Metal.</p>
<p>➤</p>	<p>It is seen from the modeling results that the safe distance for PM₁₀ and PM_{2.5} is as high as 2000 meters. During the monitoring at Thirusulam, source emissions as high as 905.91 kg/day were recorded and for PM_{2.5} (RSPM) 181.6 kg/ day was recorded. Once again, at 8.1.1, the report resorts to averaging pollution values, which is impermissible and unscientific.</p>	<p>It is respectfully submitted that the monitoring at Tirusualm, Chennai at the source (0-31m) was carried out to assess the fugitive emissions which cannot be compared with source or ambient air quality standards, and these values represent concentration and fugitive emissions at the source only. The concentration of PM₁₀ and PM_{2.5} are high as 2000m at one or two directions can be controlled by adopting wind breaking wall or net and proper green cover.</p>
<p>➤</p>	<p>It is to be noted that this report is based on assessment of stone crushers that are separated by a distance and even then, the pollution levels recorded at the crusher units are alarming. For example, PM₁₀, TSPM values presented in Table 3.3 (working hours) and 3.4 (non working hours) provide a</p>	<p>It is respectfully submitted that the highest concentration of TSPM during working hours (12 hours) and non-working hours (12 hours) were recorded at the source (< 3m) to assess the fugitive emission arising out from the stone crusher for the estimation of source strength is a crucial step in assessing the impact of emission on their surrounding environment, which is not</p>

<p>glimpse of the pollution caused by these units. At Thiruvakkarai BM — the maximum TSPM value recorded is 6612 ug/m³ during working hours and during non working hours the maximum value recorded is 1383 ug/m³ therefore indicating that these crushers contribute to enhancing pollution levels by 5 times or 500%</p>	<p>to be compared with standards. These highest concentrations are at the source (< 3m) used for estimating the source strength and emission rate for monitoring and modeling purpose.</p>
<p>➤ It is to be noted that during non-working hours, materials are transported from the site. The report does not contain any measurement of PM₁₀ values when no activity is at the site - but at page xxii it states that on Sundays, when there was no crushing or transportation activity, the pollution values were only 1/8th of the values recorded during operation. At page xxii, the report also states that the pollution levels are 3-4 times higher when the crusher units are in operation. This being the factual position recorded, it is surprising that the report at 8.5 states that inter distance between crushers is not significant. The report fails to see that</p>	<p>It is respectfully submitted that monitoring was carried out during working and non-working hours for RSPM (PM₁₀), PM_{2.5} to assess the concentration from stone crushing activity during working (12 hours) and non-working hours (12 hours). The background emissions are about 1/8th of the concentration recorded during operation, whereas the concentration recorded during working hours (12 hours) are all about 3-4 times higher than that of non-working period concentration. The NEERI report talks about distance-distance between the crusher (s) and does not specify safe distance for single crusher/cluster of crushers.</p>

	<p>when crushers are clustered i.e. grouped together as sought to be done by the impugned BP, the impact of crusher units will be magnified and the already high pollution levels around crushers will become much worse due to the cumulative impact</p>	
	<p>➤ The report also does not contain any modeling of the impact of crushers in a cluster as proposed to be permitted by the impugned BP</p>	<p>It is respectfully submitted that the report contains modeling results considering a study area of 2km x 2km to consider the impact of crushers in a cluster as proposed to be permitted by the impugned BP.</p>
	<p>➤ The data presented in the report itself is evidence that the impugned BP is unsustainable. However, the report states that to avoid mushrooming of crushers over larger area, it is beneficial to cluster them. This conclusion is not based on either consideration of pollution levels or impact on the health of people in these areas. It is based on considerations that are irrelevant and without appreciating that, confining pollution to a smaller area means exponentially increasing the pollution in that area</p>	<p>It is respectfully submitted that the NEERI report considered the impact of all the sources including crushing and allied activities and other sources both for single crusher and cluster of crushers. The health impacts are considered in the standards stipulated by regulatory authority CPCB which is followed in the report for both monitoring and modeling technique to derive the safe distance.</p> <p>Hence, the point of raising of not considering the health impact of the people for deriving the safe distance is not valid. Also, the safe distance is based on the ambient air quality standards which if not met, the crushers are given the option of controlling emission by improving</p>

243

		<p>their stone crushing operation and implementation of proper control measures. Hence, a safe distance becomes null and void in case the stone crushers are not meeting the stipulated standards of RSPM (PM₁₀), PM_{2.5} even after proper operation, good housekeeping and control measures like proper enclosure and green cover.</p>
	<p>➤ A fundamental principle of environmental governance is dooms watch - the regulator has to assume the worst case scenario and prescribe siting criteria and standards, so that even when pollution control systems fail, the people will not be subjected to extreme pollution. In the present case, that is already the scenario when pollution control systems fails or ignored and the dust concept will add more smoke to the smog.</p>	<p>It is respectfully submitted that the present siting criteria, standards, guidelines, Conditions to be complied, practice to be adopted were developed after conducting detailed study through National Productive Council (NPC) and National Environmental Engineering Research Institute (NEERI) in such a manner that when pollution control systems fails, the people will not be subjected to extreme pollution. Accordingly a safe distance of 500m is fixed from stone crushers to any National highways or State highways or "inhabited site" or places of public and religious importance.</p>
	<p>➤ It is submitted that the primary and only relevant factor in deciding the sitting criteria of such polluting units is the impact they have on the surrounding environment and the impact of such pollution on the people</p>	<p>It is respectfully submitted that the Board has issued the BP No.21 dated 31.07.2019 based on the Board Resolution No. 278-1- 6 dated 22.7.2019 by relaxing 1 KM distance criteria from crusher to crusher for the existing and new stone crushers in the state of Tamil Nadu</p>

244

in the vicinity. The current regulatory system is limited to addressing environmental pollution without any understanding of its impacts on human health. It is a fact that pollution will harm human health. Numerous epidemiological studies have found an association between air pollution and a wide range of adverse health effects in the general population; the effects have ranged from subtle subclinical effects to premature death. Air pollution is associated with increased incidences of respiratory symptoms and infections, and even premature mortality. (Jakubiak-Lasocka et al. 2015) The upper respiratory tract (URT) is first affected by air pollution. Children's higher respiratory rates and the fact that their pulmonary capacity is not fully developed make them more susceptible to air pollutants than adults. [Kurt, 2016] Several studies demonstrate a link between increase in outdoor air pollutants and increased hospitalization of children complaining of URT infections [Lin, 2012.

as follows:

1. The minimum distance of 1 KM between New / Proposed crushers as prescribed in the B.P. Ms No.4 dated 02.07.2004 is dispensed off. This relaxation is also applicable to the existing stone crushers and the M-Sand units.
2. The stone crushing units shall meet Ambient Air Quality standards at all times. The suspended particulate matter (measured between three metres and ten metres from any process equipment of stone crushing unit shall not exceed 600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than 600pg/m³.
3. The crushers may be encouraged to establish nearby quarry site so as to avoid transportation and to reduce air pollution.
4. All the existing and the new crushers shall provide air pollution control measures as suggested by National Productivity Council, NEERI and Board circular dated 22.4.2008.
5. The stone crushing units & M-Sand units shall not store raw materials & products

Amarillo, 2012]. Such infections are important contributors to childhood morbidity and mortality [WHO],

more than one month capacity and all the open storage should be properly covered with Tarpaulin to avoid dust emanation due to wind action.

6. No new / proposed stone crushers should be located within 500m from any National Highways or State Highways or inhabited site or educational institutions / and other public offices and places of religious importance,
7. The Board will review the performance of installation and operation of air pollution control measures and the compliance of standards by the stone crushing units after one year.

In the above said BP, Board has dispensed the 1 KM distance criteria in between crusher to crusher only and not relaxed the safe distance of 500m from the stone crushers to any National highways or State highways or "inhabited site" or places of public and religious importance and the same is strictly followed and implemented so as to protect the surrounding environment and human health.

It is further submitted that dispensing of 1 KM distance criteria in between crusher to crusher will have influence one over the other, which

246

		<p>can be prevented by the effective operation and maintenance of the air pollution control measures installed as recommended by the NPC, NEERI & TNPCB. The occupational health of the workers can be maintained by providing the personal protective equipments as recommended by the NPC & NEERI</p>
	<p>➤ The TNPCB should endeavor to implement better pollution control systems at stone crusher units and monitor them effectively to reduce the pollution in these areas. However, they have opted to make this worse by permitting clustering of crushers. It is submitted that the impugned BP cannot be sustained based on this NEERI report dated May 2022 - in fact a proper reading of the report supports quashing the impugned BP.</p>	<p>It is respectfully submitted that the respondent Board will issue the CTE/CTO to the stone crusher units after ensuring the complete installation of air pollution control measures as recommended by the NPC, NEERI & TNPCB and monitor them regularly. Further the respondent Board discharging its statutory function as per the provisions of the environmental laws for the prevention, control and abatement of pollution caused by the Industries. It is also submitted that permitting of cluster of crushers will not worsen the environment and in fact it will reduce the pollution caused in larger areas. The cluster of crushers will have following advantages;</p> <ol style="list-style-type: none"> a. The crusher can be installed nearby quarry itself and thereby the effect of transportation of rough stone on the surrounding environment can be much reduced.

2A

b. In lesser area, more stone crushers can be established and the effect of dust pollution will be localized and same will be effectively prevented and controlled by maintaining the specified distance according the number of crushers in that cluster on all sides around the periphery of the cluster area and providing green belt of specified width within the extreme boundary as recommended by the NPC and NEERI.

Distance Criteria for cluster of Existing Stone Crushing Units : (As Recommended By NEERI)

Sl No	Type of clusters	Distance between crusher / cluster of crushers and habitations / NH or SH	Green belt area at the periphery
1	Single crusher	50m	10m.
2	10 crushers	150m	30m
3	25 crushers	250m	50m
4	50 crushers	300m	100m

c. If the crusher to crusher distance is maintained as 1km, then one crusher only will be installed in an area of 1 sq.km

(247 acres). In this case, the influence of dust pollution on the surrounding environment will be more.

6. **DILUTION OF EXISTING CRITERIA**

➤ It is stated that the validity of B.P.No.4 was challenged before the Hon'ble High Court of Judicature at Madras in W.P.Nos.1560 and 12264 of 2006 and in the order dated 08.10.2010, the Hon'ble Division Bench of this Court has considered the entire issue and concluded that B.P.No.4 cannot be held to be invalid. It is pertinent to state here that the respondent Board, while framing norms for the location of the stone crushing units by introducing B.P.No.4 dated 02.07.2004 has in fact, taken note of certain observations made by the Hon'ble Supreme Court in the order dated 25.04.1996 passed in Civil Appeal No.10732 of 1995 and also the subsequent order of the Hon'ble Supreme Court dated 10.05.1999 made in SLP (C) No.13564 of 1998 issuing

➤ The Honourable Supreme Court of India in its order dated 25.4.96 in the Civil Appeal No.10732/1995 restored the earlier Judgment of Honourable High Court of Madras and banned the operation of stone crushers and quarries within the radius of 500 meters of the residential area. {The Honourable Supreme Court of India not observed and discussed with respect to distance criteria to be maintained between crusher to crusher}.
➤ The Board has issued B.P.MS.No.4 Dated: 02.07.2004 based on the recommendations of the NEERI study report. Even though the NEERI has not recommended any distance criteria to be maintained between crusher to crusher in their report, the Board has imposed a condition that the minimum distance between new / proposed stone crushers as 1 KM to avoid dust pollution influence of one over the other considering the

	<p>certain directions and after consideration of those observations made by the Hon'ble Supreme Court, the Board having felt that there has been an ambiguity in B.P.No.48 dated 09.09.1998, formulated B.P.No.4. Therefore, it is clear that B.P.No.4, apart from having been upheld by the Division Bench of the Hon'ble High Court of Madras has been passed by the Board after due application of mind and considering all the relevant issues.</p>	<p>prevailing environmental conditions and pollution control system available at that time.</p> <ul style="list-style-type: none"> ➤ In the Comprehensive Industry Document on Stone Crushers (Series: COINDS/78/2007-08), the CPCB has not mentioned any distance criteria to be maintained between crusher to crusher. ➤ The MoEF&CC, Gol has prescribed standards for the stone crushers in the Environment (Protection) Rules, 1986, but nowhere it was discussed about the distance to be maintained between crusher to crusher.
	<ul style="list-style-type: none"> ➤ NEERI in its final report (Pg.8.10) now observes that BP No.4 dated 02.07.2004 is not important and significant and suggested withdrawal of the same thereby violating the orders of this Hon'ble Court. The respondent Board cannot now without any valid reason, dispense with the minimum distance of 1 km between new/proposed crushers as prescribed in the B.P. Ms. No. 4 dated 2.7.2004. The respondent Board has now turned regressive on the subject of standards of protection and altered the condition at its whims and fancies. The reason 	<ul style="list-style-type: none"> ➤ The 1KM distance criteria between crusher to crusher have not been adopted any other State of India except Tamil Nadu State. ➤ Extensive use of river sand as fine aggregate in the construction works results in scarcity of river sand. Further, indiscriminate mining of sand affects the river eco system and lowers the ground water table. Therefore, the Government is now encouraging the use of M-Sand in construction in place of river sand. ➤ M-sand is manufactured by crushing of blue metal jellies either in stone crushers as an extended facility or in standalone M- Sand

250

	<p>for dispensing with the said distance criteria is totally arbitrary and illegal.</p>	<p>units.</p> <ul style="list-style-type: none"> ➤ Stone Crushers Associations have made representation with a request to waive the 1 KM distance from crusher to crusher so that the existing crushers can go for expansion to manufacture M-Sand in addition to the existing consented production of blue metal jellies and new crushers can be permitted so as to meet the demand for supply of blue metal and M-sand for construction activities, ➤ In order to sort out the issue, after detailed discussion with Government, it was decided to re-examine the 1 KM distance criteria mentioned in the B.P Ms No. 4 dated 02.07.2004 in view of the latest development in pollution control technologies, the present demand for construction materials and difficulties faced by the entrepreneurs to find suitable site. ➤ Nowadays stone crushing units are adopting spraying of fine water mist through special nozzles which suppresses the particulate matter emission. ➤ In view of the above facts, it was decided to dispense the 1 KM distance criteria mentioned in the B.P Ms No. 4 dated 02.07.2004 in view of the latest development
--	---	---

		in pollution control technologies, the present demand for construction materials and difficulties faced by the entrepreneurs to find suitable site.
7.	POLLUTION CONTROL MECHANISM	
	<p>➤ It is understood from the impugned proceedings that in the meeting held with Hon'ble Minister for Environment at TNPCB Head Office on 06.03.2019, it was discussed that the stone crushing units are now adopting the latest technologies for dust suppression. Also, it appears that the participants opined that, in view of the establishment of M-sand unit as integral part of stone crushing units, they adopt spraying of fine water mist through special nozzles which suppresses the particulate matter emission and in view of the above, it was decided to re-examine the 500 meters distance criteria fixed for the stone crushers from habitations, National Highways or State Highways through a detailed study.</p>	<p>➤ The stone crushing units shall meet Ambient Air Quality standards at all times. The suspended particulate matter (measured between three metres and ten metres from any process equipment of stone crushing unit shall not exceed 600 microgram per cubic metre) from a controlled isolated as well as from a unit located in a cluster should be less than 600pg/m³.</p> <p>➤ The crushers may be encouraged to establish nearby quarry site so as to avoid transportation and to reduce air pollution.</p> <p>➤ The respondent Board will issue CTE/CTO only after ensuring the installation air pollution control measures as recommended by the National Productivity Council, NEERI and Board circular dated 22.4.2008.</p> <p>➤ The respondent Board will ensure that no new / proposed stone crushers should be located within 500m from any National</p>

		<p>Highways or State Highways or inhabited site or educational institutions / and other public offices and places of religious importance before issuing CTE to the stone crushing units,</p> <ul style="list-style-type: none"> ➤ Nowadays stone crushing units are adopting spraying of fine water mist through special nozzles which suppresses the particulate matter emission. ➤ The Board will also review the performance of installation and operation of air pollution control measures and the compliance of standards by the stone crushing units by conducting ambient air quality survey through Board laboratories.
	<ul style="list-style-type: none"> ➤ Assuming without admitting that the latest technologies for dust suppression is being adopted by the units, the same are not being monitored by the 1st respondent Board. In fact, NEERI in its final report states that the existing measures are not sufficient and crushing units were not complying with the existing measures. (Pg 8.12). Moreover, the existing control measures such as dust containment enclosures, water spray arrangements 	<ul style="list-style-type: none"> ➤ The MoEF&CC, Gol has prescribed standards for the stone crushers in the Environment (Protection) Rules, 1986, but nowhere it was discussed about the distance to be maintained between crusher to crusher. ➤ The 1KM distance criteria between crusher to crusher have not been adopted any other State of India except Tamil Nadu State. ➤ Extensive use of river sand as fine aggregate in the construction works results in scarcity of river sand. Further, indiscriminate mining

	<p>etc. needs to be improved along with inclusion of wind breaking structures and wind development of thick foliage trees around each crushing units. Even though NEERI in its report observed that dust generated from stone crushing activities contains a significant amount of fine inhalable matter, the presence of high percentage of silica in the dust and the particle size distribution further suggests that the occupational environment of the workers and the human health of the surrounding area may be threatened, it has suggested dispensation of distance criteria from crusher to crusher. In the light of the same, the respondent Board ought not to have relaxed the distance criteria between crusher to crusher.</p>	<p>of sand affects the river eco system and lowers the ground water table. Therefore, the Government is now encouraging the use of M-Sand in construction in place of river sand.</p> <ul style="list-style-type: none"> ➤ M-sand is manufactured by crushing of blue metal jellies either in stone crushers as an extended facility or in standalone M- Sand units. ➤ Stone Crushers Associations have made representation with a request to waive the 1 KM distance from crusher to crusher so that the existing crushers can go for expansion to manufacture M-Sand in addition to the existing consented production of blue metal jellies and new crushers can be permitted so as to meet the demand for supply of blue metal and M-sand for construction activities, ➤ In order to sort out the issue, after detailed discussion with Government, it was decided to re-examine the 1 KM distance criteria mentioned in the B.P Ms No. 4 dated 02.07.2004 in view of the latest development in pollution control technologies, the present demand for construction materials and difficulties faced by the entrepreneurs to find suitable site.
<p>8.</p>	<p>I respectfully submit that the action of the respondent Board dispensing with the minimum distance of 1 km between the new / proposed crushers in the absence of any scientific and expert report is illegal and arbitrary. The same respondent Board, in the meeting held on 24.04.2019 observed that dispensing of the minimum</p>	

25A

	<p>distance of 1 km between new / proposed crushers may lead to mushrooming of crushers which will have dust pollution influence of one over the other and may have impact on the surrounding environment. Now the NEERI report more or less echoes the position of the respondent Board with no scientific/ empirical/ rational basis.</p>	<p>➤ Nowadays stone crushing units are adopting spraying of fine water mist through special nozzles which suppresses the particulate matter emission.</p> <p>In view of the above facts, it was decided to dispense the 1 KM distance criteria mentioned in the B.P Ms No. 4 dated 02.07.2004 in view of the latest development in pollution control technologies, the present demand for construction materials and difficulties faced by the entrepreneurs to find suitable site.</p>
9.	<p>I state that the final assessment report filed by NEERI is inconclusive and the same ought to be rejected. In fact, it is pertinent to note that the language used in the final report as well as in the impugned board proceedings are identical indicating that the agency has not conducted a conclusive study so as to protect the environment from pollution caused to man and environment by the crushing units. It is submitted that the respondent board may be directed not to consider the final report filed by NEERI as the same is inconclusive and violative of environmental norms. By this yardstick, there can be no restriction on setting up</p>	<p>It is respectfully submitted that the petitioner has reported that the language used in the final report as well as in the impugned Board proceedings are identical indicating that the agency has not conducted a conclusive study so as to protect the environment from pollution caused to man and environment by the crushing units. In this connection, it is submitted as follows</p> <p>➤ It is respectfully submitted that the Board has already entrusted a study to National Environmental Engineering Research Institute (NEERI), Nagpur to assess the performance of air Pollution Control Measures provided by the stone crushing industries and to assess the dust emission</p>

	<p>industries as a cluster in any sector. The whole concept of carrying capacity study is to ensure that the micro ecology of a particular site is not threatened by a mushrooming of clusters whose cumulative impact would have a deleterious impact on the environment but also the health of residents. To imagine that removing restrictions on inter se clusters would discourage the mushrooming of industries has no factual or scientific basis.</p>	<p>from the industry and also to arrive at the optimum distance from the National / State Highways and from the Residential area. Based on the recommendations of NEERI, the respondent Board has issued B.P.MS.No.4 Dated: 02.07.2004.</p> <p>➤ The respondent Board has issued the BP No.21 dated 31.07.2019 based on the Board Resolution No. 278-1- 6 dated 22.7.2019 by relaxing 1 KM distance criteria between crusher to crusher for the existing and new stone crushers in the state of Tamil Nadu from the B.P.MS.No.4 Dated: 02.07.2004.</p>
10.	<p>Moreover, even these unscientific recommendations are not stand alone. NEERI recognized the poor compliance of pollution control mechanisms in the existing scenario and makes recommendations regarding the same. One cannot be relaxed without even including the tightening of other regulations even assuming arguendo that relaxation is possible.</p>	<p>➤ Based on the NEERI's report only the above two BP has been issued. The present study was also conducted by the NEERI only. Hence the language used in the final report as well as in the impugned board proceedings will be naturally identical.</p> <p>➤ Further it is submitted that the National Environmental Engineering Research Institute (NEERI), Nagpur is a constituent of Council of Scientific & Industrial Research (CSIR), New Delhi and has a nation-wide presence with its five zonal laboratories at Chennai, Delhi, Hyderabad, Kolkata and Mumbai.</p>

256

- | | |
|--|--|
| | <ul style="list-style-type: none">➤ CSIR-NEERI, Chennai Zonal Laboratory, one of the five Zonal Laboratories of the NEERI, Nagpur, has been a trail-blazer to the industries in the States of Tamil Nadu, Karnataka, Kerala and Pondicherry, ever since its inception in 1969. The Zonal Laboratory follows the footsteps of the parent organization (NEERI, Nagpur) in its commitment towards the national and societal missions and CSIR thrust area activities.➤ In its 47 years of existence, this unit has made significant strides in such thrust areas of R&D as environmental monitoring, environmental biotechnology, hazardous waste management, environmental systems design, environmental impact & risk assessment and environmental audit.➤ CSIR-NEERI, Chennai Zonal Laboratory has played an important role in solving some of the most critical problems of pollution in the States of Tamil Nadu, Karnataka, Kerala and also union territories of Puducherry, Andaman & Nicobar Islands, and Lakshadweep. Projects of international status funded by such agencies as WHO, World Bank and the US Government have |
|--|--|

		<p>been undertaken by the Zonal Laboratory. Hence the questioning the integrity of the CSIR-NEERI, Chennai Zonal Laboratory by the petitioner is not acceptable.</p>
--	--	--

10. It is respectfully submitted that the Board has not issued the impugned BP hurriedly as stated by the petitioner. Since because the respondent Board was already in the process of re-examining the 1km distance from crusher to crusher in view of the latest development in pollution control technology and issued the BP by following the due process as stated therein.
11. It is respectfully submitted that the Rule 3 of the E (P) Rules 1986, prescribe the Standards for emissions or discharge of environmental Pollutants [Schedule I to IV]. In schedule I, serial No.37, described the Standards for emission of Suspended Particulate Matter (SPM) which consists of two paras such as Implementation of the Pollution Control measures and the Quantitative standard for SPM. **However, in the above said Rule/Act it does not specify any distance criteria to be maintained between crusher to crusher.**
12. It is respectfully submitted that the Honourable Supreme Court of India in its order dated 25.4.1996 in the Civil Appeal No.10732/1995 restored the earlier Judgment of Honourable High Court of Madras and banned the operation of stone crushers and quarries within the radius of 500 meters of the residential area. *{not mentioned any distance criteria to be maintained between crusher to crusher}*
13. It is respectfully submitted that the Respondent Board entrusted a study to National Environmental Engineering Research Institute (NEERI), Nagpur to assess the performance of air Pollution Control Measures provided by the stone crushing industries and to assess the dust emission from the industry and also to arrive at the optimum distance from the National / State Highways and from the

258

Residential area. Based on the NEERI recommendations, Board has issued B.P.MS.No.4 Dated: 02.07.2004. **The NEERI has not recommended any distance criteria to be maintained between crusher to crusher in their report. However it recommends cluster and accordingly suggested required width of greenbelt to be maintained depending up on the number of crusher units in that particular cluster.**

14. It is respectfully submitted that in the cluster system, in lesser area, more stone crushers can be established and the effect of dust pollution will be localized and same will be effectively prevented and controlled by maintaining the specified distance according the number of crushers in that cluster on all sides around the periphery of the cluster area and providing green belt of specified width within the extreme boundary as recommended by the NPC and NEERI.
15. It is further submitted that dispensing of 1 KM distance criteria in between crusher to crusher will have influence one over the other, which can be prevented by the effective operation and maintenance of the air pollution control measures installed as recommended by the NPC, NEERI & TNPCB. The occupational health of the workers can be maintained by providing the personal protective equipments as recommended by the NPC & NEERI
16. The Comprehensive Industry Document on Stone Crushers (Series: COINDS/78/2007-08), is latest among Central Pollution Control Board publication which gives overall view of Stone Crushers operating in the country, to develop the National Environmental Standards, to provide cleaner technologies and to specify Guidelines / Code of Practice for Pollution Prevention & Control. **The CPCB has not mentioned any distance criteria to be maintained between crusher to crusher in this report.**
17. In the impugned BP, the respondent Board has dispensed the 1 KM distance criteria in between crusher to crusher only and not relaxed the safe distance of

500m from the stone crushers to any National highways or State highways or "inhabited site" or places of public and religious importance and the same is strictly followed and implemented so as to protect the surrounding environment and human health.

18. It is respectfully submitted that dispensing of 1KM distance criteria in between crusher to crusher will have influence one over the other, which can be prevented by the effective operation and maintenance of the air pollution control measures installed by the stone crusher units as recommended by the NPC, NEERI & TNPCB. The occupational health of the workers can be maintained by providing the personal protective equipments as recommended by the NPC & NEERI.
19. It is respectfully submitted that the extensive use of river sand as fine aggregate in the construction works results in scarcity of river sand. Further, indiscriminate mining of sand affects the river eco system and lowers the ground water table and the Government has also instructed to take a decision at the earliest on the 1KM distance criteria so as to permit the new stone crushers to meet the M-sand demand for the construction projects in the State. By considering the above facts and in view of the latest development in pollution control technologies, the present demand for construction materials and difficulties faced by the entrepreneurs to find suitable site, the respondent Board has issued the BP No.21 dated 31.07.2019 based on the Board Resolution No. 278-1- 6 dated 22.7.2019 by relaxing 1 KM distance criteria between crusher to crusher for the existing and new stone crushers in the state of Tamil Nadu from the B.P.MS.No.4 Dated: 02.07.2004.
20. It is respectfully submitted that at present, while granting consent to establish (CTE), TNPCB verifies the distance criteria and imposes conditions for air pollution control measures as per the existing guidelines. After compliance of

260

CTE conditions, the Board grants consent to operate (CTO) to the units. The recommendations now made by the CSIR-NEERI for air pollution control, will be considered by the Board while granting CTE to new / proposed stone crushing units. The existing consented stone crushers will also be addressed to improve their air pollution control measures as suggested by the NEERI.

21. It is respectfully submitted that with respect to the distance criteria, (i) dispensing of 1KM distance from crusher to crusher and (ii) maintaining minimum 500 metres distance from stone crusher to National Highways or State Highways or inhabited site or educational institutions / and other public offices and places of religious importance, the recommendations made by the NEERI is accepted by the Board.
22. It is respectfully submitted that the National Environmental Engineering Research Institute (NEERI), Nagpur is a constituent of Council of Scientific & Industrial Research (CSIR), New Delhi and has a nation-wide presence with its five zonal laboratories at Chennai, Delhi, Hyderabad, Kolkata and Mumbai.
23. It is respectfully submitted that the CSIR-NEERI, Chennai Zonal Laboratory, one of the five Zonal Laboratories of the NEERI, Nagpur, has been a trail-blazer to the industries in the States of Tamil Nadu, Karnataka, Kerala and Pondicherry, ever since its inception in 1969. In its 47 years of existence, this unit has made significant strides in such thrust areas of R&D as environmental monitoring, environmental biotechnology, hazardous waste management, environmental systems design, environmental impact & risk assessment and environmental audit. Further the CSIR-NEERI, Chennai Zonal Laboratory has played an important role in solving some of the most critical problems of pollution in the States of Tamil Nadu, Karnataka, Kerala and also union territories of Puducherry, Andaman & Nicobar Islands, and Lakshadweep.

Projects of international status funded by such agencies as WHO, World Bank and the US Government have been undertaken by the Zonal Laboratory.

24. It is respectfully submitted that in view of the above facts and statement, since the CSIR NEERI Chennai is the only the Technical Expert agency in the field of Environment in India, the allegations, averments and questioning the integrity of the CSIR-NEERI, Chennai Zonal Laboratory made by the petitioner is baseless without having any scientific data on records are not acceptable and denied.

Under the above circumstances, it is humbly prayed that this Hon'ble Court may be pleased to dismiss the writ petition with exemplary cost and to pass such further or other orders as this Hon'ble Court may deem fit and proper in the facts and circumstances of this case and thus render justice.

BEFORE ME.

Solemnly affirmed at Chennai
on this day of June, 2023
and signed his name in my presence.

ADVOCATE CHENNAI

The first part of the report discusses the
 current state of the industry and the
 challenges it faces. It also outlines the
 objectives of the study and the methodology
 used to collect and analyze the data.

The second part of the report presents the
 findings of the study. It shows that the
 industry is facing significant challenges
 due to changes in consumer behavior and
 technological advancements.

The third part of the report discusses the
 implications of the findings and provides
 recommendations for the industry to address
 these challenges.



IN THE HIGH COURT OF JUDICATURE AT MADRAS
(Special Original Jurisdiction)
W.P.No.26786 of 2019

E.V.Sampath,
S/o. Varadhan,
No.1/113, BajanaiKovil Street,
Erumaiyur, Chennai – 600 044

...Petitioner

Vs

Tamil Nadu Pollution Control Board,
Rep by its Member Secretary,
No.76, Anna Salai, Guindy,
Chennai- 600032.

...Respondent

AFFIDAVIT FILED ON BEHALF OF THE RESPONDENT
- TAMIL NADU POLLUTION CONTROL BOARD

I, R. Sarasavani, Daughter of Thiru. J. Raghavan, Hindu, aged about 58 years having office at No.76, Mount Salai, Guindy, Chennai 600 032 do hereby solemnly affirm and sincerely state as follows:-

I submit that, I am the Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board, Chennai and I am filing this affidavit on behalf of Respondent Board and as such I am well acquainted with the facts of the case as per records available in our office. I am authorized to file this affidavit.

2) It is respectfully submitted that the petitioner filed this writ petition with a prayer to quash the impugned proceeding of the respondent Board in

3/0
B.P.No. 21 dated 31.07.2019 in so far as it relates to relaxing the minimum distance of 1 KM between the new / proposed crushers as prescribed in B.P. Ms. No. 4, dated 02.07.2004.

3) It is respectfully submitted that this Hon'ble Court in its order dated 06.09.2019 ordered *interalia* that, "*there shall be an order of interim stay of operation of the impugned order in B.P. MS. No. 21 dated 31.07.2019, till 04.10.2019*". The interim stay is extended from time to time and till date the stay is in force.

4) It is respectfully submitted that this Hon'ble Court in its order dated 19.07.2021 *interalia* mentioned that, "*the TNPCB will seek expert opinion and the future course of action pertaining to stone-crushing units to be adopted by TNPCB will be strictly in accordance with such expert opinion received...*"

5) It is respectfully submitted that the Tamil Nadu Pollution Control Board vide Proceeding No.: TNPCB/T1/F.4792/2019 dated:11.08.2021 has issued work order to CSIR National Environmental Engineering Research Institute (NEERI), Chennai to carry out a study titled "*Assessment of Dust Emission from stone crushing industries and Distance Criteria in the State of Tamil Nadu*".

6) It is respectively submitted that in June 2022, the CSIR-NEERI, Chennai have submitted the FINAL REPORT titled '*Assessment of Dust Emissions from Stone Crushing Industries and Distance criteria in the State of*

Tamil Nadu' to the respondent Board and the same was submitted to the Hon'ble Court during June 2022.

7) It is respectfully submitted that the counter affidavit filed by the respondent Board during September 2019, the affidavit filed by the respondent during June 2020, the additional affidavit filed by the respondent during March 2021, the reports dated 15.09.2021, 07.12.2021, 07.03.2022 & 17.06.2022 filed by the respondent Board and reply of the respondent TNPC Board on the objection of the petitioner to the assessment report of the NEERI, during June – 2023 may be treated as part and parcel of this affidavit.

8) It is respectively submitted that the NEERI in its final report, dated 09.06.2022 has reported the following w.r.t. distance between two stone crusher units:-

The distance from stone crushing industry to stone crushing industry as mentioned in the TNPCB Proceeding (BP No. 4, dated 02.07.2004) is not important & significant and can be withdrawn considering the following facts:-

- 1. Be specifying inter distance between the stone crushing industries shall lead to the dispersal of stone crushing industries across in the state of Tamil Nadu resulting into spreading of dust pollutants.*
- 2. Inter distance between stone crushing industries is not as significant and governing criteria compared to specifying distance from stone crushing industries to habitation areas (approved residences/inhabited site, Educational Institutions, Places of public offices and religious importance, State/National Highways etc.)*

3. *Specifying inter distance between stone crushing industries as a limiting criteria is a way against cluster of industries, which is not preferable leading to spread and increase in the dust pollutants.*

Also the NEERI has recommended the following measures for the stone crushing units:-

- (i) The stone crushing units shall provide for dust containment and dust suppression system as recommended by the National Productivity Council. They shall provide green belt of 5 to 10m width at the periphery for meeting the national ambient air quality standards in terms of PM10 and PM2.5.
- (ii) The stone crushing units shall provide
 - a. Evergreen trees like Neem, Ashoka, Tamarind and other local trees belonging to the family cesalpinaceae like Gul Mohar and Fire of the Forest may be planted all around the crushing area. Similarly, trees may be planted along the roads to arrest the spread of particulate arising from vehicular movement inside the area.
 - b. Good house-keeping by way of spraying water at the vulnerable points/locations to arrest the spread of dust particles should be practiced.
 - c. Paving of roads should be adopted
 - d. Fine powder should be collected at the ground level.
 - e. The fine powder should be disposed off periodically
 - f. Conveyor chute should be provided at the discharge points
 - g. Drop height for conveyor operations should be kept at the minimum
 - h. Covering of fine dust with tarpaulin during storage and transport to final destination should be practiced.

- i. Wind breaking structures (wall or net) preferably adjustable, moveable wind breaking nets based on the topography and the prevailing meteorological conditions shall be provided.
 - j. Ambient air quality monitoring with respect to PM10 and PM2.5 should be carried out in both the downwind and upwind directions during summer.
 - k. As an occupational safety measures, all the workers should be provided with nose masks to avoid dust entering the respiratory system.
- (iii) A minimum 500m safe distance is to be maintained from any National Highways or State Highways or inhabited site or educational institutions and other public offices and places of religious importance so as to avoid influence of dust emission from the Stone Crushing Industries.
- (iv) *The minimum 1 Km distance between one stone crushing unit to another stone crushing unit shall be dispensed so as to avoid mushrooming of single crushers over a larger area. This will pave the way for favorable condition for cluster of crushers in a compact area close to each other, thereby reducing the minimum distance between the crushers, confining the pollution levels within a smaller area so that prevention measures (control/mitigation) can be adopted more effectively.*

9) It is respectively submitted that, the Central Pollution Control Board has issued "Environmental Guidelines for Stone Crushing Units" in July, 2023, wherein the distance criteria to be maintained between two stone crushers were not specified and however, it is mentioned that new crushers should be allowed

314

to operate only in dedicated crusher zones as per the siting policies of SPCBs/PCCs.

10) It is respectively submitted that, in order to take the stand of the Board as policy decision, the subject was placed before the respondent Board in the meeting held on 10.10.2023. The Board vide resolution No.292-2-2, dated:10.10.2023 resolved to accept the proposal of dispensing of 1 Km distance between one stone crushing unit to another stone crushing unit as recommended by the NEERI in its final report dated 09.06.2022 along with the other recommendations of the NEERI with respect to stone crushing units and also to adopt the 'Environmental Guidelines for Stone Crushing units' issued by the CPCB in July 2023. In view of the above decision, this respondent humbly prayed that this Hon'ble Court may please be accept the affidavit.

Under the above circumstances, it is humbly prayed that this Hon'ble Court may be pleased to dismiss the writ petition and pass such further or other orders as this Hon'ble Court may deem fit and proper in the facts and circumstances of this case and thus render justice.

BEFORE ME

Solemnly affirmed at Chennai
on this day of October, 2023
and signed her name in my presence.

ADVOCATE CHENNAI

13/10/23

Date of Meeting: 10.10.2023

Date of Communication: 16.10.2023

BM ITEM NO.292-2-2

NOTE TO EXAMINE DISPENSING OF 1 KM DISTANCE BETWEEN ONE STONE CRUSHING UNIT TO ANOTHER STONE CRUSHING UNIT IN THE B.P.NO.4 DATED 02.07.2004, AS RECOMMENDED BY THE NEERI REPORT, DATED 09.06.2022.

The Board resolved to accept the proposal of dispensing of 1 Km distance between one stone crushing unit to another stone crushing unit as recommended by the NEERI in its final report dated 09.06.2022 along with the other recommendations of the NEERI with respect to stone crushing units and also to adopt the 'Environmental Guidelines for Stone Crushing units' issued by the CPCB in July 2023.

Sd/-xxx
Dr.Jayanthi .M, I.F.S.,
Chairperson.
TNPCB

// True Copy //

J. for signature
16/10/2023

Joint Chief Environmental Engineer (III)

20.10.23
16/10/23

dl
17/10

APPENDIX VI
CPCB STANDARDS FOR SUSPENDED PARTICULATE MATTER FROM
STONE CRUSHING UNIT

The standards consist of two parts:

- i) Implementation of the following pollution control measures:
- ii) Dust contaminant cum suppression system for the equipment.
- iii) Construction of wind breaking walls.
- iv) Construction of the metalled roads within the premises.
- v) Regular cleaning and wetting of the ground within the premises.
- vi) Growing of a green belt along the periphery.
- vii) Quantitative standard for the SPM:

The suspended particulate matter measured between 3 meters to 10 meters from any access equipment of a stone crushing unit shall not exceed $600 \mu\text{g}/\text{m}^3$.

**Environmental Guidelines
for
Stone Crushing Units**



Central Pollution Control Board

Ministry of Environment, Forest and Climate Change

Parivesh Bhawan, East Arjun Nagar

Delhi-110032

(July, 2023)

1.0 Introduction

Stone crushing sector is an important industrial sector engaged in producing crushed stone of various sizes (40 mm.20 mm.10 mm. crushed sand, stone dust etc) depending upon the requirement which acts as raw material for various construction activities.

Stone crushing operation releases a substantial amount of fugitive dust, which not only pollute the environment, but also pose a health hazards to the workers and the surrounding population. The growth in infrastructure is leading to increase in demand of raw materials, thereby resulting in the need to set up new stone crushing units or increase production from existing units. This poses a challenge to maintain the ambient air quality, which is possible if environmental guidelines predetermined by the industry concerned are followed.

Inventory and information about stone crushing units gathered from 27 SPCBs/PCCs (Arunachal Pradesh, Andaman & Nicobar island, Assam, Bihar, Chandigarh, Chhattisgarh, Daman, Dadra & Nagar Haveli, Goa, Gujarat, Haryana, Himanchal Pradesh, Jharkhand, J&K, Karnataka, Kerala, Madhya Pradesh Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Punjab, Sikkim, Tripura, Uttarakhand), and the data received indicates that there are about 16,931 stone crushing units with capacity ranges between 0.1 TPH to 1,400 TPH.

2.0 Classification of Stone Crushing Units

Based on the information received from SPCBs/PCCs, stone crushers may be classified into small, medium and large-scale in terms of production capacity.

S.No.	Category	Production capacity (TPH)
1.	Small Scale	Up to 25
2.	Medium Scale	26 to 100
3.	Large Scale	100 above

3.0 Stone Crushing Process

The stone crushing process can be broadly divided in following stages:

3.1 Transportation of raw material: Stones extracted from various sources are transported to stone-crushing units by means of trucks, trailers or automatic dumpers.

3.2 Primary crushing: Mined stones are fed directly into the primary crusher through stone feeders. The primary crusher breaks large stones and boulders into 100-140 mm size stones. Crushed stones are sent to secondary crusher for further reduction into smaller sizes. Various types of crushers are used in stone crushing industry. Jaw crushers are widely used as primary crushers.

3.3 Secondary crushing: After primary crushing, crushed stones are fed to secondary crushers through conveyor belts. In this stage, stones are further crushed to a size of 40-60 mm to 10 mm or even smaller. Stone crushing units use different types of crushers for secondary crushing. Granulator or cone crusher is usually used for secondary crushing.

3.4 Screening: From secondary crusher, crushed stones are transferred for screening through a conveyor belt. Screening is the process for segregating products of various sizes. Different mesh size screens are aligned one below the other and each screen is connected to a separate conveyor belt for discharging different size products. Mass that remains on the screen is called 'oversize' and material that passes through screen is called 'under size'. Oversize is returned to secondary crushers for further crushing and then again to screen. Under size is discharged through a 'telescopic chute' and screened products of various sizes are conveyed to stockpiles by belt conveyors. Different types of screens are used such as; grizzly-type screen, vibrating screen and rotary screen. Vibrating screens are most commonly used.

320

3.5 Tertiary crushing: Tertiary crushing is carried out in units that produce stone dust as their primary product. Dust is usually a by-product of stone crushing process. Units that produce dust, install a separate machine, usually roller crushers. Stones of size 10-20 mm are sent to roller crushers for grinding into fine dust.

3.6 Product storage and loading: After crushing and screening, final product is transferred to a conveyor belt which distributes the product into different stockpiles, depending on size of the product. The product/fines are either stored as stockpiles or directly loaded into trucks & dumpers and transported.

4.0 Environmental issues associated with Stone Crushing Units

The major environmental issue due to operation of a stone crushing unit is fugitive dust emissions which is contributed by the following processes:

- **Primary crushing:** Primary crushers breaks large boulders into smaller sizes. Crushing process as well as unloading of stones generate a substantial amount of fugitive dust. Mechanism for water sprinkling is provided to reduce fugitive dust. Some primary crushing areas are partially or completely covered with a shed as a measure to further prevent the fugitive dust emissions to surroundings, however at some places partial coverings provided which do not appear to be sufficient to such emissions.
- **Secondary crushing:** Compared to primary crushing, fugitive dust emitted at secondary crushing is relatively higher. Generally, insufficient covered shed provided in the process results in fugitive emissions.
- **Screening:** Screening process is also a source of fugitive dust emissions. As the material is conveyed to screen from secondary crusher, screen vibrates and thus, separates the material of different sizes resulting into huge amount of fugitive dust emissions. Generally, units provide covered shed and water sprinklers to combat

dust emissions however, improper design and operation of sprinklers and improper covering is an issue.

- **Tertiary crushing:** Fugitive emissions are generated during grinding of stones into fine dust.
- **Conveyor Belt:** Conveyor belts are primary means of transferring raw materials and products from one end to the other. Movement of products on the conveyor belts is a potential source of fugitive dust emissions. To reduce dust emissions, water sprinkling arrangement is provided on each belt. Some units cover conveyor belts either with sheets or thick cloth to reduce dust emissions.
- **Product release and storage:** Fugitive emissions generated during transfer of material through telescopic chutes is lower than that generating during direct disposal of product on stockpile. Material, such as stone dust, stored in open areas is are also a potential source of fugitive dust emissions.
- Although no process waste water is generated from stone crushing units, however, water is used for sprinkling, conveyed to settling tanks of appropriate size which is recycled and reused in process.

5.0 Environmental Guidelines for Stone Crushing Units

The stone crushing units should adopt following environmental guidelines to prevent/suppress fugitive dust emissions from their operation:

Source of emission	Measures to be Taken
Unloading of raw material for storage	Water sprinkling with adequately designed nozzle which produce tiny droplets of water should be provided during raw materials unloading .
Unloading of raw material into hopper	<ul style="list-style-type: none"> • Three sides and top should be covered and one side may be kept open for vehicular movement. • Water sprinklers should be provided on approach roads.

Primary Crushing/ Jaw Crusher	<ul style="list-style-type: none"> • Crusher should be completely enclosed by GI/MS sheets on top and at least three sides completely from the ground level. One side should have provision of movable sheet/door for movement/maintenance. • Primary crushers/jaw crushers should be covered with tarpaulin/cotton cloth/suitable materials to contain fugitive dust emissions (Figure-1) • Water sprinkler system with adequately designed nozzle which produce tiny droplets of water should be provided at primary crusher/jaw crusher so that fugitive emissions are contained and amount of water sprayed should be optimized.
Secondary Crushing	<ul style="list-style-type: none"> • Crusher should be completely enclosed by GI/MS sheets on top and at least three sides completely from the ground level. One side should have provision of movable sheet/door for movement/maintenance. • Dry extraction cum bag filter followed by cyclone to be provided for control of emissions.
Screening	<ul style="list-style-type: none"> • Crusher should be completely enclosed by GI/MS sheets on top and at least three sides completely from the ground level. One side should have provision of movable sheet/door for movement/maintenance. Door to be kept closed during operation. • Flexible covers where conveyors pass through the screen house should be installed at entries and exits of conveyors to screen house. • Dust extraction system connected with bag filter to be provided. • Provision of water mist sprinkling systems with adequately designed nozzle which produce tiny droplets of water should be made at inlet/outlet of screens.
Tertiary Crushing	<ul style="list-style-type: none"> • Crusher should be completely enclosed by GI/MS sheets on top and at least three sides completely from the ground level. One side should have provision of movable sheet/door for movement/maintenance. Dust extraction system connected with bag filter to be provided. • Provision of water mist sprinkling system should be made with adequately designed nozzle which produce tiny droplets of water.

Conveyor Belts	Conveyor belts should be properly covered from node to node with a thick sheet of suitable material along with water sprinkling system with adequately designed nozzle which produce tiny droplets of water.
Discharge points	Flexible Telescopic chute from top of discharge point to the ground level should be provided (Figure-2 & Figure-2(a)).
Product storage	<ul style="list-style-type: none"> • Properly designed telescopic chute of adequate length of suitable material should be provided at ends of conveyor so that dust generated from this section is contained at source. • All open stockpiles for aggregates of size above 5 mm should be kept sufficiently wet by water spraying. • Stockpiles of aggregates of 5 mm size or less should be covered to ensure that same is not carried away (or whipped out) by wind.

5.1 General Measures

- i. Wind breaking wall: GI/MS/brick wall should be provided along the periphery of crusher. Height of the wall should be 3-ft more than the highest node of the crusher.
- ii. Roads: Metaled/concrete roads should be provided within the premises. Ramps and the entire ground area inside the premises should also be metaled.
- iii. Housekeeping: To curb the air pollution in the crusher premises, arrangement of rotating water sprinkling system/fogger/Anti-smog gun should be provided. Water sprinklers should have adequately designed nozzle which produce tiny droplets of water, as such system is more effective in dust control with significant reduction in consumption of water. Fine dust accumulated and bag filters in the crushing area should be cleaned at regular intervals and the collected dust should be stored in sacks for further sale or disposal.
- iv. Plantation: 2-3 rows of tall trees should be planted around the periphery of crusher.
- v. Housing should be open for movement of mechanical drivers, conveyor belts, etc. should be sealed properly with flexible rubber flaps.

- 32A
- vi. Name of the unit, contact details of the owner and address of the unit, plant capacity and date of issue of CTE/CTO from SPCBs/PCCs should be displayed on the display board at the entrance.
 - vii. Transportation: Vehicles carrying any kind of material should be completely covered.
 - viii. Regular wetting of roads should be done to suppress dust within the premises to control dust emission re-suspension.
 - ix. Water consumption and handling: Unit should provide settling tanks of appropriate size and recycle & reuse of the water in process. Crusher should provide a water storage tank with adequate capacity. In case of use of groundwater, stone crushing unit should obtain permission to extract groundwater from the Central Ground Water Authority (CGWA)/Ground Water Department (GWD) of the State/UT. Unit should maintain proper log book of consumption of fresh water. Depending on availability, efforts may be made to use STP treated water instead groundwater to control emissions from process activities.

6.0 Regulatory/Monitoring Mechanism for Stone Crushing Unit

- i. Stone crushing unit should obtain Consent to Establish (CTE) and Consent to Operate (CTO) from the concerned SPCBs/PCCs.
- ii. Unit while applying for CTO/renewal of consent, should upload the duly filled checklist attached at **Annexure-1** along with digitally tagged photographs and videos of the crushing unit to ensure compliance of the conditions mentioned in the guidelines. SPCBs/PCCs should digitally verify the said conditions before issuance of CTE/CTO/renewal of consent.
- iii. CCTV/PTZ cameras should be installed at the entrance and all corners of the premises of the unit covering entire area with minimum of 30 days data storage.
- iii. Stone crushing unit shall comply with emission norms prescribed under the Environment (Protection) Rules, 1986 and conditions laid down in CTO by concerned SPCB/PCC.

- v. Online/manual ambient air monitoring systems to be installed in crusher zone as per CPCB/SPCB guidelines – in upwind and downwind directions.
- vi. Stone crushing unit should develop green belt as per the plan approved by concerned Department of the State/UT.
- vii. Local authorities should associate with stone crusher associations for the construction of metalled road in the entire crusher zone.
- viii. A District Level Committee should be constituted under chairmanship of District Magistrate/Deputy Commissioner so that surprise inspections for surveillance of stone crushing units located under their jurisdiction can be carried out on regular basis.
- ix. Health survey of workers should be carried out by the stone crusher on half-yearly basis.
- x. New Crushers should be allowed to operate only in dedicated crusher zones as per the siting policies of SPCBs/PCCs.
- xi. Stone crusher unit should be operated only during day time (i.e. 6.00 AM to 10.00 PM) to avoid inconvenience to the nearby residents due to ambient noise.

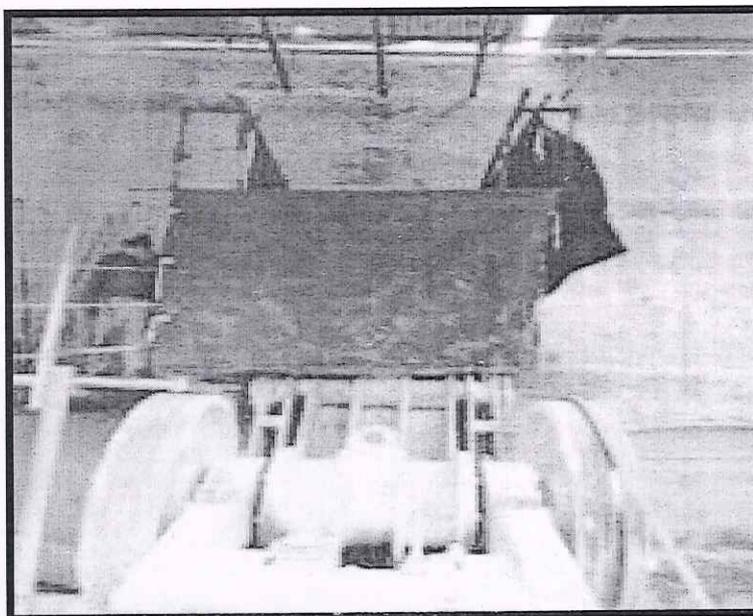


Figure-1: Covering of Primary/Jaw crusher



Figure-2: Chute from top of discharge point



Figure-2(a): Chute from top of discharge point

Annexure-1

Format/Checklist for SPCBs/PCCs before issuance of CTE & CTO

S. No.	Fugitive Emission Source Locations	Checklist for compliance of conditions of Environmental guidelines	Yes/No
1.	Unloading area of raw material, primary crusher, Screener, conveyors belts and transfer points	Water sprinklers installed with adequate designed nozzles (Upload photo/videos).	
2.	Primary crushers, Secondary crushers, Screeners and tertiary crushers	Enclosures by GI/MS sheets on top and at least three sides completely from the ground level (Upload photo/videos).	
3.	Secondary, Tertiary crushers and Screener	Dry extraction cum bag filter followed by cyclone. (Upload photo).	
4.	Covering of Conveyor belts from node to node with a thick sheet of suitable material	Covering of Conveyor belts (Upload photo).	
4	At discharge points	Flexible Telescopic chute from top of discharge point to the ground level (Upload photo).	
5	GI/MS/brick wind breaking wall of 3-ft more than the highest node of the crusher along the periphery of crusher	Wind breaking wall (Upload photo)	
General			
6.	Wind breaking wall	GI/MS/brick wind breaking wall of 3-ft more than the highest node of the crusher along the periphery of crusher (Upload photo)	
7.	Roads	Metalled/concrete roads within the premises. Ramps and the entire ground area inside the premises should also be metalled	

8.	Suppression of dust within the premises	Arrangement of rotating water sprinkling system/fogger/Anti-smog gun in the premises to suppress dust within the premises to control dust emission re suspension	
9.	Green belt	Plantation of 2-3 rows of tall trees around the periphery of crusher	
9.	Display board	Display board at the entrance, having name of unit, contact details of owner and address of unit, plant capacity and date of issue of CTE/CTO from SPCB/PCC	
10	Covering of vehicles	Covering of vehicles carrying any kind of material .	
11	CCTV/PTZ camera	CCTV/PTZ cameras installed at the entrance and all corners of the premises of the unit covering entire area with minimum of 30 days data storage	
12	Photos/videos	Upload photographs/videos ensuring compliance of all conditions as mentioned in the guidelines while applying CTE/CTO/ Renewal	



WEB COPY

W.P.No.26786 of 2019

IN THE HIGH COURT OF JUDICATURE AT MADRAS

DATED: 09.01.2024

CORAM :

THE HON'BLE MR.SANJAY V.GANGAPURWALA, CHIEF JUSTICE
AND
THE HON'BLE MR.JUSTICE D.BHARATHA CHAKRAVARTHY

W.P.No.26786 of 2019

E.V.Sampath

.. Petitioner

Vs.

1. Tamil Nadu Pollution Control Board
Rep. by its Member Secretary
76, Mount Salai, Guindy
Chennai 600 032.

2. A.V.M.Hemnaath

3. M.N.Ravi Khumarr

4. R.Daya Krishna

5. B.Ajith

6. B.Satheeshkumar

[R2 to R6 impleaded vide order dated
16.03.2020 in WMP Nos.34392 of 2019
& 7275 of 2020]



W.P.No.26786 of 2019

330

 WEB CO 7. Navamani Mines Pvt Ltd
 Rep. by its Managing Director P.Mani
 Door No.8/898, Azhagu Nagar
 Trichy Road
 Namakkal 637 001.

.. Respondents

[R7 impleaded vide order dated
 18.08.2020 made in WMP No.13559/20]

Prayer: Petition filed under Article 226 of the Constitution of India seeking a writ of Certiorari calling for the records of the respondent relating to the proceeding passed in the B.P.No.21 dated 31.07.2019 in so far as it relates to the condition No.1, i.e. "The minimum distance of 1 km between new/proposed crushers as prescribed in the B.P.Ms.No.4 dated 2.7.2004 is dispenses off. This relaxation is also applicable to the existing stone crushers and M.Sand units" and quash the same as illegal and arbitrary.

For the Petitioner : Mr.T.Mohan
 Senior Counsel
 For Mr.B.Ramesh Babu

For the Respondents : Mr.R.Shunmugasundaram
 Advocate General
 Assisted by
 Mrs.Shanmugavalli Sekar
 for Respondent-1

Mr.K.S.Viswanathan
 Senior Counsel
 For Mr.G.M.Ananthakumar
 for Respondents 2 & 3

Mr.L.Chandrakumar
 for Respondents 4 to 6



WEB COPY

W.P.No.26786 of 2019

Mrs.Rita Chandrasekar
For Mr.P.Velumani
for Respondent-7

Mr.V.P.Aravind
For M/s. Ojas Law Firm
for Respondent-8

For Petitioner in WMP No. : Mr.Viswanathan
18000 of 2023 Senior Counsel
For Mr.S.Saravanan

For Petitioner in WMP No. : Mr.Kamaleshkannan
2266 of 2022

For Petitioners in WMP Nos. : Mr.K.S.Viswanathan
7616, 1022, 1024, 1092, Senior Counsel
9923 & 4477, 7624, 9919 For Ms.T.Hemalatha
of 2023 & 86 of 2021

For Petitioner in WMP No. : Mrs.Rita Chandrasekar
3988 of 2021 For M/s. Aiyar & Dolia

For Petitioner in WMP No. : Mr.Calvin Jones
5778 of 2021

For Petitioner in WMP No. : Mr.S.Kolandasamy
18955 of 2023

ORDER

(Made by the Hon'ble Chief Justice)

We have heard Mr.T.Mohan, learned Senior Counsel for



W.P.No.26786 of 2019

332
WEB CO

Mr.B.Ramesh Babu, learned counsel for the petitioner, Mr.R.Shunmugasundaram, learned Advocate General, assisted by Mrs.Shanmugavalli Sekar, learned counsel for the respondent-1, Mr.K.S.Viswanathan, learned Senior Counsel for Mr.G.M.Ananthakumar, learned counsel for the respondents 2 & 3, Mr.L.Chandrakumar, learned counsel for the respondents 4 to 6, Mrs.Rita Chandrasekar, learned counsel for Mr.P.Velumani, learned counsel for the seventh respondent, Mr.V.P.Aravind, learned counsel for the eighth respondent, Mr.Viswanathan, learned Senior Counsel, for Mr.S.Saravanan, learned counsel for the petitioner in WMP Nos.18000 & 18955 of 2023, Mr.Kamaleshkannan, learned counsel for the petitioner in WMP No.2266 of 2022, Mr.K.S.Viswanathan, learned Senior Counsel for Ms.T.Hemalatha, learned counsel for the petitioners in WMP Nos.7616, 1022, 1024, 1092, 9923 & 4477, 7624, 9919 of 2023, 86 of 2021, Mrs.Rita Chandrasekar, learned counsel for the petitioner in WMP No.3988 of 2021, Mr.Calvin Jones, learned counsel for the petitioner in WMP No.5778 of 2021 and Mr.S.Kolandasamy, learned counsel for the petitioner in WMP No.18955 of 2023.



W.P.No.26786 of 2019

WEB COPY

2. The petitioner has filed this writ petition assailing the action of the respondent authorities reducing minimum distance of 1 km between the new/proposed crushers as prescribed in B.P.Ms.No.4 dated 02.07.2004. The new criteria of reducing the distance of 1 km is pursuant to B.P.No.21 dated 31.07.2019.

3. It appears that this writ petition is filed in the year 2019. The National Environmental Engineering Research Institute, Nagpur has given its recommendations to the stone crushing industries in the State of Tamil Nadu and it has also given its conclusion. According to learned Senior Counsel for the petitioner, the same is based on the policy and not on the basis of any empirical study.

4. The same is the report of the Experts.

5. On 10.10.2023, the Tamil Nadu Pollution Control Board, in its meeting held on 10.10.2013, has resolved to accept the proposal of dispensing of 1 km distance between one stone crushing unit to another stone crushing unit as recommended by the NEERI in its final



W.P.No.26786 of 2019

report dated 09.06.2022 along with other recommendations of the NEERI with respect to stone crushing units and also to adopt the 'Environmental Guidelines for Stone Crushing Units' issued by CPCB in July 2023.

6. According to learned Advocate General, the said resolution is adopted by the Board and is enforced.

7. The petitioner is assailing the reduction of the minimum distance of 1 km as per the B.P.No.21 dated 31.07.2019. However, the recommendations of NEERI are accepted wherein even the distance of 1 km is dispensed with. There are certain other recommendations made by NEERI. The same is not the subject matter of pleadings in the writ petition.

8. Moreover, the National Green Tribunal would be more appropriate authority to consider about the apprehensions raised by the petitioner even in the new guidelines.



W.P.No.26786 of 2019

WEB COPY

9. In the light of that, we permit the petitioner to approach the National Green Tribunal. In that event, all contentions are kept open. The interim order passed earlier shall continue for a period of ten days from today. It is needless to state that on lapse of ten days, the interim protection shall come to an end.

10. The writ petition is disposed of. There shall be no order as to costs. W.M.P.Nos.5778, 3988, 86, 18955 of 2021, 7616, 4477, 7624, 9919, 1022, 1024, 1092, 9923, 18000 of 2023 and 2266 of 2022 are disposed of. Consequently, W.M.P.Nos.26175, 29648 of 2019, 1828, 1829, 1831 of 2021 and 18006 of 2023 are closed.

(S.V.G., CJ.)

(D.B.C., J.)

09.01.2024

Index : Yes/No
Neutral Citation : Yes/No

kpl

To

The Member Secretary
Tamil Nadu Pollution Control Board

Page 7 of 9



336



W.P.No.26786 of 2019

WEB CC

76, Mount Salai, Guindy
Chennai 600 032.



WEB COPY

W.P.No.26786 of 2019

THE HON'BLE CHIEF JUSTICE
AND
D.BHARATHA CHAKRAVARTHY, J

(kpl)

W.P.No.26786 of 2019

09.01.2024

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

O.A No. 12 of 2024

E.V.Sampath,
S/o. Varadhan,
No. 1/113, BajanaiKovil Street,
Erumaiyur, Chennai – 600 044.

...Applicant

-Vs-

Tamil Nadu Pollution Control Board,
Rep. by its Member Secretary,
76, Mount Salai,
Guindy, Chennai – 600 032.

.... Respondent

**REPLY FILED ON BEHALF OF THE
RESPONDENT - TAMIL NADU
POLLUTION CONTROL BOARD**

**Advocate for Respondent:TNPCB
Thiru.S. Sai Sathya Jith ,
Advocate, Chennai.**

Date:13.02.2024.

Date of hearing on: .02.2024