

109
BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
Original Application No. 145 of 2026

In the matter of: -

Asad Khan Mohammad

..... Applicant

Versus

Union of India & Ors.

.... Respondent(s)

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Srinivas Vishven

Filed by Advocate Srinivas Vishven
On behalf of Central Pollution Control Board

Place: Delhi

Dated: 01.07.2026

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
Original Application No. 145 of 2026**

In the matter of: -

Asad Khan Mohammad

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.... Respondent(s)

**REPLY ON BEHALF OF THE RESPONDENT NO. 2, i.e. CENTRAL
POLLUTION CONTROL BOARD.**

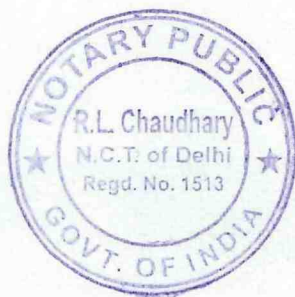
PRELIMINARY SUBMISSIONS:

1. That the Hon'ble National Green Tribunal (hereinafter referred to as the Hon'ble "NGT") vide order dated 09.03.2026 has sought the response of Central Pollution Control Board (hereinafter referred to as "CPCB") in the instant matter. Thereby, the reply is made in succeeding paragraphs. A copy of the said Order is annexed as **ANNEXURE – I**.

2. That in the present Original Application, the applicant has alleged that illegal mining activities are being carried out by the Respondent stone crusher unit i.e. M/s S.A. Rawat Stone Crusher (Respondent no. 11 herein), in and around Village Dadubans, Pargana Roorkee, Tehsil & District Haridwar, Uttarakhand. Further, the applicant has alleged that the said stone crusher is extracting mineable minerals from the river bed as well as from the Applicant's private agricultural land, in addition to operating the crusher unit in violation of environmental norms.



3. That the Central Pollution Control Board (hereinafter referred to as "CPCB") is constituted under Section 3 of the Water (Prevention and Control of Pollution) Act, 1974. It performs functions under the provisions of the Water (Prevention and Control of Pollution) Act 1974 (hereinafter referred as the Water Act, 1974), the Air (Prevention and Control of Pollution) Act, 1981 (hereinafter referred as the Air Act, 1981) and the Environment (Protection) Act, 1986 (hereinafter referred as the E (P) Act, 1986).
4. That the State Pollution Control Boards (hereinafter referred to as "SPCBs") and Pollution Control Committees (hereinafter referred to as "PCCs") have been constituted in States/Union Territories under the Water Act, 1974 and the Air Act, 1981 and are empowered to implement the provisions of these Acts in respect of territories falling in their respective territorial jurisdictions.
5. That it is humbly submitted that as per CPCB direction dated February 12, 2025 issued to all SPCBs/PCCs under section 18(1)(b) of the Water Act, 1974 and the Air Act, 1981, regarding harmonization of classification of industrial sectors under Red, Orange, Green, White and Blue Categories, "Stone Crushers" are categorized under "Orange" category and are required to obtain Consent to Establish (hereinafter referred to as "CTE") and Consent to Operate (hereinafter referred to as "CTO") from the concerned SPCB/PCC. Stone crushing units should operate only after obtaining CTE and CTO from the concerned SPCB/PCC and shall comply with the conditions laid down in CTE and CTO.



6. That the Emission Standards for stone crushing units were notified under the E (P) Act, 1986 by the Ministry of Environment, Forest and Climate Change (hereinafter referred to as "MoEF&CC") vide Notifications no. (i) S.O. 443(E) dated 18.04.1987 and (ii) G.S.R. 742(E) dated 30.08.1990 and all the stone crushing units are required to comply with the emission norms prescribed thereunder. A copy of aforesaid notifications is enclosed as **Annexure -II.**

7. That the Environmental Guidelines for Stone Crushing Units were formulated by CPCB in July, 2023 and circulated to all the SPCBs/PCCs for implementation vide letter dated 01.08.2023. The said Guidelines stipulate both general and source-specific measures required to be adopted by stone crushing units for the prevention and suppression of fugitive dust emissions. A copy of the said Environmental Guidelines for Stone Crushing Units is enclosed as **Annexure-III.**

8. That the minor minerals are defined under Section 3(e) of the Mines and Minerals (Development & Regulation) Act, 1957 (hereinafter referred to as the "MMDR Act"). Section 15 of the MMDR Act empowers the State Governments to make Rules for regulating the grant of quarry leases, mining leases or other mineral concessions in respect of minor minerals and for purposes connected therewith.

9. That Section 23C of the MMDR Act empowers the State Governments to make Rules for preventing illegal mining, transportation and storage of minerals and for the purposes connected therewith.



10. That Central Government has made it mandatory to obtain Environmental Clearance for mining of minerals. The MoEF&CC published EIA Notification 2006 and its subsequent amendments regarding Environmental Clearance to be obtained by the mine owner for mining activities, which includes Environmental Impact Assessment/Environment Management Plan Reports and necessary conditions for safeguarding the environment are stipulated while granting necessary Environmental Clearances.

11. That the State Level Environment Impact Assessment Authority (hereinafter referred to as "SEIAA") is constituted in States/UTs and are empowered to grant Environmental Clearance as per procedures specified in the EIA Notification for the respective States/UTs.

12. That MoEF&CC has issued "Sustainable Sand Mining Management Guidelines-2016" to promote scientific mining of sand and encourage environmentally friendly management practices, and to ensure conservation of the river equilibrium and its natural environment by protection and restoration of the ecological system. For the enforcement of the regulatory provisions related to river sand mining for effective monitoring and ensuring sustainable sand mining, MoEF&CC has released "Enforcement and Monitoring Guidelines for Sand Mining" in January 2020.

13. That the mining operations are regulated through the grant of CTE and/or CTO under the Water Act, 1974 and the Air Act, 1981 by the concerned SPCBs/PCCs. The Water Act, 1974 and the Air Act, 1981 also includes provisions for monitoring compliance with environmental standards and

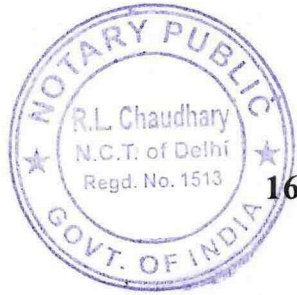


provisions of a show-cause notice/closure for non-compliance of environmental standards.

14. That in the matter of illegal sand mining, Hon'ble National Green Tribunal vide order dated 26.02.2021 in OA No. 360/2015 directed for the scale of compensation to be adopted by all the States/UTs for imposing Environmental Compensation to deal with cases of illegal sand mining in violation of Environmental Clearance conditions. In compliance to above order, CPCB vide letter dated 11.06.2021 issued directions to Environment Secretaries of States/UTs to evolve an appropriate mechanism for assessment of compensation in all Districts of the State and for utilization of recovered compensation for restoration of the environment by preparing an appropriate action plan.

PARAWISE REPLY

15. That the averments made in paragraph No. 1, 2 & 3 of the Original Application are related to information about the petitioner, respondents and Original Application and is a matter of record and hence, need no comments from the Answering Respondent No. 02.



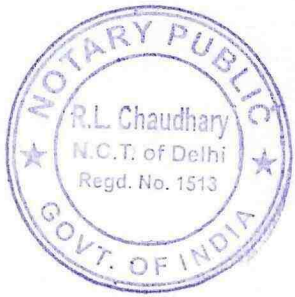
16. That the averments made in paragraph No. 4 (A) of the Original Application is related to the question of alleged illegal extraction of sub-minerals from the Applicant's agricultural land by or for the Respondent stone crusher. In this regard, the submissions made in para 8 to 14 of this reply are re-iterated and are not repeated herein for the sake of brevity.

17. That the averments made in paragraph No. 4 (B) of the Original Application is related to the question of alleged operation of the

Respondent stone crusher beyond the permitted capacity of 20 TPH. In reply it is humbly submitted that the unit is required to operate strictly within the consented capacity and in compliance with the conditions stipulated in the CTO. Any increase or reduction in production capacity or deviation from the consent conditions require prior approval from the concerned SPCB. Uttarakhand State Pollution Control Board (hereinafter referred to as "UKPCB") is empowered to grant CTE and CTO and enforce conditions of CTE and CTO within the state of Uttarakhand.

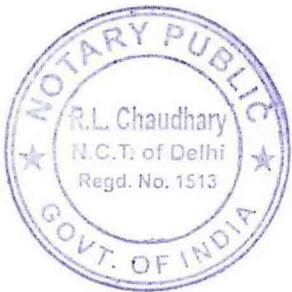
18. That the averments made in paragraph No. 4 (C) of the Original Application is related to the question of alleged failure of stone crusher to construct a proper boundary wall, pave internal roads, develop a three-layer green belt, and install effective dust suppression systems. In this regard, it is humbly submitted that CPCB formulated Environmental guidelines for Stone Crushing Units in July, 2023 and circulated to all the SPCBs/PCCs for its implementation. The said guidelines stipulate the general, source specific measures and Regulatory/Monitoring Mechanism for stone crushing units to prevent/suppress dust emissions. Stone crushing units need to comply with pollution control measures as stipulated in the said Guidelines. In case of non-compliance with the prescribed guidelines, Standards and conditions of CTO, appropriate action, may be initiated by the concerned SPCB in accordance with environmental laws.

19. That the averments made in paragraph No. 4(D) of the Original Application relate to the question of allegations regarding non-installation or manipulation of the tamper-proof electronic meter and non-maintenance of reliable CCTV footage in violation of the Uttarakhand Stone Crusher Policy, 2021. In this regard, it is humbly submitted that the requirement of



a tamper-proof electronic meter with daily start-close readings is a condition stipulated under the Uttarakhand Stone Crusher Policy, 2021, and its enforcement falls within the jurisdiction of UKPCB and the concerned State authorities. As regards CCTV surveillance, it is submitted that CPCB's Environmental Guidelines for Stone Crushing Units (July 2023) also mandate installation of CCTV/PTZ cameras covering the entire premises with a minimum of 30 days of data storage. Compliance with this requirement is therefore an obligation of the unit under CPCB's Guidelines as well, and UKPCB is empowered to verify and enforce the same.

20. That the averments made in paragraph No. 4 (E) of the Original Application is related to the question of alleged continuous fugitive dust emissions and excessive noise from the Respondent's plant amount to violations of the Air Act, 1981. In this regard, submissions made in Para 6, 7 and 18 are reiterated and are not repeated here for the sake of brevity. Further, it is humbly submitted that as per CPCB above mentioned guidelines, the 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.



21. That the averments made in paragraph No. 4 (F) of the Original Application are related to the question of alleged extraction of material from the riverbed without lawful permission. In this regard, the submissions made in para, 9 to 14 of this reply are re-iterated and are not repeated herein for the sake of brevity.

22. That the averments made in paragraph No. 4 (G) of the Original Application are related to the question of alleged absence of proper settling

tanks and water recycling systems leading to contaminated runoff violates the Water Act, 1974. In this regard it is humbly submit that CPCB formulated Environmental guidelines for Stone Crushing Units in July, 2023 and circulated to all the SPCBs/PCCs for its implementation. **Para 5.1 (ix)** of the said guidelines stipulates that the Stone Crushing Unit should provide settling tanks of appropriate size and recycle & reuse the water in process. The crusher should provide a water storage tank with adequate capacity.

23. That the averments made in paragraph No. 4 (H) of the Original Application are related to the question of alleged movement of large numbers of tractor-trolleys linked to the Respondent crusher in early morning hours. In this regard, the submissions made in para 5 to 14 of this reply are re-iterated and are not repeated herein for the sake of brevity.

24. That the averments made in paragraph No. 4 (I) of the Original Application are related to the question of alleged inaction of local authorities on the Applicant's complaint dated 14.01.2026. The matter may be appropriately addressed by the concerned State authority and hence, need no comments from the Answering Respondent no. 02.

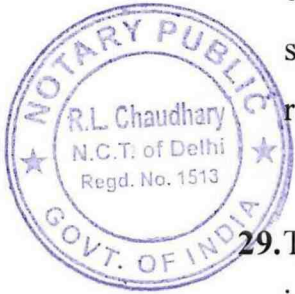
25. That the averments made in paragraph No. 4 (J) of the Original Application is related to the question of alleged cumulative acts of over-production, illegal mining, and non-compliance with CPCB Guidelines and Uttarakhand Stone Crusher Policy, 2021 which ought to render the Respondent liable to pay Environmental Compensation under the Polluter Pays Principle. In this regard, the submissions made in para 5 to 14 of this reply are re-iterated and are not repeated herein for the sake of brevity.



26. That the averments made in paragraph No. 4 (K) of the Original Application is related to the question of closure to be ordered due to alleged continuous violations and risk to public health, agriculture and river ecology. In this regard, the submissions made in para 5 to 14 of this reply are re-iterated and are not repeated herein for the sake of brevity.

27. That the averment made in paragraph No. 5 of the Original Application is related to Jurisdiction of the National Green Tribunal and is a matter of record and hence, need no comments from the Answering Respondent No. 02.

28. That the averment made in paragraph No. 6 (i) of the Original Application pertain to the alleged pollution caused by the stone crushing activities, resulting in air pollution, noise pollution, water pollution, and soil degradation and reference of CPCB guidelines. In this regard, the submissions made in para 7, & 18 of this reply are re-iterated and are not repeated herein for the sake of brevity.



29. That the averment made in paragraph No. 6(ii) of the Original Application is related to binding regulatory framework framed by State of Uttarakhand for stone crushing units under the Uttarakhand Stone Crusher Policy, 2021 and subsequent Government Orders (commonly referred to as the "Anugya Neeti"). The matter may be appropriately addressed by the concerned State Authorities and hence, need no comments from the answering respondent no. 02.

30. That the averment made in paragraph No. 6(iii) of the Original Application is related to alleged operation of stone crusher contrary to CPCB Guidelines and Stone Crusher Policy, 2021. In this regard, the submissions made in para 7,18 & 29 of this reply are re-iterated and are not repeated herein for the sake of brevity.

31. That the averment made in paragraph No. 6(iv) of the Original Application is related to CTO granted dated 24.03.2023 in favour of M/s S.A. Rawat Stone Crusher. UKPCB is empowered to grant CTE and CTO and enforce conditions of CTE and CTO within the state of Uttarakhand. Thereby, the reply of concerned respondent may kindly be considered in this regard.

32. That the averment made in paragraph No. 6(v) of the Original Application is related to alleged continues generation of excessive fugitive dust, causing persistent noise nuisance, and unregulated movement of tractor-trolleys in the early morning hours, endangering nearby residents and the environment and rendering the grant of permission and regulatory oversight legally unsustainable. In this regard, the submissions made in para 5 to 14 of this reply are re-iterated and are not repeated herein for the sake of brevity.



33. That the averment made in paragraph No. 6(vi) of the Original Application is related to CPCB Guidelines and Uttarakhand Stone Crusher Policy, 2021 and the Respondent unit has been alleged to be operating in blatant breach of the same. In this regard, the submissions made in para 7, 18 and 29 of this reply are re-iterated and are not repeated herein for the sake of brevity.

- 34.** That the averment made in paragraph No. 6(vii) of the Original Application is related to Policy mandates of installation of tamper proof electronic meter with daily start-close readings to be maintained by the operator, which may appropriately be addressed by the concerned State authorities and hence need no comments from the Answering Respondent no. 02.
- 35.** That the averment made in paragraph No. 6(viii) of the Original Application relates to the requirement of CCTV cameras at entry and exit gates with preserved recordings in compliance with the Uttarakhand Stone Crusher Policy, 2021. In this regard, it is submitted that CPCB's Environmental Guidelines for Stone Crushing Units (July 2023) also mandate installation of CCTV/PTZ cameras covering the entire premises with a minimum of 30 days of data storage. The enforcement of both the State Policy requirement and CPCB's Guidelines in this regard falls within the jurisdiction of UKPCB and accordingly, the reply of concerned State authorities therein, may also be considered by this Hon'ble Tribunal.
- 36.** That the averments made in paragraph No. 6(ix) and 6(x) of the Original Application are related to allegations of unlawful and unregulated functioning of stone crusher and acting in connivance with local mafia, repeatedly moved beyond the approved crusher premises, illegal handling of sub-minerals, absence of effective regulatory control and have even approached the residence of the Applicant in an intimidating manner. In this regard, it is humbly submitted that the matter may be appropriately addressed by the concerned State authority and hence need no comments from the Answering Respondent no. 02.




- 37.** That the averment made in paragraph No. 6(xi) of the Original Application is related to alleged operation of stone crusher beyond the sanctioned capacity of 20 tonnes per hour. In this regard, the submissions made in para 17 of this reply are re-iterated and are not repeated herein for the sake of brevity.
- 38.** That the averment made in paragraph No. 6(xii) of the Original Application is related to illegal extraction of sub minerals from the Applicant's agricultural land and the adjoining riverbed. In this regard, the submissions made in para 8 & 14 of this reply are re-iterated and are not repeated herein for the sake of brevity.
- 39.** That the averment made in paragraph No. 6(xiii) of the Original Application is related to written complaint dated 14.01.2026 filed before the Senior Superintendent of Police, Haridwar regarding the alleged unauthorized movement of tractor-trolleys specifically large number of tractor trolleys movement in the early morning hours and illegal material handling by persons associated with the crusher. In this regard it is humbly submitted that the matter may be appropriately addressed by the concerned State authorities and hence, need no comments from the answering respondent no. 02.
- 40.** That the averment made in paragraph No. 6(xiv) of the Original Application is related to alleged violations of the E (P) Act, 1986, the Air Act, 1981 and the Water Act, 1974 by the respondent Stone Crusher. In this regard, the submissions made in para 5 & 14 of this reply are re-iterated and are not repeated herein for the sake of brevity.



41. That the averment made in paragraph No. 6(xv) of the Original Application is related to the applicant seeking imposition of strict environmental compensation, under the "Polluter Pays Principle" and criminal prosecution under the E (P) Act, 1986 and the Rules framed thereunder, as well as consequential proceedings under the Air Act, 1981 and the Water Act, 1974, on the respondent stone crusher. In this regard, the submissions made in para 5 & 14 of this reply are re-iterated and are not repeated herein for the sake of brevity.
42. That the averment made in paragraph No. 7 and 8 of the Original Application are matter of record and hence, need no comments from the Answering Respondent No. 2.
43. That, with regard to averments made in Original Application under the heading Grounds and Prayers, it is humbly submitted that the submissions made in preceding paragraphs are re-iterated and are not repeated herein for the sake of brevity.
44. That it is most respectfully submitted that the Answering Respondent seeks liberty to file an additional reply if the same is required to be filed at a later stage.
45. In light of the above submission, it is most respectfully submitted that this Answering respondent i.e. CPCB, shall abide by all the orders or directions passed by the Hon'ble Tribunal in the instant Original Application.




(Anamika Sagar)
Scientist 'E'
Central Pollution Control Board

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
Original Application No. 145 of 2026

In the matter of: -

Asad Khan Mohammad

..... Applicant

Versus

Union of India & Ors.


.... Respondent(s)

AFFIDAVIT

I, Anamika Sagar, working as Scientist 'E', having office at the Delhi, Central Pollution Control Board, Respondent No. 02, Parivesh Bhawan, East Arjun Nagar, Delhi, do hereby solemnly affirm and sincerely state on oath as follows: -

1. That I, the deponent herein, is well conversant with the facts and circumstances of the present case on the basis of the information derived from the official records, and hence, I am competent to verify, sign and swear this affidavit on behalf of the Respondent CPCB.
2. That the accompanying reply may be read part and parcel of the present affidavit.
3. That the accompanying reply has been drafted and filed under my instructions, the contents thereof are true and correct based on the record maintained during the ordinary course of business of CPCB and available records and documents and the contents of the same are read over and explained to me and are not repeated herein for the sake of brevity.





DEPONENT
 अनामिका सागर/Anamika Sagar
 वैज्ञानिक 'इ'/Scientist 'E'
 केंद्रीय प्रदूषण नियंत्रण बोर्ड
 Central Pollution Control Board
 पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, भारत सरकार
 M/o Env. Forest & Climate Change, Govt. of India
 परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली-110032
 Parivesh Bhawan, East Arjun Nagar, Delhi-110032

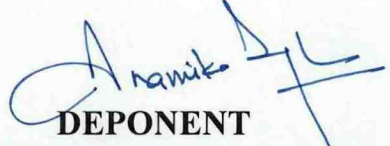
VERIFICATION

Verified at Delhi on this day of **30 JUN..2026**2026, that the contents above are correct and true based on the records of the case as mentioned in the day-to-day affairs of the CPCB. Nothing has been concealed therefrom or misstated.



ATTESTED

NOTARY PUBLIC
GOVT. OF INDIA

30 JUN 2026


DEPONENT

अनामिका सागर/Anamika Sagar
वैज्ञानिक 'E'/Scientist 'E'
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, भारत सरकार
M/o Env. Forest & Climate Change, Govt. of India
परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली-110032
Parivesh Bhawan, East Arjun Nagar, Delhi-110032

Item No. 05

Court No. 1

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

Original Application No. 145/2026

Asad Khan Mohammad

Applicant

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 09.03.2026

**CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER**

Applicant: Mr. Gaurav Kumar Bansal, Ms. Nandita Bansal & Ms. Chandrika Upadhyaya,
Advocates

ORDER

1. In this Original Application, the applicant has made allegation that the Respondent No. 11 – M/s S.A Rawat Stone Crusher has indulged in illegal mining activities in and around Village Dadubans, Pargana Roorkee, Tehsil and District Haridwar, Uttarakhand. The applicant has also alleged that the said stone crusher is extracting the mineable minerals from the river bed but in the OA the name of the river has not been disclosed. Learned counsel for the applicant is granted liberty to file additional affidavit disclosing the name of the river.

2. The further allegation of the applicant is that the said stone crusher has extracted the soil from the applicant's agricultural land beyond the permissible limit. In support of such an allegation learned counsel for the applicant has referred to the photographs on Page 96. He has also referred to the khasra entries filed as Annexure A1/4 on Page 89 to show that the land belongs to the applicant. Further allegation of the applicant is that the stone crusher is running breaching the statutory safety norms and is operating without any approved mining plan, environmental clearance etc.

3. Learned counsel for the applicant has further submitted that it is operating violating the Consent to Operate conditions. Learned Counsel for the applicant has also referred to the complaint made by the applicant to the police authorities (Annexure A1/6) and has submitted that the applicant has been threatened by the stone crusher operators for making the complaint.

4. The OA raises substantial issue relating to compliance of environmental norms.

5. Issue notice to the respondents. Applicant is directed to serve the respondents and file affidavit of service at least one week before the next date of hearing.

6. In the meanwhile, the Respondent No. 10 - Senior Superintendent of Police, Haridwar is directed to ensure that the applicant is not threatened on account of filing the complaint before the Tribunal.

7. List on 06.07.2026.

Prakash Shrivastava, CP

Dr. Afroz Ahmad, EM

March 9, 2026
Original Application No. 145/2026
AS

Sr. No.	Industry	Parameter	Standards
1	2	3	4
# ¹ 11.	STONE CRUSHING UNIT	Suspended Particulate Matter	The suspended particulate matter measured between 3 metres and 10 metres from any process equipment of a stone crushing unit shall not exceed 600 microgrammes per cubic metre.
² 12.	COKE OVENS	pH	Concentration in the effluents when discharged into inland surface waters not be exceed milligramme per litre (except for pH) 5.5 – 9.0
		Biochemical Oxygen Demand (27°C for 3 days)	30
		Suspended Solids	100
		Phenolic Compounds (as C ₆ H ₅ OH)	5
		Cynides (as CN)	0.2
		Oil & Grease	10
		Ammonical Nitrogen (as N)	50
13.	SYNTHETIC RUBBER	Colour	Concentration in the effluents when discharged into inland surface waters not be exceed milligramme per litre (except for colour and pH) Absent
		pH	5.5 – 9.0
		Biochemical Oxygen Demand ¹ [BOD (3 days at 27°C)]	50
		Chemical Oxygen Demand	250
		Oil and grease	10.0

¹ S.No.11 and entries relating thereto inserted vide SO 443(E)dt.18.4.87 published in the Gazette no. 206 dt. 18.4.87.
Standards notified at Sl. No. 37 may also be referred.

² S.Nos. 12 to 24 and entries relating thereto inserted vide S.O. 64(E) published in the Gazette No. 42 dt. 18.1.88.

Sr. No.	Industry	Parameter	Standards
1	2	3	4

* Separate standards for VSS, HSS, PBSW & PBCW as given in column 4 stands abolished

¹[(c) Standards for forage fluoride

- Twelve consecutive months average - 40 ppm
- Two consecutive months average - 60 ppm
- One month average - 80 ppm]

*37.	STONE CRUSHING UNIT	Suspended Particulate Matter (SPM)	<p>The Standards consist of two paras :</p> <p>(i) Implementation of the following Pollution Control measures:</p> <p>(a) Dust containment cum suppression system for the equipment.</p> <p>(b) Construction of wind breaking walls.</p> <p>(c) Construction of the metalled roads within the premises.</p> <p>(d) Regular cleaning and wetting of the ground within the premises.</p> <p>(e) Growing of a green belt along the periphery.</p>
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¹ Inserted by Rule 2(IV)(b) of the Environment (Protection) First Amendment Rules, 2006 notified by G.S.R.46(E), dated 3.2.2006.

* Standards notified at Sl. No. 11 may also be referred.

Sr. No.	Industry	Parameter	Standards
1	2	3	4
			(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 metre] from a controlled isolated as well as from a unit located in a cluster should be less than 600 mg/Nm ³ [xxx....]
38.	PETROCHEMICALS (BASIC & INTERMEDIATES)	EFFLUENTS	
		Ph	6.5 – 8.5
		*BOD ² [(3days at 27°C)]	50
		**Phenol	5
		Sulphide (as S)	2
		COD	
		Cynide (as CN)	250
		*** Fluoride (as F)	
		Total suspended Solids	³ [100]
		Hexavalent Chromium ³ [(as Cr)]	0.1
		**** Total Chromium ³ [(as Cr)]	2.0

** Corrections have been made as per CORRIGENDUM Notification No. S.O. 8(E) dated 31.12.1990.

¹ The sentence 'The measurements are to be conducted at least twice a month for all the 12 month in a year' deleted as per CORRIGENDUM Notification S.O 8(E) dated 31.12.90.

² Substituted by Rule 2 of the Environment (Protection) Amendment Rules, 1996 notified by G.S.R.176(E), dated 2.4.1996 may be read as BOD (3 days at 27°C) wherever BOD 5 days 20°C occurred.

³ Corrected as per CORRIGENDUM Notification S.O. 8(E) dated 31.12.1990.



केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार
MINISTRY OF ENVIRONMENT FOREST & CLIMATE CHANGE GOVT OF INDIA

CP-12/9/2022-IPC-V-HO-CPCB-HO

1881-1826

August 01, 2023

To

The Member Secretary,
(As per the list enclosed)

Subject: Environmental Guidelines for Stone Crushing Units - reg.

Sir,

Central Pollution Control Board has formulated "Environmental Guidelines for Stone Crushing Units" to control the air pollution in the Country. A copy of Guidelines is attached for ready reference and implementation in the State/UT.

This issued with the approval of Competent Authority, CPCB.

Yours faithfully

(Anamika Sagar)

Addl. Director & Div. Head (IPC- V)

Encl.: As above

Copy to:

- 1 All Regional Directorates : For information and necessary action,
Central Pollution Control Board please
(list enclosed)
- 2 The Chairperson : For kind information, please
Commission for Air Quality
Management in National Capital Region
and Adjoining Areas,
17th Floor, Jawahar Vyapar Bhawan,
(STC Building), Tolstoy Mparg,
New Delhi – 110001
- 3 PS to CCB : For kind information of CCB, please.
- 4 PS to MS : For kind information of MS, please.

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
निर्गत... N.S. Jangh
दिनांक 21/8/2023

(Anamika Sagar)

‘परिवेश भवन’ पर्वी अर्जुन नगर, दिल्ली-110032

Parivesh Bhawan, East Arjun Nagar, Delhi-110032

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**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.

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.

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<p>Primary Crushing/ Jaw Crusher</p>	<ul style="list-style-type: none"> • Crusher should be completely enclosed by G/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.
<p>Secondary Crushing</p>	<ul style="list-style-type: none"> • Crusher should be completely enclosed by G/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.
<p>Screening</p>	<ul style="list-style-type: none"> • Crusher should be completely enclosed by G/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.
<p>Tertiary Crushing</p>	<ul style="list-style-type: none"> • Crusher should be completely enclosed by G/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.

- 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

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	
