



**BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA
IN
Original Application No. 103/2025/EZ**

**IN THE MATTER OF:
Mahendra Prakash Soren**

...Applicant(s)

Versus

State of Jharkhand & Ors.

...Respondent(s)

INDEX

Sl. No.	Particulars	Annexures	Page No.
1.	Reply on behalf of Respondent No. 03 i.e. Central Pollution Control Board.		1-6
2.	Environmental Guidelines for Stone Crushing Units.	Annexure I	7-19

Mrinal Kanti Biswas

Regional Director & Scientist E

CPCB, Kolkata

Filed through

Counsel

Dated: 19/08/ 2025
Place: Kolkata



19 AUG 2025

X



**BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA
IN
Original Application No. 103/2025/EZ**

IN THE MATTER OF:

Mahendra Prakash Soren

...Applicant(s)

Versus

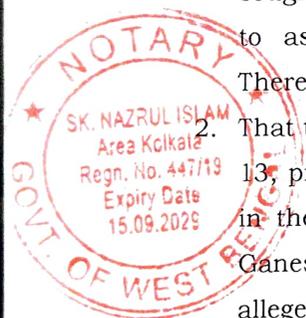
State of Jharkhand & Ors.

...Respondent(s)

COUNTER AFFIDAVIT ON BEHALF OF CENTRAL POLLUTION CONTROL BOARD i.e. RESPONDENT NO. 03

Preliminary Submissions:

1. That the Hon'ble National Green Tribunal, Eastern Zone Bench, Kolkata (hereinafter referred to as "Hon'ble NGT") vide order dated 01.07.2025 in the present Original Application (hereinafter referred to as "OA") has sought the reply of Central Pollution Control Board (hereinafter referred to as "CPCB" or "Respondent No. 3") in the instant matter. Thereby, reply is in the succeeding paragraphs.
2. That the matter is related to the allegations against Respondent Nos. 7 to 13, project proponents, engaged in stone mining and crushing activities in the villages of Bishanpur, Pratapur, Mansinghpur, Siulidanga, and Ganeshpur, all located in Hiranpur, District Pakur, Jharkhand. It is alleged that these units are operational in violation of conditions of Environmental Clearance and Consent to Operate (hereinafter referred to as "CTO"), causing Noise and Air pollution without implementation of any dust suppression measures.
3. That at the outset, the Answering Respondent denies all claims, contentions, allegations and averments against this Answering Respondent i.e. CPCB in the above Original Application contrary to anything stated or submitted in this reply. Nothing in the Original Application may be deemed to have been accepted or admitted by the Answering Respondent for want of a specific denial or on the ground of non-traverse, save any averment which has been expressly admitted hereinafter.
4. That CPCB is a statutory body constituted under the Water (Prevention and Control of Pollution) Act, 1974 (hereinafter referred to as the "Water



Act, 1974") and performs the functions under the Water Act 1974, the Air (Prevention and Control of Pollution) Act, 1981 (hereinafter referred to as the "Air Act, 1981") and the Environment (Protection) Act, 1986. It is further submitted that State Pollution Control Boards/Pollution Control Committees (hereinafter referred to as "SPCBs/PCCs"), established under the Water Act, 1974 and the Air Act, 1981 are empowered to implement and enforce the provisions of these Acts within their respective territorial jurisdictions.

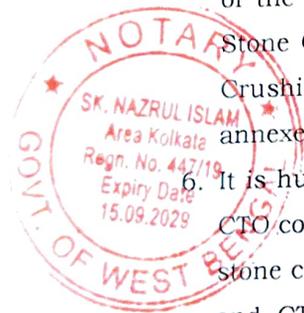
PRELIMINARY SUBMISSIONS:

5. That the Emission Standards for stone crushers were notified under the Environment (Protection) Act, 1986, by the Ministry of Environment, Forest & Climate Change (hereinafter referred to as "MoEF&CC") vide Notification dated 30.08.1990. The Stone crushing units should comply with the emission norms prescribed under the Environment (Protection) Act, 1986. Further, CPCB formulated Environmental guidelines for Stone Crushing Units in July, 2023 and circulated to all the SPCBs/PCCs for its implementation vide letter dated August 01, 2023. The said guidelines stipulate the general and source specific measures required to be taken by stone crushing units to prevent/suppress dust emissions. Paragraph 6.0 of the said guidelines stipulates Regulatory/Monitoring Mechanism for Stone Crushing Unit. A copy of the Environmental Guidelines for Stone Crushing Units along with the said letter dated August 01, 2023, is annexed as **Annexure-I**.

6. It is humbly submitted that issuance of Consent to Establish (CTE) and CTO comes under the purview of concerned SPCB, and Stone mining and stone crushers unit are required to comply the Environmental Clearance and CTO conditions. Under the Mining and Mineral (Development & Regulation) Act 1957, the State Governments are empowered to make rules for grant of prospecting licenses or mining leases in respect of minor mineral and making rules for preventing illegal mining, transportation and storage of minerals, and therefore can make necessary policy and implement necessary enforcement measures.

REPLY:

7. That with reference to the averment made in Paragraph No. 1 of OA regarding pollution issues faced by the applicant due to stone mining and stone crusher units, it is humbly submitted that a 'Joint Inspection' has





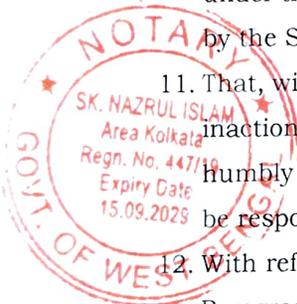
been carried out by the Committee Members appointed by the Hon'ble NGT and report regarding the same shall be submitted by the District Magistrate, Pakur (Nodal agency).

8. That with regard to the averments made in Paragraph No. 2 of OA about the role of various Government bodies, it is humbly submitted that the submissions made at para 4 of this reply is reiterated and is not repeated herein for the sake of brevity.
9. That with regard to the averments made in Paragraph Nos. 3 to 13 of OA wherein the alleged violations and pollution caused by the stone mining and stone crusher units is brought out, in this regard, it is respectfully submitted that this Answering Respondent reiterates the contents provided in para's under preliminary submissions and the same are not repeated herein for the sake of brevity.
10. That, with reference to the averment made in Paragraph No. 14 of OA which is regarding alleged violations of CTO conditions, it is humbly submitted that issuance of Consent to Establish (CTE) and CTO comes under the purview of concerned SPCB, hence may appropriately be replied by the SPCB.
11. That, with reference to averment made in Paragraph No. 15 of OA wherein inaction by the concerned SPCB against the violators is alleged, it is humbly submitted that any alleged inaction by any of the respondents may be responded by the concerned Respondents.
12. With reference to the averments made in Sub-Paragraph No. (1) to (17) of Paragraph No. 16 which are 'Grounds' of the Original Application, it is humbly submitted that the submissions made in preceding paragraphs are re-iterated and are not repeated for the sake of brevity.
13. That in light of the above submissions, it is respectfully submitted that this Answering Respondent i.e. CPCB, shall abide by any order(s) or direction(s) passed by this Hon'ble NGT in the instant Application.
14. That, it is respectfully before this Hon'ble Tribunal may be pleased to pass such orders as may be necessary for the end of Justice.

*Identified by me
Sibajyoti Chakraborty
Advocate
19.08.2018*

Mrinal Kanti Biswas

Regional Director & Scientist E
CPCB, Kolkata



S.L. NO. 128

X



**BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA**

IN

Original Application No. 103/2025/EZ

IN THE MATTER OF:

Mahendra Prakash Soren



...Applicant(s)

Versus

State of Jharkhand & Ors.

...Respondent(s)

AFFIDAVIT

I, Mrinal Kanti Biswas, Son of Saroj Kumar Biswas, aged 43 years, having office at the Regional Directorate (Kolkata), Central Pollution Control Board (CPCB), Southend Conclave, Block No. 502, 5th & 6th floor, 1582, Rajdanga Main Road, Kolkata - 700107, do hereby solemnly affirm, declare on oath and state as under:

1. That the deponent is authorized representative to represent the Respondent CPCB in the present case, and as such, I am 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 and authorized 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 as I am competent to swear this affidavit.
3. That the accompanying reply has been drafted and filed under my instructions and authority the contents thereof are true and correct on the basis of the record maintained during 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.

Identified by me

Sibojjati Chakrobarti
Advocate 19.08.2025

**Solemnly Affirmed and
Declared before me on the
Identification of the Advocate**

[Signature]
DEPONENT

[Signature]
Notary

**SK. Nazrul Islam
Notary, Govt. of W.B
Govt. No. 447/19
City Civil Court, Calcutta**

19 AUG 2025



VERIFICATION

Verified at Kolkata on this day of 19th August 2025 that the contents of the above reply are correct and true on the basis of the record of the cases as mentioned in the day to day affairs of the CPCB. Nothing has been concealed therefrom or misstated.

Handwritten initials

Signed and verified on this 19th day of August, 2025 at Kolkata.

Handwritten initials

Identified by me

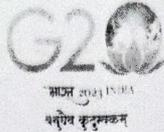
Sibajit Chakrabarti
Advocate 19.08.2025

Handwritten signature
DEPONENT





LIFE
Lifestyle For
Environment



✕

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
(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
दिनांक 2/8/2023
N.S. 10/9/23
C/S

Anamika Sagar
(Anamika Sagar)

‘परिवेश भवन’ पर्वी अर्जुन नगर, दिल्ली-110032

Parivesh Bhawan, East Arjun Nagar, Delhi-110032

दूरभाष/Tel : 43102030, 22305792, वेबसाइट/Website : www.cpcb.nic.in

**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.



Primary Crushing/ Jaw Crusher	<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.
Secondary Crushing	<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.
Screening	<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.
Tertiary Crushing	<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.

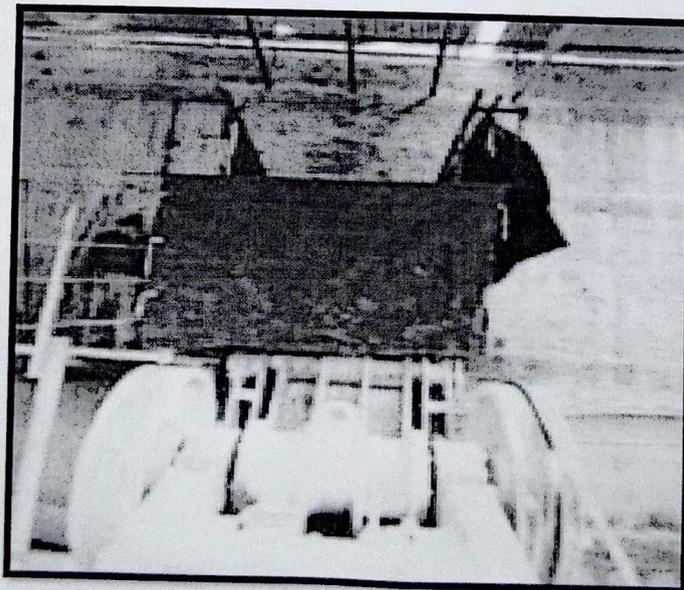


Figure-1: Covering of Primary/Jaw crusher

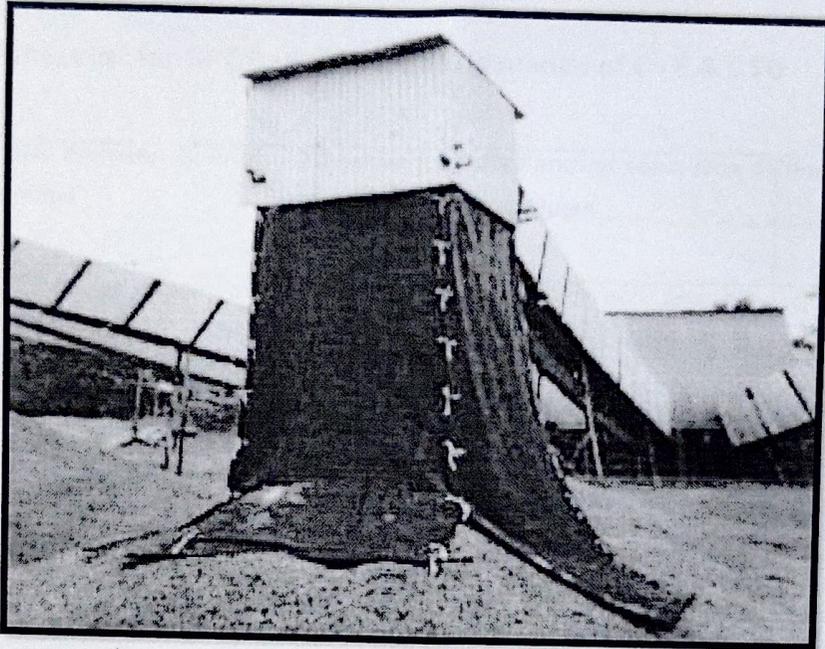


Figure-2: Chute from top of discharge point



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

18

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	
