

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

Original Application No. 222/2024 and

Original Application No. 551/2024

In the matter of

News Item titled "पंजाब का बड़ा मुद्दा पंजाब के बॉर्डर एरिया में नहीं रुक रहा अवैध खनन, देश को सुरक्षा को खतरा बढ़ा" appeared in Amar Ujala dated 09.04.2024.

Report/Reply by way of affidavit of Er. Piyush Jindal, Environmental Engineer (HQ-2), Punjab Pollution Control Board, Nabha Road, Patiala on behalf of respondent No. 2, in compliance of order dated 09.09.2024.

I, the above-named deponent, do hereby, solemnly affirm and state as under:

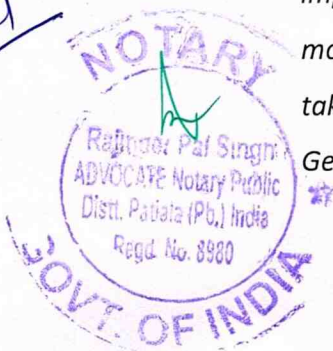
Respectfully Showeth:

1. That briefly submitted the Hon'ble National Green Tribunal has taken suo moto cognizance of a news item titled "पंजाब का बड़ा मुद्दा पंजाब के बॉर्डर एरिया में नहीं रुक रहा अवैध खनन, देश को सुरक्षा को खतरा बढ़ा" appeared in Amar Ujala Newspaper dated 09.04.2024 and the case in Original Application No. 551 of 2024 has been registered. The news item has highlighted the issue relating to illegal mining in the State of Punjab.
2. That after consideration of the matter, the Hon'ble Tribunal was pleased to dispose of the case vide an order dated 09.09.2024 with the direction as under:-

In view of the above, the concerned Department, of the State Government responsible for according permissions for mining including the PPCB are directed to clearly indicate and ensure implementation of all the tech mechanisms required for monitoring and enforcement of laws relevant to illegal mining and take steps to check illegal mining. The Department of Mining and Geology and Punjab Pollution Control Board are directed to file a

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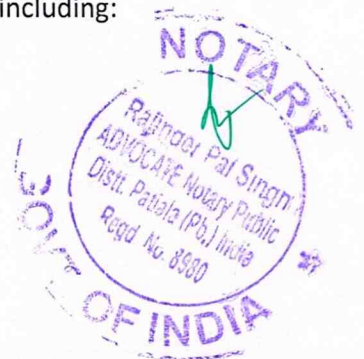


report indicating the various tech mechanism that have been put in place along with the concerned staff who have been assigned for this specific purpose including infrastructure facilities provided, before the Registrar General of this Tribunal within three months e-mail. If found necessary, the matter will be listed for consideration before the Bench.

3. That the deponent is presently working as Environmental Engineer, Headquarter-2 in the Punjab Pollution Control Board at Patiala and is well conversant with the facts and circumstances of the case and is competent and authorized to swear and file the present affidavit on behalf of the Member Secretary, Punjab Pollution Control Board i.e. respondent No. 2.
4. That to make compliance of the order dated 9.9.2024 of the Hon'ble Tribunal, the Punjab Pollution Control Board has sought information from the Department of Mining and Geology, Government of Punjab vide letter no. 23711 dated 23.09.2024, reminder letter no. 28453 dated 19.11.2024 and D.O. letter No. 30608 dated 09.12.2024 about the various tech-mechanism that have been put in place by the Mining Department for monitoring & enforcement of laws relevant to illegal mining alongwith the details of concerned staff who have been assigned for this specific purpose including infrastructure & facilities provided, by the Department to curb illegal mining.
5. That in reference to above letters of the Punjab Pollution Control Board, the Chief Engineer/Drainage-cum-Mines & Geology, Water Resources Department, Punjab, Chandigarh vide e-mail dated 01.01.2025 has submitted detailed report indicating various tech-mechanism that have been put in place by the Mining Department for monitoring & enforcement of laws relevant to illegal mining alongwith the details of concerned staff who have been assigned for this specific purpose including infrastructure & facilities provided, as under:—

I. Punjab Sand Portal

The Punjab Sand Web Portal is a comprehensive digital platform developed by the Department of Mines and Geology, offering a host of services including:



- i. Department-Level Access: Login IDs are provided to department officials for accessing the Management Information System (MIS) reports, in order to take regulatory actions accordingly.
- ii. Contractor Management System: Login IDs are provided to contractors to facilitate them in managing their operations.
- iii. Stakeholder Services: Facilitates registered stakeholders, permit holder, and other users through a host of services on the portal.
- iv. Mine Plan approval
- v. Short-term permits for mineral disposal
- vi. Registration of Vehicles
 - a. During the past one-year period [i.e. from 18.12.2023 to 13.12.2024], the total number of vehicles registered on the Punjab Sand Portal is 2218.
 - b. Detailed information regarding the vehicles registered on the portal were collected under the following heads:
 1. Permit I.D.
 2. Owner Name
 3. Phone Number
 4. Vehicle Type
 5. Applying District
 6. Period (in months)
 7. Commencement Date
 8. Approval Status
- vii. Registration of crusher units
 - a. 412 crusher units have been registered on the Punjab Sand Portal during the past one-year period.
 - b. Detailed information regarding the vehicles registered on the portal were collected under the following heads:
 - i. Application I.D.
 - ii. Name of the individual/firm/company
 - iii. District
- viii. Information Database of Commercial Mining Site Contractors



- a. The Punjab Sand Portal maintains updated information pertaining to Commercial Mining Contractors under the following heads:
 - i. Application ID
 - ii. Name of Individual/firm/company
 - iii. District
- b. 25 commercial mining sites contractors were registered on the portal in the last one-year period.

II. Weighbridges and Weighment Slips

- i. Weighbridge installation by the contractors is mandatory for operational commercial mining sites, as per the Punjab State Minor Minerals Policy 2023.
- ii. These weighbridges are integrated with the centralised mining portal to automate the weight measurement process, reducing manual intervention and manipulation risks.
- iii. Security features, including barcodes, watermarks, vehicle photographs, and slip validity, enhance system robustness. The embedded barcode redirects to the slip's origin when scanned, preventing slip forgery, and ensuring transparency.
- iv. This technologically advanced mechanism helps the department's in efficient monitoring, enhanced revenue collection, and curbing illegal activities in the mining sector.
- v. The Sand Portal maintains a database pertaining to registered weighbridges, containing information under the following heads:
 - a. Name of the mine where the weighbridge is registered
 - b. Cluster Number
 - c. District
 - d. Mine Category
 - e. Total Number of orders.



vi. 44 weighbridges have been installed in commercial mining sites and integrated with mining portal during the past one year, and 124866 weighment slips issued mine-wise.

vii. To further expand this measure, the department has also initiated a Request for Proposal for installation of Weigh bridges, along with boom barriers, cameras, RFID readers, ANPR, PTZ and Veri-focal cameras and other related hardware and software solutions, on a Public-Private-Partnership (PPP) Mode at various strategic locations near Stone crusher zones, as per Clause 10 of the Punjab Crusher Policy 2023, at a tentative cost of Rs. 37 crores. The said clause is reproduced below:

"The Govt. may at any time issue such directions to install weigh-bridge at every registered Crusher Unit. Weigh-bridge may be installed on PPP mode or Govt. can establish weigh-bridges on its own. However, it shall be the responsibility of crusher owner for making arrangements like power backup, infrastructure, furniture, drinking water, electricity, internet connectivity, computer etc."

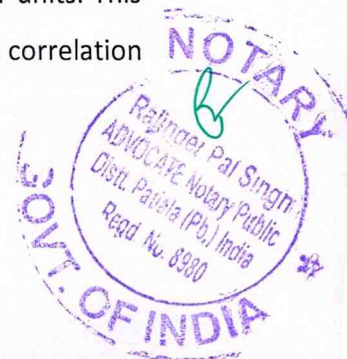
- a. That the primary aim of this project is to account for every tonne of processed material, thereby enhancing the revenue collection for the State Exchequer.
- b. That the proposed system will address the gaps by providing a comprehensive and integrated solution that encompasses advanced technological tools such as weighbridges, Cameras, RFID readers etc. These tools will enhance the accuracy of data collection and ensure real-time monitoring of processed materials as they move within the State and across its borders.
- c. That it is a strategic move towards enhancing the regulation and monitoring of processed materials within the State. This project is essential for establishing an efficient and accurate system for accounting processed materials, thereby improving revenue collection for the State Exchequer.



III. Monitoring of Crusher Units

The state government implements the following measures to effectively monitor the Stone Crusher units and ensure their statutory and regulatory compliance:

- i. Registration of Crusher Units: As detailed hereinabove, crusher units are registered on the Punjab Sand Portal for their effective monitoring.
- ii. Monthly Crusher Reports submitted by Crusher Units: the department mandates that Stone Returns are submitted, visible on the Account Management Tab of the online web portal, and containing the following information:
 - a. Original/Revised Return I.D.
 - b. Name of Crusher
 - c. Registration Number
 - d. Crusher Capacity (CFT/Day)
 - e. District
 - f. Month of Return
 - g. Date of Submission
 - h. Return Period
 - i. Electricity Consumed (kwh)
 - j. Power generated (kwh)
 - k. Opening Stock Raw Materials (CFT)
 - l. Opening Stock Processed material (CFT)
- iii. Notices issued to Crusher Units as enforcement activity: The department monitors the Monthly Stone Crusher Returns and if required, issues Stone Crusher Notices as enforcement measures for any query that arises. The Stone Crusher Notices, specifying the notice ID, notice name, name of the crusher, return ID, month of return, quantity, amount, date of issue, action and notice issuing authority, can be found under the "Stone Crusher Returns Notice" Tab on the web portal.
- iv. Monitoring of Electricity Bills of Crushers: The department's mining portal is integrated with the Punjab State Power Corporation Limited (PSPCL) portal to automatically retrieve data on the electricity consumption of crusher units. This technological enhancement enables the department to monitor the correlation

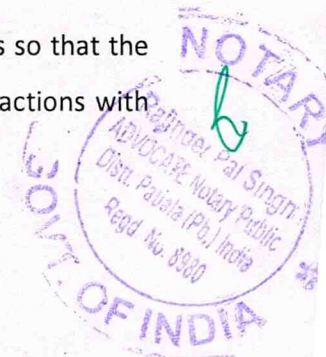


between electricity usage and material processing. As per the "Punjab Crusher Policy 2023", crusher units are required to report the quantity of material processed in relation to their electricity consumption in their monthly returns. A standard factor has been set: 4.5 KWH of electricity corresponds to 1 MT of material processed for crusher units, and 3.0 KWH per MT for screening plants.

- v. Monitoring the quality of crushed materials of crushers: As per the "Punjab Crusher Policy 2023" it is mandatory for all crusher units to submit monthly returns via the online platform (Mining Portal) to provide details regarding the material purchased, processed, and sold. In case of discrepancies in the monthly return, the system allows authorised officers of the department to issue notices to crusher owners through the online mode. The system also enables the department to monitor the volume of material processed by each crusher unit through the monthly returns filed.
- vi. Detailed Certificate of Stone Crusher Management, with realtime location of crusher units using Google Map/kml link: Each Stone Crusher is provided with a detailed Certificate of Stone Crusher Management that can be accessed through the web portal. Apart from information regarding the member's personal details, partnership details, application ID, XEN status, land ownership, source of power, vehicle owned, etc. information regarding realtime location of crusher units is provided on the web portal in the form of a Google Map/kml link.

IV Regular surprise raids and inspections with use of body cameras and GPS cameras

- i. The department conducts regular surprise raids and inspections at locations related to complaints and interstate check-posts established by the department. Appropriate action is taken in accordance with prevailing rules and policy decisions.
- ii. During these raids, the department has actively been making use of body cameras and GPS cameras during inspections and raids to combat illegal mining activities.
- iii. The enforcement personnel are made to wear body cameras so that the video and audio captured during raids document their interactions with



alleged offenders. This ensures transparency and accountability in the enforcement process, thereby also providing clear evidence for legal proceedings.

- iv. GPS cameras are also employed by the department's Flying Squad to mark/identify specific mining locations. It helps in identifying illegal mining locations with coordinates and support data collection for effective enforcement strategies.

V GEO-FENCING of Mining Sites

- i. Geo-fencing is already being done during the preparation of Mine Plan in case of Commercial Mining Sites and Public Mining Sites and the KML files (showing Geo-fenced area of Google maps) of the same have already been uploaded onto the mining portal of the department which are visible in public domain.
- ii. The integration of geo-fencing technology at mining sites with the GPS Devices installed in vehicles transporting minerals or machinery used for excavation is expected to significantly reduce illegal mining and transportation in the State. The department is planning for such integration in the near future for efficient monitoring of mining activities in the State. In this regard, a number of GPS vendors have already been empanelled by the department. It is an open-ended empanelment, and the process of empanelment is on-going. Whenever an applicant submits the required documents and successfully integrates their software with the department's software, an empanelment letter will be issued to the respective GPS vendor.
- iii. Till date, the department has received 19 applications, out of which 8 vendors have met the eligibility criteria outlined in the empanelment document. These 8 vendors have been provided with the API documentation required for integration with the department's mining portal. Upon their successful integration, the formal empanelment of vendors shall be displayed in the public domain via Mining Portal and through other mediums.



- iv. In this regard, it is pertinent to highlight the benefits of GPS Tracking in the Mining Sector, which have been taken into consideration by the department while implementing this effective use of GPS in the monitoring and enforcement process. The benefits are as follows:
- a. Improved Operational Efficiency
 - i. Real-Time Tracking: That GPS allows for real-time tracking of mining vehicles and equipment, enabling coordination of operations, reduced downtime, better and optimised routes.
 - ii. Fleet Management: That enables efficient management of large fleets, tracking the movement and availability of vehicles, ensuring that resources are utilized effectively.
 - iii. Automated Reporting: That data collected by GPS systems can be used to generate automated reports, reducing the need for manual data entry and improving decision-making.
 - b. Enhanced Safety
 - i. Worker Safety: That GPS tracking helps ensure that vehicles and personnel are operating within designated safe zones. Alerts can be set up if equipment or workers enter unauthorized areas.
 - c. Track Multiple Trips
 - i. Route Optimization: That by tracking and analysing vehicle routes, mining department can reduce unnecessary travel or multiple trips by vehicles on single transit pass.
 - ii. Alert on idle time: GPS tracking systems can alert managers if a vehicle is idling unnecessarily or trying to get involved in unlawful activity.
 - d. Regulatory Compliance
 - i. Geo-fencing for Mining Boundaries: That GPS-based geofencing ensures that mining activities are confined to legal boundaries, reducing the risk of illegal mining or noncompliance with regulations.

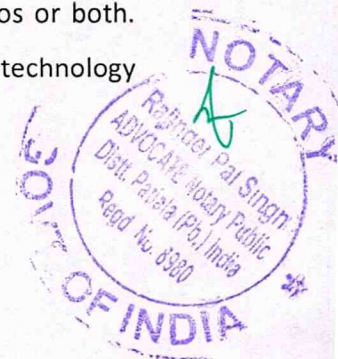


- ii. Environmental Monitoring: That helps in ensuring compliance with environmental regulations by controlling vehicle movements in sensitive areas.
- e. Theft Prevention and Asset Security
 - i. Equipment and Mineral Tracking: That GPS tracking helps in monitoring the location of high-value machinery and minerals, reducing the risk of theft. Alerts can be triggered if vehicles deviate from predefined routes.
 - ii. Remote Immobilization: That in case of unauthorized movement or theft, vehicles or equipment can be remotely immobilized using GPS technology. (advanced feature)
- f. Better Maintenance and Equipment Management
 - i. Preventive Maintenance: That GPS systems can track equipment usage, operating hours, and maintenance needs, allowing for proactive servicing, thus preventing breakdowns and prolonging equipment life.

VI Pre & Post Mining Drone Survey

- i. For all the mining sites in the State of Punjab, pre-mining survey through UAV (Drone) has been conducted by IIT Ropar before the start of mining operations. While conducting the survey, the adjacent area falling within 500 meters distance from the permitted area has also been included. This survey will be conducted again at the time of closing of mining operations to calculate the amount of material excavated from the mine to check any over-extraction.
- ii. The department has purchased infrastructure of three Q6 drones, along with the operating software. An in-house team comprising more than 30 officers has been trained for conducting drone survey.

VII Launch of "Pb Mines Inspection" App: The department has launched "Pb Mines Inspection App" with the help of which any citizen of the State, be it personnel from the department or a common man, can report illegal mining happening in their area on real time basis with the option to include photos, videos or both. This is a measure undertaken by the department to integrate use of technology



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with active participation of the citizenry for enhanced accountability and monitoring.

VIII That the department has 102 Officers in Group A and 286 Officers in Group B, for enforcement and implementation of the mining policy of the State Government.

IX That to implement these technical interventions, the Executive Engineer-cum-District Mining Officers of the concerned districts have been assigned responsibilities to implement and enforce the mechanisms outlined above. It is further assured by the Department of Water Resources (Mines and Geology) that the State of Punjab is taking and will take every possible innovative step to check illegal mining activities in the State of Punjab and the Department has filed a separate report in this regard before this Hon'ble Tribunal in compliance to order dated 09.09.2024.

6. That in order to make compliance of order dated 09.09.2024 of the Hon'ble Tribunal, the deponent Member Secretary, Punjab Pollution Control Board has instructed all its Regional Offices vide letter No. 28304-21 dated 14.11.2024 to ensure compliance of the following observations of the Hon'ble NGT, in letter and spirit :-

Mere incorporation of the above condition without specifying various statutory requirements as laid down in the Punjab State Minor Mineral Policy, 2023 and Punjab State Sand and Gravel Mining Policy, 2018 that are to be provided by the Project Proponent/Departments is futile. The Punjab Pollution Control Board should be more vigilant as they are the statutory body to address illegal mining and violations of the Environment Protection Act, 1986 including The Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act 1981 apart from all relevant State Laws pertaining to environmental issues relating to mining.

A copy of the letter No. 28304-21 dated 14.11.2024 is enclosed herewith as Annexure-A.



7. That the report/reply of Punjab Pollution Control Board is hereby submitted in compliance to order dated 09.09.2024 for kind consideration of the Hon'ble Tribunal.



Deponent
(Piyush Jindal)

Environmental Engineer (HQ-2)
Punjab Pollution Control Board, Patiala
(on behalf of Respondent no.2)

Date: 27/2/25

Place: Patiala

Verification

Verified that the contents of the above affidavit are true and correct to the knowledge of the deponent as derived from the official record. No part of the above report/reply by way of affidavit of the deponent is wrong and nothing material has been kept concealed therein.



Deponent
(Piyush Jindal)

Environmental Engineer (HQ-2)
Punjab Pollution Control Board, Patiala
(on behalf of Respondent no.2)

Date: 27/2/25

Place: Patiala



The Contents of this affidavit document have been read over to the deponent He/She has accepted the true & correct.

Accepted as identical



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This Document has been entered in my register at Serial No. 3092 dated 27 FEB 2025

27 FEB 2025



PPCB/HO/No. 28304-21

Dated: 14/11/24

Through E-mail

To

The Environmental Engineer,
Punjab Pollution Control Board,
Regional Office, Amritsar/ Bathinda/Fatehgarh Sahib
Faridkot/Batala/Hoshiarpur/Jalandhar-I/II/
Ludhiana-I/II/III/IV/Patiala/Rupnagar/SAS Nagar/
Sangrur/Tarn Taran/Sri Muktsar Sahib.

Subject: Original Application No. 551/2024 – Notice of Motion in suo-moto case News item titled “ਪੰਜਾਬ ਕਾ ਬਡਾ ਮੁਦਾ ਪੰਜਾਬ ਕੇ ਬੌਰਡ ਏਰਰਯਾ ਮੈਨਹੁ ਂਰੁਕ ਰਹਾ ਅਵੈਘ ਖਨਨ, ਦੇਸ਼ ਕ ਸੁਰਕਸ਼ਾ ਕੋ ਖਤਰਾ ਬਡਾ” appearing in Amar Ujala dated 09.04.2024.

Reference: Orders dated 09.09.2024 passed by Hon'ble National Green Tribunal in the subject matter.

In reference to above, it is intimated that the Hon'ble National Green Tribunal has disposed off the subject cited matter vide its order dated 09.09.2024, wherein on examination of the said sample Consent to Operate under Water Act, 1974 & Air Act, 1981 given by the Board, Hon'ble NGT has given following comments on the specific condition “The project proponent shall ensure the compliance of provisions of Punjab Minor Mineral Rules, 2013 or any Rules/Acts relating to the mining of minor minerals” incorporated by the Board while issuing consent to operate:

“Mere incorporation of the above condition without specifying various statutory requirements as laid down in the Punjab State Minor Mineral Policy, 2023 and Punjab State Sand and Gravel Mining Policy, 2018 that are to be provided by the Project Proponent/Departments is futile. The Punjab Pollution Control Board should be more vigilant as they are the statutory body to address illegal mining and violations of the Environment Protection Act, 1986 including The Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act 1981 apart from all relevant State Laws pertaining to environmental issues relating to mining”.

Copy of the order is enclosed herewith for ready reference.

In view of the above, it is requested to ensure compliance of the above observation of the Hon'ble NGT, in letter and spirit.

This issues with the approval of the Competent Authority.

DA/- As above

Shobha Sharma
14/11/24
Environmental Engineer (HQ-2/1)