



9  
Regional Office

Tele No. 01664-256259

**Haryana State Pollution Control Board,**  
SCF-32, Opp. Community Centre, Sector-13, HSVP, Bhiwani  
Email-hspcbrojr@gmail.com



No.: HSPCB/BHI/2025/ 6048  
To,



Dated:- 02/01/25

The Registrar,  
Hon'ble National Green Tribunal,  
Faridkot House, Copernicus Road,  
New Delhi.  
Email ID:- [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in)

**Sub: Action Taken Report in the matter of O.A. No. 673/2024 titled as Sunita Vs State of Haryana" in compliance of Hon'ble National Green Tribunal, Principal Bench, New Delhi order dated 16.07.2024.**

Kindly refer to the subject noted above, please find the enclosed herewith the report on behalf of Joint Committee in compliance of order dated 16.07.2024 in O.A. No. 673/2024 titled as Sunita Vs State of Haryana in compliance of Hon'ble National Green Tribunal.

Submitted for your kind information and necessary action, please.

  
Regional Officer,  
Bhiwani Region  


**BEFORE THE NATIONAL GREEN  
TRIBUNAL PRINCIPAL BENCH NEW  
DELHI  
OA NO. 673/2024  
(Sunita Vs State of Haryana)**

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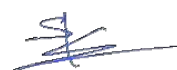
**Action Taken Report in compliance with Hon'ble National Green Tribunal, Principal Bench, New Delhi order, dated 16.07.2024 in the matter of OA NO. 673/2024 titled as Sunita Vs State of Haryana**

The relevant part of the order dated 16.07.2024 in OA No. 673/2024 is reproduced below:

1. *This Original Application under Sections 14 and 15 of National Green Tribunal Act, 2010 (hereinafter referred to as 'NGT Act, 2010') has been registered exercising suo-moto jurisdiction on a letter petition dated 26.09.2023, sent by Sunita (Sarpanch), village Khanak, Tehsil Tosham, District Bhiwani, State of Haryana, alleging that illegal mining is being carried out at Dhansar and Agroha mines, on the hills, in village Khanak, Tehsil Tosham District Bhiwani, State of Haryana and the persons engaged in illegal mining are carrying mining activities using blasting and drilling methods, causing serious damage to environment and also health hazardous to local people.*
2. *It is not stated in the complaint as to who is doing illegal mining and details are not given.*
3. *In these facts and circumstances, in our view, it would be appropriate that complaint be directed to be looked into by local authorities and Statutory Regulators. If they find any violation of environmental laws due to illegal mining, would take appropriate, remedial and prohibitive action in accordance with law.*
4. *Accordingly, we constitute a Joint Committee comprising District Magistrate, Bhiwani, Haryana State Pollution Control Board and CPCB.*
5. *District Magistrate, Bhiwani shall be the Nodal Agency for coordination and compliance of this order.*
6. *Above Committee shall visit the site, collect relevant information and if finds any illegal mining and damage to environment as also violation of environmental laws, shall take prohibitive, preventive, remedial and punitive action against violators in accordance with law and submit a Compliance Report with Registrar General of this Tribunal within two month. Registrar General if finds necessary, may place the matter before Bench for further proceedings.*
7. *With above directions, this Original Application is disposed of."*

**Background of the Project:**

The project area ( 258.30 ha) is located at Khasra No. at 274 min & 275 min in village Khanak, Tehsil Tosham of District Bhiwani, Haryana. The total mine lease area falls under Government land. The Khanak mine lease area lies



between latitudes 28° 53' 36.51" N to 28° 54' 48.46" N and longitude 75° 50' 39.39" E to 75°52'50.70" E. The site is well connected to the nearest town Tosham via Major District Road (MDR)-108 (adjacent to the mine area) & State Highway -12 (~ 6.0 km away in SE Direction), nearest village Khanak, nearest town is Tosham (~ 4 km in SE Direction), nearest Railway Station is Bawani Khera (~ 16 km in ENE direction) and nearest Airport is Indira Gandhi International Airport, New Delhi (~126 km in ESE direction). Post office, Hospital, Bank, Education and market facilities are available in 10km .

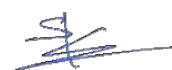
The mineable reserves are 661.335 million MT. The anticipated life of the Khanak Stone mine based on present production (6790839.385 tons per year) targets will be around 27 years.

M/s HSIIDC has obtained Environmental Clearance(EC) for Minor Mineral Mining Project (Area: 258.30 ha) with production capacity of stone 10 MTPA along with associated minor minerals under the provisions of EIA Notification, 2006 vide letter no. J-11015/97/2014-IA.II (M) dated 06th May 2015. The mine lease area does not fall under any Forest Area.

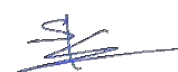
The project has obtained EC for expansion vide Proposal No. SIA/HR/MIN/421906/2023 dated 08.08.2023, to increase production from 10MTPA to 24 MTPA and it is a fully mechanized opencast mining project.

### **Observations:**

1. A joint inspection of stone mining project of M/s HSIIDC Panchkula at Village Khanak, Bhiwani, was conducted on 15.10.2024 by the following officials:
  - Sh. Ashvir Nain, SDM Tosham(Representative of District Magistrate, Bhiwani)
  - Dr. Sunil Sheoran, Scientist C, Regional Officer, Bhiwani (HSPCB) (Representative of HSPCB)
  - Sh.Vinay Upadhyay, Scientist C, CPCB, Delhi(Representative of CPCB)
2. Representatives from the Forest Department, Bhiwani and Mines and Geology Department, Bhiwani were also present during the inspection.



3. A personal hearing was conducted by the joint inspection team with Mrs. Sunita, Sarpanch of Khanak village, who had filed the complaint. She mentioned that villagers were facing pollution problems when the complaint was filed in September 2023, however, she has no current complaints against the mining project of M/s HSIIDC Panchkula at village Khanak, Bhiwani. A copy of her written statement is attached as **Annexure-1**.
4. The HSIIDC has obtained Environmental Clearance (EC) dated 08.08.2023 and Consent to Establish (CTE) dated 29.09.2023 & Consent to Operate (CTO) dated 11.10.2023. Copies of the relevant documents are attached as **Annexure-2**, **Annexure-3**, and **Annexure-4**.
5. Compliance with the Environmental Clearance and CTO conditions were checked during the inspection, and a point-wise compliance report is attached as **Annexure-5**.
6. During the site inspection the mining project was operating within the legally allotted lease area, same was verified through GPS coordinates provided by the Mining and Forest Department representatives.
7. The mining department submitted vibration study reports of last one year conducted by DGMS Ghaziabad, which indicated that vibration levels during blasting activities were within prescribed limits. Copies of the reports of September 2024 are attached as **Annexure-6** for reference.
8. The mining unit has provided 120 fixed water sprinklers and two anti-smog guns for dust suppression. However, during the inspection, one anti-smog gun was operational, while the other was under maintenance. Provisions for wet drilling were in place at the site.
9. A green belt has also been established.
10. The latest ambient air quality report from HSPCB shows that the mining project is complying with ambient air quality standards. A copy of the report is attached as **Annexure-7**.
11. Six monthly compliance reports of EC conditions are being periodically submitted by project proponent. Latest report dated 14.10.2024 is attached as **Annexure-8**.
12. Copy of photographs of inspection conduct by the joint committee are attached as **Annexure-9**.



**Conclusion:**

Based on the inspection and documents reviewed, the committee concludes that the mining project is operating within the legally allotted lease area, and illegal mining was not observed. Blasting activities are within prescribed vibration limits, and the project has adopted wet drilling practices. However, the unit is advised to strengthen air pollution control measures as follows:

**Recommendations for robust dust mitigation measures to be adopted :-****1. Increase Anti-Smog Guns:**

Expand the number of anti-smog guns from 2 to 10 units to effectively reduce dust emissions, particularly in key dust-generating areas.

**2. Enhance water sprinkler systems:**

Increase the number of fixed water sprinklers from 120 to 200 units to provide better coverage and more efficient dust suppression.

**3. Increase water sprinkling frequency and volume:**

Implement more frequent water sprinkling in the lease area and along the Bhiwani-Hisar Road, especially near Khanak village, to control dust.

**4. Strategic placement of anti-smog guns:**

Position anti-smog guns at specific locations, particularly where dust is generated during blasting operations, to more effectively control dust spread.

**5. Use mobile water tankers:**

Deploy mobile water tankers to spray water on haul roads and active mining areas for additional dust suppression.

**6. Plan mining operations according to weather conditions:**

Adjust mining activities based on weather conditions, especially limiting operations during high-wind periods to reduce dust spread.

**7. Pave or stabilize roads:**

Where feasible, pave haul roads & regularly maintain these roads by spraying water to minimize dust from vehicle movement.

**8. Collaborative road side development:**

The mining department, in coordination with local authorities, may prepare a project proposal under the district mineral fund to pave roadsides along the Bhiwani-Hisar Road (especially through Khanak village) and develop a dense green belt as a barrier for air and noise pollution.

9. **Post-mining reclamation:**

Reclaim mined-out pits by planting grasses and shrubs to stabilize loose soil and reduce dust generation.

10. **Install ambient air quality monitoring stations (AAQMS):**

Installation of a minimum of 3 online AAQMS—1 upwind and 2 downwind—to monitor critical air pollutants, including PM10, PM2.5, NO2, CO, and SO2 etc. within 30 days. The stations should be strategically positioned according to long-term climatological wind patterns and follow the NAAQS Notification guidelines. The data shall be digitally displayed in front of the main Gate of the mine site.

11. **Establish a sapling nursery and native plant species reintroduction:**

The project proponent will establish their own sapling nursery for plantation in the lease area and surrounding regions. Additionally, work with the forest department and local communities to reintroduce native plant species through seed ball dispersal and other methods for enhancing green cover.

12. **Utilize rainwater and treated water for dust suppression and plantation:**

The mining project will use water accumulated from rain in the mining pits and treated water from the Tosham PHED STP for sprinkling and plantation purposes.



**Regional Officer,  
HSPCB,  
Bhiwani Region**



**Sub Divisional Magistrate,  
Tosham**



**Scientist-C,  
CPCB,  
Delhi**



**District Magistrate,  
Bhiwani**

बेटी बचाओ!

17

बेटी पढ़ाओ!



# सरपंच ग्राम पंचायत खानक

ब्लॉक तोशाम, जिला भिवानी



**सुनीता देवी**

सरपंच, ग्राम पंचायत खानक

ब्लॉक तोशाम, जिला भिवानी मो. 9992317000

क्रमांक.....

दिनांक 17-10-2024



स्वच्छ गांव स्वस्थ गांव

श्री श्री

श्री मान

Haryana State Pollution Control Board

Bhiwani

विषय:- 27-09-2023 को दी गई शिकायत के स्पष्टीकरण हेतु

निवेदन यह है कि मैं सुनीता सरपंच खानक, साहब मेरे द्वारा 27-09-2023 को एक शिकायत पत्र खानक पहाड़ में देवी हलासीका व प्रदूषण के संबंध में दी गई थी आज वर्तमान समय में खानक पहाड़ के मांझीगां वार्ड में काफी सुधार किया गया है जैसे कि हलासीका नियंत्रित तरीके से की जा रही है तथा प्रदूषण को रोकने के लिए भी काफी कार्य किए जा रहे हैं जैसे कि पानी के टैंकर द्वारा विद्युत्वायु किया जा रहा है मैं इस वार्ड से संतुष्ट हूँ

अतः:- साहब से निवेदन यह है कि मेरी शिकायत समाप्त की जाए

धन्यवाद

दिनांक :- 17-10-2024

सुनीता देवी  
सरपंच  
ग्राम पंचायत, खानक  
ब्लॉक तोशाम (भिवानी)

18

ENVIRONMENTAL  
CLEARANCE

**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**(Issued by the State Environment Impact Assessment Authority(SEIAA), HARYANA)**

To,

The Manager  
 HARYANA STATE INDUSTRIAL AND INFRASTRUCTURE  
 DEVELOPMENT CORPORATION LIMITED  
 C-13- 14, Sector 6  
 Panchkula -134109

**Subject:** Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the SEIAA vide proposal number SIA/HR/MIN/421906/2023 dated 20 Mar 2023. The particulars of the environmental clearance granted to the project are as below.

- |  |  |
|--|--|
| 1. EC Identification No.                   | EC23B001HR164105   |
| 2. File No.                                | SEIAA/HR/2022/259  |
| 3. Project Type                            | Expansion  |
| 4. Category                                | B  |
| 5. Project/Activity including Schedule No. | 1(a) Mining of minerals  |
| 6. Name of Project                         | Proposed Expansion of Minor mineral of Stone along with Associated Minor minerals from 10 MTPA to 24 MTPA over an area of 258.30 ha located in village - Khanak , Tehsil- Tosham, District- Bhiwani, Haryana by Haryana State Industrial Infrastructure Development corporation (HSIIDC) |
| 7. Name of Company/Organization            | HARYANA STATE INDUSTRIAL AND INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED  |
| 8. Location of Project                     | HARYANA  |
| 9. TOR Date                                | N/A  |

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 08/08/2023

(e-signed)  
 Pardeep Kumar, IAS  
 Member Secretary  
 SEIAA - (HARYANA)

*Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH. Please quote identification number in all future correspondence.*

*This is a computer generated cover page.*

PARIVESH

(Pro-Active and Responsive Facilitation by Interactive,  
 and Virtuous Environmental Single-Window Hub)





State Environment Impact Assessment Authority, Haryana,  
Bays No.55-58, Prayatan Bhawan, Sector-2 Panchkula.

Tel: 0172-2565232, 4043956  
E-mail Id: [seiaa-21.env@hry.gov.in](mailto:seiaa-21.env@hry.gov.in)

**Subject: Environment Clearance for Proposed Expansion of Minor mineral of Stone along with Associated Minor minerals from 10 MTPA to 24 MTPA over an area of 258.30 ha located in village - Khanak , Tehsil- Tosham, District- Bhiwani, Haryana by M/s HSIIDC Ltd.**

1.	Proposal	<u>Grant of EC for Capacity Expansion</u>
2.	Project Proponent	<b>M/s HSIIDC Ltd</b>
3.	Location & Category of the Project	Village - Khanak , Tehsil- Tosham, District- Bhiwani, Haryana 1 (a)
4.	Project Cost	Rs. 175 Crores as per Form (I).
5.	Project Consultant	Mantec Consultants Pvt. Ltd.
6.	NABET, ACCREDITATION	Certificate No.: NABET/EIA/2023/RA 0205
7.	Validity of Environment Clearance	AT PAR with the Approved leased period within the scope & meaning of Approved Mining Plan issued by Mines & Geology Department, Haryana.

1. This has reference to your Proposal No. **SIA/HR/MIN/421906/2023 on 20.03.2023** and subsequent letter dated 30.06.2023, 01.07.2023 (Affidavit), 28.07.2023, 30.07.2023 and 02.08.2023 for obtaining Environmental Clearance under category 1(a) of EIA Notification dated 14.09.2006 along with submission of **due Scrutiny fee (as applicable) of ₹ 1,50,000/- vide DD No. 269785 dated 21.10.2022 (in compliance of Haryana Government, Environment & Climate Change, Department Notification No. DE&CCH/3060 dated 14.10.2021)**. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application viz., Form-1, Pre-feasibility Report, Approved Mining Plan, District Survey Report, Public Hearing/ Consultation, EIA/EMP on the basis of approved TOR and additional clarifications furnished in response to the observations of the State Expert Appraisal Committee (SEAC) constituted by MoEF& CC, GoI vide their Notification dated 21.02.2022, in its meeting held on 12.06.2023 , 14.07.2023 and 28.07.2023.
2. It is inter-alia, noted that the project involves the Environment Clearance for Proposed Expansion of Minor mineral of Stone along with Associated Minor minerals from 10 MTPA to 24 MTPA over an area of 258.30 ha located in village - Khanak , Tehsil-

## 3. The details of project are as under:

1.	Online Proposal Number	SIA/HR/MIN/421906/2023
2.	Name of the Project	Proposed Expansion of Minor mineral of Stone along with Associated Minor minerals from 10 MTPA to 24 MTPA over an area of 258.30 ha located in village -Khanak , Tehsil- Tosham, District- Bhiwani, Haryana by M/s HSIIDC Ltd.
3.	Nature & category of Mine	Non-Coal Mining Category 'B' of Activity 1(a)
4.	Project Proponent	M/S HARYANA STATE INDUSTRIAL INFRASTRUCTURE DEVELOPMENT CORPORATION
5.	Location of Project	Village- Khanak, Tehsil-Tosham, District-Bhiwani, State Haryana
6.	Toposheet No.	44P/9; 44P/13
7.	Area of the project	258.30 ha
8.	Maximum Production Capacity	24 MTPA
9.	Geological Mineral Reserve	73,48,17,388 TPA
10.	Mineable Reserve	66,13,35,000 TPA
11.	Geographical co-ordinates	28°54'15.980" N to 28°53'58.977" N 75°50'46.265" E to 75°52'36.544" E
12.	Elevation Range in the area	220-375 mRL
13.	Mining Method & Technology	Open cast Fully-mechanized
14.	Ultimate depth of Mining	80 m
15.	Ground water level	82 m
16.	GWT intersection	In this mining depth of pit upto 140 mRL where ground water table lie on 142 mRL hence no ground water intersection till the entire mine life.
17.	Water Requirement	Total water requirement - 40 KLD Dust Suppression/ water sprinkling- 30 KLD Domestic- 4 KLD Plantation - 6 KLD
18.	Project Cost	Rs. 175 Crores /-
19.	Water Requirement	Total water requirement - 40 KLD Dust Suppression/ water sprinkling- 30 KLD Domestic- 4 KLD Plantation - 6 KLD
20.	Source of water	Water will be sourced from the nearby villages through tankers

21.	Environment Management Plan Budget	Capital cost - Rs. 85.12 Lacs Recurring Cost - Rs. 73.62 Lacs
22.	CER Budget	Capital - Rs. 45 Lacs Recurring - Rs. 39 lacs
23.	Power Requirement	Presently there is arrangement for supply, at the mine. It is proposed to take an extension of the electricity line to all major lamp posts/ locations.191 KW, Source- State Electricity Board will be required

4. In view of the recommendations made by State Expert Appraisal Committee (SEAC) in the said case and further consideration of the documents/details submitted by the Project Proponent; the Authority after discussions during **163<sup>rd</sup> Meeting held on 02.08.2023.**

Upon perusal of relevant record & details pertaining to the case, besides considering the recommendations of the Appraisal Committee & Sub-committee report dated 25.07.2023, the Authority deemed it appropriate to consider the proposal, **AFFIRMATIVELY**, within the scope & meaning of EIA Notification dated 14.09.2006 emanating from Environment (Protection) Act, 1986 subject to the conditions as under:

**A: SPECIFIC CONDITIONS:-**

1. **The Mining Lease Holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.**
2. **That proposal to the enhancement of the capacity from 10 MTPA to 24 MTPA over an area of 258.30 ha located in village - Khanak , Tehsil- Tosham, District- Bhiwani, Haryana by M/s HSIIDC Ltd shall be strictly in accordance with the approved Mining Plan.**
3. **That Project Proponent shall not violate any provision under the Forest Act / Rules & other relevant Acts & Rules, as may be applicable besides the terms & conditions of contract between the Mines & Geology Department, Haryana.**
4. **That upon considering the various representations of the Village bodies, the Authority is inclined to direct Project Proponent to take care of the HEALTH INFRASTRUCTURE (Health Care Centre) in the LOCAL AREA, besides taking steps to conserve & protect the Environment in and around the Mining site by planting 5000 Trees in consultation with the local administration i.e. Deputy Commissioner, Bhiwani & Village body (Zila Parishad / Sarpanch).**
5. **That Project Proponent shall ensure to adhere to the directions issued by MOEF & CC, GOI and HSPCB, from time to time for the conservation & protection of Environment.**
6. **The PP shall get the Wildlife Conservation Plan approved from competent authority before start of Mining Operations.**
7. **The Environmental clearance is granted subject to the Final outcome of Hon'ble Supreme Court of India, Hon'ble High Court of India and any other court of law, if any as applicable to this project.**
8. **The PP shall construct the pucca link roads to the mining site before the start of mining.**
9. **The PP shall prepare the Mine safety plan and get it approved from the competent authority before the start of mining**
10. **The Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers.**

11. Transportation of the minerals by road passing through the village shall not be allowed. A 'bypass' road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sound, dust and accidents could be mitigated. The Project Proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the Project. No road movement should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.
12. Likewise, Alteration or re-routing of foot paths, pagdandies, cart roads, and village infrastructure public utilities or roads (for purposes of land acquisition for mining) shall be avoided to the extent possible and in case such acquisition is inevitable, alternative arrangements shall be made first and then only the area acquired. In these types of cases, inspection Reports by site visit by experts may be insisted upon which should be done through reputed institutes.
13. The PP shall ensure that total EMP Budget shall be spent on project during construction as well as during operational phase as per table given above. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted.
14. The PP shall ensure that the amount as earmarked in EMP Budget for Development and Maintenance of Haulage Route as demanded by the locals during the Public Hearing be spent.
15. The EMP cost on Socio Economic Activities shall be used at the project site and EMP recurring for the project shall be spent throughout the operation of the project.
16. Socio Economic Development of the neighbourhood Habitats could be planned and executed by the Project Proponent more systematically based on the 'Need based door to door survey' by established Social Institutes/Workers. The report shall be submitted to the SEIAA on six monthly bases.
17. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. the housing may be in the form of temporary structures to be removed after the completion of the project.
18. Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented
19. An independent study be organized during peak activity, to understand how the actual compare with the carrying capacities and further decisions taken to maintain sustainability of this essential stone extraction and supply activity. Project Proponent shall ensure that the road may not be damaged due to transportation of stone.
20. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated and improved upon after the implementation of the project.
21. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed the plantation in 33% of the total area of project site will be carried out including statutory boundary barrier, Gram Panchayat, nearby schools, hospitals and along the road in consultation with local authority or Govt. Body. Native plant species as suggested by villagers/specialist may be planted.

22. Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The PP shall complete all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing.
23. The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment, forest and Climate Change and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out; The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry.
24. The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly Vehicles with PUC only will be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centres.
25. There shall be planning, developing and implementing facility of rainwater harvesting measures on long terms basis in consultation with Regional Director, Central Groundwater Board and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.
26. Where ever blasting is undertaken as part of mining activity, the Project Proponent shall carry out vibration studies well before approaching any such habitats or other buildings, to evaluate the zone of influence and impact of blasting on the neighbourhood. Within 500 meters of such sites vulnerable to blasting vibrations avoidance of use of explosives and adoption of alternative means of mineral extraction, such as ripper/dozer combination/rock breakers/surface miners etc. should be seriously considered and practiced wherever practicable. A provision for monitoring of each blast should be made so that the impact of blasting on nearby habitation and dwelling units could be ascertained. The covenant of lease deed under Rule 31 of MCR 1960 provides that no mining operations shall be carried out within 50 meters of public works such as public roads and buildings or inhabited sites except with the prior permission from the competent authority
27. The Project Proponent shall obtain all necessary clearance/permission from all relevant agencies before commencement of work.
28. Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
29. The PP shall take precautions to suppress the dust in and around the mining site. Use of effective sprinkler system to suppress fugitive dust on haul roads and other transport roads shall be ensured.
30. Implementation of Haryana Government Rehabilitation and Resettlement of Land Owners' Policy as per applicability in the area.
31. Implementation of Environment Management Policy of the Company w.r.t. judicious use of Mineral resources for growth & development synchronizing mining & environment with prosperity.
32. The Project Proponent shall also take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted in the study area.
33. The illumination and sound at night at project site, disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. Project Proponent must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.
34. A comprehensive study for slope stabilization of mine benches and OB dumps shall be undertaken within one year.
35. The PP shall manage the overburden at the mining site if left after sale.
36. Washing of all transport vehicles should be done inside the mining lease.

37. The PP shall create environment division unit in the project for implementing the conditions of Environment clearance.
38. The PP shall obtain the permission regarding withdrawal of ground water from CGWA before the start of the project if any and also obtained the CTO from HSPCB after the approval from CGWA
39. Any change in stipulations of EC of the approved mining plan will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
40. The PP shall adhere to the approved mining plan and approved closure plan by the competent authority.

**B: Statutory compliance:-**

1. This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
2. The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors before commencing the mining operations.
3. The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors.
4. This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.
5. This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.
6. Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish/Consent to Operate from the concerned State Pollution Control Board/Committee.
7. The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS), Mines & Geology Department, Haryana and Indian Bureau of Mines from time to time.. Also adhere to Haryana Minor Mineral Concession, Stocking, Transportation of Minerals and Prevention of Illegal Mining Rules, 2012.
8. The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made there under in respect of lands which are not owned by it.
9. The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No.Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
10. The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.
11. A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
12. State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.

13. The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.
14. The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

#### **I. Air Quality Monitoring and Preservation**

1. The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. . PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub>, CO and SO<sub>2</sub> etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
2. Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM<sub>10</sub> and PM<sub>2.5</sub> are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/Central Pollution Control Board.

#### **II. Water Quality Monitoring and Preservation**

1. In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
2. Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
3. Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in

consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.

4. The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEF&CC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
5. Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
6. Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEF&CC annually.
7. Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
8. The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.

### **III. Noise and vibration monitoring and prevention**

1. The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
2. The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/masks away from the villagers and keeping the noise levels well within the prescribed limits for day/night hours.
3. The Project Proponent shall take measures for control of noise levels below 85 dba in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty

areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

#### IV. Mining Plan

1. The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, overburden, interburden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form of Short Term Permit (STP), Query license or any other name.
2. The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/ Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change and SEIAA for record and verification.
3. The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEF&CC and its concerned Regional Office.

#### V. Land reclamation

1. The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.
2. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
3. The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.
4. The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/geo-membranes/clay liners/Bentonite etc. shall be undertaken for stabilization of the dump.
5. The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC/SEIAA.

6. Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be desilted regularly, particularly after monsoon season, and maintained properly.
7. Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
8. The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

#### **VI. Transportation**

1. No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.
2. The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

#### **VII. Green Belt**

1. The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.
2. The Project Proponent shall carryout plantation/afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/Tribal Welfare Department/Gram Panchayat such that only those species be selected which are of use

to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.

3. The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.
4. The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt.
5. And implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.

#### **VIII. Public Hearing and Human Health Issues**

1. The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEF&CC Regional Office and DGMS on half-yearly basis.
2. The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.
3. The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium- Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminum, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).

4. The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1),Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEF&CC annually along with details of the relief and compensation paid to workers having above indications.
5. The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
6. Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
7. The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

#### **IX. Corporate Environment Responsibility (CER)**

1. The activities and budget earmarked for Corporate Environmental Responsibility (CER) as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 or as proposed by EAC should be kept in a separate bank account. The activities proposed for CER shall be implemented in a time bound manner and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.
2. Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEF& CC and its concerned Regional Office.

#### **X. Miscellaneous**

1. The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF& CC.
2. The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
3. The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEF&CC and its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
4. A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF& CC.

5. The concerned Regional Office of the MoEF&CC including other authorized organization shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) including other authorized officer by furnishing the requisite data/information.
6. The Project Proponent should intimate to the Authority as well as to the quarter concerned in case of any change in the present communication address.
7. The Project proponent shall not violate any judicial orders/pronouncements issued by any Court/Tribunal.
8. Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the Project Proponent if it was found that construction of the project has been started before obtaining prior Environmental Clearance.
9. Any appeal against the this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
10. The project proponent is responsible for compliance of all conditions in Environmental Clearance letter and project proponent can not absolve himself /herself of the responsibility by shifting it to any contractor engaged by project proponent

**(Pardeep Kumar, IAS)**  
**Member Secretary,**  
**State Level Environment Impact**  
**Assessment Authority, Haryana, Panchkula.**

**A copy of the above is forwarded to the following:**

1. Director (IA Division), MoEF& CC, GoI, Indira Paryavaran Bhavan, Zorbagh Road-New Delhi-110003.
2. Chairman, State Environment Impact Assessment Authority, Bay No. 55-58, Prayatan Bhawan, Sector-2, Panchkula, Haryana
3. Chairman, Haryana State Pollution Control Board, C-11, Sector-6, Panchkula.
4. Director, Environment & Climate Change Department, Haryana, SCO 1-3, Sector-17 D, Chandigarh-160017
5. Director General, Mines & Geology Department, Mines & Geology Department, Second Floor, DHL Square, Plot No. 9, Sector-22, IT Park, Panchkula, Haryana
6. Regional Office, Ministry of Environment, Forests & Climate Change, Govt. of India, Bay's No. 24-25, Sector 31-A, Dakshin Marg, Chandigarh-160018.
7. Concerned File/ Office Copy.

**(Pardeep Kumar, IAS)**  
**Member Secretary,**  
**State Level Environment Impact**  
**Assessment Authority, Haryana, Panchkula.**

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**HARYANA STATE POLLUTION CONTROL BOARD**
**HSPCB SCF-32, sector 13, HUDA, Bhiwani Ph. 01664-240259**
**Email:- hspcbrojr@gmail.com**
**Website: www.hrocmmns.nic.in E-Mail - hspcbho@gmail.com**
**Telephone No.: 0172-2577870-73**

**No. HSPCB/Consent/ : 313100423BHICTE3396735**
**Dated:29/09/2023**
**To.**

**M/s : HSIIDC Panchkula**  
**Village KHANAK Tehsil Tosham Distt Bhiwani**  
**BHIWANI**  
**127021**

**Sub. : Grant of consent to Establish to M/s HSIIDC Panchkula**

Please refer to your application no. 3396735 received on dated 2023-08-24 in regional office Bhiwani.

With reference to your above application for consent to establish, M/s HSIIDC Panchkula is here by granted consent as per following specification/Terms and conditions.

<b>Consent Under</b>	AIR/WATER
<b>Period of consent</b>	29/09/2023 - 07/08/2033
<b>Industry Type</b>	Mining and ore beneficiation
<b>Category</b>	RED
Investment(In Lakh)	14725.0
Total Land Area (Sq. meter)	2583000.0
Total Builtup Area (Sq. meter)	1500.0
<b>Quantity of effluent</b>	
1. Trade	0.0 KL/Day
2. Domestic	0.3 KL/Day
Number of outlets	0.0
<b>Mode of discharge</b>	
1. Domestic	Septic Tank
2. Trade	
<b>Permissible Domestic Effluent Parameters</b>	
1. NA	
<b>Permissible Trade Effluent Parameters</b>	
1. NA	mg/l
Number of stacks	1
<b>Height of stack</b>	
1. NA	
<b>Permissible Emission parameters</b>	

1. SPM	100 mg/m <sup>3</sup>
<b>Capacity of boiler</b>	
1. NA	Ton/hr
<b>Type of Furnace</b>	
1. NA	
<b>Type of Fuel</b>	
1. NA	KL/day

**Regional Officer, Bhiwani**  
Haryana State Pollution Control Board.

### Terms and conditions

1. The industry has declared that the quantity of effluent shall be 0.3 KL/Day i.e 0KL/Day for Trade Effluent, 0 KL/Day for Cooling, 0.3 KL/Day for Domestic and the same should not exceed .
2. The above 'Consent to Establish' is valid for 60 months from the date of its issue to be extended for another one year at the discretion of the Board or till the time the unit starts its trial production whichever is earlier. The unit will have to set up the plant and obtain consent during this period.
3. The officer/official of the Board shall have the right to access and inspection of the industry in connection with the various processes and the treatment facilities being provided simultaneously with the construction of building/machinery. The effluent should conform the effluent standards as applicable
4. That necessary arrangement shall be made by the industry for the control of Air Pollution before commissioning the plant. The emitted pollutants will meet the emission and other standards as laid/will be prescribed by the Board from time to time.
5. The applicant will obtain consent under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21/22 of the Air (Prevention & Control of Pollution) Act, 1981 as amended to-date-even before starting trial production
6. The above Consent to Establish is further subject to the conditions that the unit complies with all the laws/rules/decisions and competent directions of the Board/Government and its functionaries in all respects before commissioning of the operation and during its actual working strictly.
7. No in-process or post-process objectionable emission or the effluent will be allowed, if the scheme furnished by the unit turns out to be defective in any actual experience
8. The Electricity Department will give only temporary connection and permanent connection to the unit will be given after verifying the consent granted by the Board, both under Water Act and Air Act.
9. Unit will raise the stack height of DG Set/Boiler as per Board's norms.
10. Unit will maintain proper logbook of Water meter/sub meter before/after commissioning.
11. That in the case of an industry or any other process the activity is located in an area approved and that in case the activity is sited in an residential or institutional or commercial or agricultural area, the necessary permission for siting such industry and process in an residential or institutional or commercial or agricultural area or controlled area under Town and Country Planning laws CLU or Municipal laws has to be obtained from the competent Authority in law permitting this deviation and be submitted in original with the request for consent to operate.

12. That there is no discharge directly or indirectly from the unit or the process into any interstate river or Yamuna River or River Ghaggar.
13. That the industry or the unit concerned is not sited within any prohibited distances according to the Environmental Laws and Rules, Notification, Orders and Policies of Central Pollution control Board and Haryana State Pollution Control Board.
14. That of the unit is discharging its sewage or trade effluent into the public sewer meant to receive trade effluent from industries etc. then the permission of the Competent Authority owing and operating such public sewer giving permission letter to his unit shall be submitted at time of consent to operate.
15. That if at any time, there is adverse report from any adjoining neighbor or any other aggrieved party or Municipal Committee or Zila Parishad or any other public body against the unit's pollution; the Consent to Establish so granted shall be revoked.
16. That all the financial dues required under the rules and policies of the Board have been deposited in full by the unit for this Consent to Establish.
17. In case of change of name from previous Consent to Establish granted, fresh Consent to Establish fee shall be levied.
18. Industry should adopt water conservation measures to ensure minimum consumption of water in their Process. Ground water based proposals of new industries should get clearance from Central Ground Water Authority for scientific development of previous resource.
19. That the unit will take all other clearances from concerned agencies, whenever required.
20. That the unit will not change its process without the prior permission of the Board.
21. That the Consent to Establish so granted will be invalid, if the unit falls in Aravali Area or non conforming area.
22. That the unit will comply with the Hazardous Waste Management Rules and will also make the non-leachate pit for storage of Hazardous waste and will undertake not to dispose off the same except for pit in their own premises or with the authorized disposal authority.
23. That the unit will submit an undertaking that it will comply with all the specific and general conditions as imposed in the above Consent to Establish within 30 days failing which Consent to Establish will be revoked.
24. That unit will obtain EIA from MoEF, if required at any stage.
25. In case of unit does not comply with the above conditions within the stipulated period, Consent to Establish will be revoked.
26. That unit will obtain consent to operate from the board before the start of product activity.

#### **Specific Conditions**

#### **Other Conditions :**

1. The CTE from pollution angle shall not provide immunity from any other Act/Rules applicable to the unit.
2. Unit will install adequate PCDs (Pollution Control Devices i.e. ETP/ APCM) before commissioning as per scheme submitted and undertaking given.
4. Unit will start expansion portion only after obtaining valid CTO from the Board.
5. The unit will obtain prior permission from CGWA or HWRA the competent authority of the State for extraction of Ground Water if any.
6. Unit will provide Green Belt / tree plantation as per the conditions of EC issued by SEIAA.
7. Unit will implement an Environment Management Plan and comply with all the provisions of Mining plan and will strictly abide by the conditions of EC granted by SEIAA.
8. Unit will do the mining activities only on the land for which permission (LOI) has been granted by Mines and geology Deptt. and for which NOC/permission/ CLU by Town and country planning Department has been granted and for which EC obtained by unit.
9. Unit will execute the mining activity strictly as per the mining plan approved by Mining Deptt. & DGMS.
10. Regular water sprinkling shall be done by the unit to control the dust pollution generated during the mining activities.
11. The mineral transportation will be done through covered trucks only.
12. Unit will not discharge any trade effluent/domestic effluent inside or outside the premises.
13. The Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers.
14. Unit will comply with the conditions of the EC granted to the unit and submit six monthly compliance report and compliance of conditions of EC uploaded.
15. The unit will maintain its effluent treatment plant, APCM / dust suppression system in well working condition.
16. Unit will not install any mineral processing unit e.g. Stone crusher, Mineral grinding unit or Screening plant in its lease area.
17. Unit will operate ETP, APCM & will maintain logbook of ETP & APCD, electrical meter reading etc.
18. Unit will obtain all necessary permission/Authorization/registrations done well in time from all the concerned departments.
18. CTE so granted is without prejudice to the any violation caused by the unit in past and will be deemed cancelled automatically, if at any stage to come to the notice of the board & further necessary action as per Environmental Laws will be initiated without giving any further notice.
19. The unit will abide by all the directions / orders issued from time to time by all the court i.e. District Courts, Hon'ble Punjab & Haryana High Court, Chandigarh, Hon'ble NGT and Hon'ble Supreme Court of India w.r.t. mining projects.
20. The unit will abide with the directions/guidelines HSPCB/CPCB/ any court decision/Direction of any competent authority.
21. If fails to comply the provisions of consent procedure & Board policy dated 26.02.2018 as amended till date, the (CTE) consent to establish so granted shall be revoked automatically without giving any notice.
22. If the unit is found not complying the conditions of CTE so granted at any stage, the unit will be liable for legal action, closure action as per the provisions of environmental Acts/laws and for lavvy of Environment Compensation on the basis of polluter pay principal as per the directions of Honble NGT / CAQM/CPCB/ HSPCB issued from time to time.
23. That Project Proponent shall create a buffer zone of 7.5 meter along with the Mining Lease area.
24. The unit is liable to pay the balance CTE fees if found due at any stage.
25. The unit will provide the AAQ stations as per condition EC.
26. That the unit will comply with all the conditions of the ENVIRONMENTAL CLEARANCE ISSUED BY THE MOEF.
27. THE UNIT WILL IMPLEMENT THE ENVIRONMENTAL MANAGEMENT PLAN AND WILL SUBMIT THE COMPLIANCE IN THIS REGARD TO THE BOARD regularly.
28. UNIT WILL DO THE MINING AS PER THE MINING PLAN SUBMITTED.
29. UNIT WILL OBTAIN THE NECESSARY PERMISSIONS AS DESIRED FROM THE CONCERNED DEPARTMENTS.
30. The unit will comply with the provisions of all environmental laws as per policy of the Board.
31. The Mining Lease Holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
32. That proposal to the enhancement of the capacity from 10 MTPA to 24 MTPA over an area of 258.30 ha located in village - Khanak, Tehsil- Tosham, District- Bhiwani, Haryana by M/s HSIIDC Ltd shall be strictly in accordance with the approved Mining Plan.
33. That Project Proponent shall not violate any provision under the Forest Act / Rules & other relevant Acts & Rules, as may be applicable besides the terms & conditions of contract between



the Mines & Geology Department, Haryana.

34. That Project Proponent shall ensure to adhere to the directions issued by MOEF & CC, GOI and HSPCB, from time to time for the conservation & protection of Environment.
35. The PP shall get the Wildlife Conservation Plan approved from competent authority before start of Mining Operations.
36. The Environmental clearance is granted subject to the Final outcome of Hon'ble Supreme Court of India, Honble High Court of India and any other court of law, if any as applicable to this project.
37. The PP shall construct the pucca link roads to the mining site before the start of mining.
38. The PP shall prepare the Mine safety plan and get it approved from the competent authority before the start of mining.
39. The Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers.
40. Transportation of the minerals by road passing through the village shall not be allowed. A „bypass road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sound, dust and accidents could be mitigated. The Project Proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the Project. No road movement should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.
41. Likewise, Alteration or re-routing of foot paths, pagdandies, cart roads, and village infrastructure public utilities or roads (for purposes of land acquisition for mining) shall be avoided to the extent possible and in case such acquisition is inevitable, alternative arrangements shall be made first and then only the area acquired. In these types of cases, inspection Reports by site visit by experts may be insisted upon which should be done through reputed institutes.
42. The PP shall ensure that total EMP Budget shall be spent on project during construction as well as during operational phase as per table given above. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted.
42. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. the housing may be in the form of temporary structures to be removed after the completion of the project.
43. Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented.
44. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated and improved upon after the implementation of the project.
45. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed the plantation in 33% of the total area of project site will be carried out including statutory boundary barrier, Gram Panchayat, nearby schools, hospitals and along the road in consultation with local authority or Govt. Body. Native plant species as suggested by villagers/specialist may be planted.
46. The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment, forest and Climate Change and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out; The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry.
47. There shall be planning, developing and implementing facility of rainwater harvesting measures on long terms basis in consultation with Regional Director, Central Groundwater Board and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.
48. Where ever blasting is undertaken as part of mining activity, the Project Proponent shall

carry out vibration studies well before approaching any such habitats or other buildings, to evaluate the zone of influence and impact of blasting on the neighbourhood. Within 500 meters of such sites vulnerable to blasting vibrations avoidance of use of explosives and adoption of alternative means of mineral

extraction, such as ripper/dozer combination/rock breakers/surface miners etc. should be seriously considered and practiced wherever practicable. A provision for monitoring of each blast should be made so that the impact of blasting on nearby habitation and dwelling units could be ascertained. The covenant of lease deed under Rule 31 of MCR 1960 provides that no mining operations shall be carried out within 50 meters of public works such as public roads and buildings or inhabited sites except with the prior permission from the competent authority.

49. Implementation of Environment Management Policy of the Company w.r.t. judicious use of Mineral resources for growth & development synchronizing mining & environment with prosperity.

50. The Project Proponent shall also take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted in the study area.

51. The illumination and sound at night at project site, disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. Project Proponent must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/masks away from the villagers and keeping the noise levels well within

the prescribed limits for day light/night hours.

52. A comprehensive study for slope stabilization of mine benches and OB dumps shall be undertaken within one year.

53. The PP shall manage the overburden at the mining site if left after sale.

54. Washing of all transport vehicles should be done inside the mining lease.

55. The PP shall adhere to the approved mining plan and approved closure plan by the competent authority.

## HARYANA STATE

*Regional Officer, Bhiwani*

*Haryana State Pollution Control Board.*



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**HARYANA STATE POLLUTION CONTROL BOARD**
**SCF-32, sector 13, HUDA, Bhiwani Ph. 01664-240259 Email:- hspcbrojr@gmail.com**
**E-mail: hspcb@hry.nic.in**

**No. HSPCB/Consent/ : 313100423BHICTO47775250**
**Dated:11/10/2023**
**To.**

M/s :HSIIDC Panchkula  
Village KHANAK Tehsil Tosham Distt Bhiwani

**Subject: Grant of consent to operate to M/s HSIIDC Panchkula.**

Please refer to your application no. 47775250 received on dated 2023-10-03 in regional office Bhiwani. With reference to your above application for consent to operate, M/s HSIIDC Panchkula is here by granted consent as per following specification/Terms and conditions.

<b>Consent Under</b>	BOTH
<b>Period of consent</b>	11/10/2023 - 30/09/2028
<b>Industry Type</b>	Mining and ore beneficiation
<b>Category</b>	RED
<b>Investment(In Lakh)</b>	14725.0
<b>Total Land Area(Sq. meter)</b>	2583000.0
<b>Total Builtup Area(Sq. meter)</b>	1500.0
<b>Quantity of effluent</b>	
1. Trade	5.0 KL/Day
2. Domestic	3.0 KL/Day
<b>Number of outlets</b>	2.0
<b>Mode of discharge</b>	
1. Domestic	septic tank with soak pit
2. Trade	ETP
<b>Domestic Effluent Parameters</b>	
1. NA	
<b>Trade Effluent Parameters</b>	
1. BOD	30 mg/l
2. COD	250 mg/l
3. TSS	100 mg/l
<b>Number of stacks</b>	1
<b>Height of stack</b>	
1. NA	
<b>Emission parameters</b>	
1. SPM	100 mg/m <sup>3</sup>
<b>Product Details</b>	

1. Stone	80000 Metric Tonnes/day
<b>Capacity of boiler</b>	
1. NA	Ton/hr
<b>Type of Furnace</b>	
1. NA	
<b>Type of Fuel</b>	
1. Electricity	Kilowatt/day
<b>Raw Material Details</b>	
Stone	80000 Metric Tonnes/Day

*Regional Officer, Bhiwani*  
*Haryana State Pollution Control Board.*

### Terms and conditions

1. The applicants shall maintain good house keeping both within factory and in the premises. All hose pipelines valves, storage tanks etc. shall be leak proof. In plant allowable pollutants levels, if specified by State Board should be met strictly.
2. The applicant/company shall comply with and carry out directive/orders issued by the Board in this consent order at all subsequent times without negligence of his /its part. The applicant/company shall be liable for such legal action against him as per provision of the law/act in case of violation of any order/directives. Issued at any time and or non compliance of the terms and conditions of his consent order.
3. The applicant shall make an application for grant of consent at least 90 days before the date of expiry of this consent.
4. Necessary fee as prescribed for obtaining renewal consent shall be paid by the applicant alongwith the consent application.
5. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above required variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard vary all or such condition and there upon the applicant shall be bound to comply with the conditions so varied.
6. The industry shall provide adequate arrangement for fighting the accidental leakages, discharge of any pollutants gas/liquids from the vessels, mechanical equipment etc. which are likely to cause environment pollution.
7. The industry shall comply noise pollution (Regulation and control) Rules, 2000.
8. The industry shall comply all the direction/Rules/Instructions as may be issued by the MOEF/CPCB/HSPCB from time to time.
9. The industry shall ensure that various characteristics of the effluents remain within the tolerance limits as specified in EPA Standard and as amended from time to time and at no time the concentration of any characteristics should exceed these limits for discharge.
10. The industry would immediately submit the revised application to the Board in the event of any change in the raw material in process, mode of treatment/discharge of effluent. In case of change of process at any stage during the consent period, the industry shall submit fresh consent application alongwith the consent to operate fee, if found due, which may be on any account and that shall be paid by the industry and the industry would immediately submit the



consent application to the Board in the event of any change during the year in the raw material, quantity, quality of the effluent, mode of discharge, treatment facilities etc.

11. The officer/official of the Board shall reserve the right to access for the inspection of the industry in connection with the various process and the treatment facilities. The consent to operate is subject to review by the Board at any time.

12. Permissible limits for any pollutants mentioned in the consent to operate order should not exceed the concentration permitted in the effluent by the Board.

13. The industry shall pay the balance fee, in case it is found due from the industry at any time later on.

14. If the industry fails to adhere to any of the conditions of this consent to operate order, the consent to operate so granted shall automatically lapse.

15. If the industry is closed temporarily at its own, they shall inform the Board and obtain permission before restart of the unit.

16. The industry shall comply all the Directions/ Rules/Instructions issued from time to time by the Board.

#### **Specific Conditions :**

1. The CTE/CTO from pollution angle shall not provide immunity from any other Act/Rules applicable to the unit.

2. Unit will maintain PCDs (Pollution Control Devices i.e. ETP, APCM and septic tank followed by soak pit).

3. The unit will obtain prior permission from CGWA or HWRA the competent authority of the State for extraction of Ground Water if any.

4. Unit will provide and maintain Green Belt / tree plantation as per the conditions of EC issued by SEIAA.

7. Unit will implement an Environment Management Plan and comply with all the provisions of Mining plan and will strictly abide by the conditions of EC granted by SEIAA and CTE granted by HSPCB.

8. Unit will do the mining activities only on the land for which permission (LOI) has been granted by Mines and geology Deptt. and for which NOC/permission/ CLU by Town and country planning Department has been granted and for which EC obtained by unit.

9. Unit will execute the mining activity strictly as per the mining plan approved by Mining Deptt. & DGMS.

10. Regular water sprinkling shall be done by the unit to control the dust pollution generated during the mining activities.

11. The mineral transportation will be done through covered trucks only.

12. Unit will not discharge any trade effluent/domestic effluent inside or outside the premises.

13. The Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers.

14. Unit will comply with the conditions of the EC/CTE granted by the authorities and submit six monthly compliance reports.

15. The unit will maintain its effluent treatment plant, APCM / dust suppression system in well working condition.

16. Unit will not install any mineral processing unit e.g. Stone crusher, Mineral grinding unit or Screening plant in its lease area.

17. Unit will operate ETP, APCM & will maintain logbook of ETP & APCD, electrical meter

reading etc.

18. Unit will obtain all necessary permission/Authorization/registrations done well in time from all the concerned departments.

18. CTE/CTO so granted is without prejudice to the any violation caused by the unit in past and will be deemed cancelled automatically, if at any stage to come to the notice of the board & further necessary action as per Environmental Laws will be initiated without giving any further notice.

19. The unit will abide by all the directions / orders issued from time to time by all the court i.e.

District Courts, Hon'ble Punjab & Haryana High Court, Chandigarh, Hon'ble NGT and Hon'ble Supreme Court of India w.r.t. mining projects.

20. The unit will abide with the directions/guidelines HSPCB/CPCB/ any court decision/Direction of any competent authority.

21. If fails to comply the provisions of consent procedure & Board policy dated 26.02.2018 as amended till date, the (CTE/CTO) so granted shall be revoked automatically without giving any notice.

22. If the unit is found not complying the conditions of CTE/CTO so granted at any stage, the unit

will be liable for legal action, closure action as per the provisions of environmental Acts/laws and for lavvy of Environment Compensation on the basis of polluter pay principal as per the directions of Honble NGT / CAQM/CPCB/ HSPCB issued from time to time.

23. That Project Proponent shall maintain a buffer zone of 7.5 meter along with the Mining Lease area.

24. The unit is liable to pay the balance CTE/CTO fees if found due at any stage.

25. The unit will maintain the AAQ stations as per condition of EC.

26. That the unit will comply with all the conditions of the ENVIRONMENTAL CLEARANCE issued by the MOEF/SEIAA.

27. THE UNIT WILL IMPLEMENT THE ENVIRONMENTAL MANAGEMENT PLAN AND WILL SUBMIT THE COMPLIANCE IN THIS REGARD TO THE BOARD regularly.

28. UNIT WILL DO THE MINING AS PER THE MINING PLAN SUBMITTED.

29. UNIT WILL OBTAIN THE NECESSARY PERMISSIONS AS DESIRED FROM THE CONCERNED DEPARTMENTS.

30. The unit will comply with the provisions of all environmental laws as per policy of the Board.

31. The Mining Lease Holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.

32. That proposal to the enhancement of the capacity from 10 MTPA to 24 MTPA over an area of 258.30 ha located in village - Khanak, Tehsil- Tosham, District- Bhiwani, Haryana by M/s HSIIDC Ltd shall be strictly in accordance with the approved Mining Plan.

33. That Project Proponent shall not violate any provision under the Forest Act / Rules & other relevant Acts & Rules, as may be applicable besides the terms & conditions of contract between the Mines & Geology Department, Haryana.

34. That Project Proponent shall ensure to adhere to the directions issued by MOEF & CC,

GOI and HSPCB, from time to time for the conservation & protection of Environment.

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41. Likewise, Alteration or re-routing of foot paths, pagdandies, cart roads, and village infrastructure public utilities or roads (for purposes of land acquisition for mining) shall be avoided to the extent possible and in case such acquisition is inevitable, alternative arrangements shall be made first and then only the area acquired. In these types of cases, inspection Reports by site visit by experts may be insisted upon which should be done through reputed institutes.

42. The PP shall ensure that total EMP Budget shall be spent on project during construction as well as during operational phase as per table given above. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted.

42. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. the housing may be in the form of temporary structures to be removed after the completion of the project.

43. Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented.

44. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated and improved upon after the implementation of the project.

45. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80

sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed the plantation in 33% of the total area of project site will

be carried out including statutory boundary barrier, Gram Panchayat, nearby schools, hospitals and along the road in consultation with local authority or Govt. Body. Native plant species as suggested by villagers/specialist may be planted.

46. The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment, forest and Climate Change and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out; The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry.

47. There shall be planning, developing and implementing facility of rainwater harvesting measures on long terms basis in consultation with Regional Director, Central Groundwater Board and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.

48. Where ever blasting is undertaken as part of mining activity, the Project Proponent shall carry out vibration studies well before approaching any such habitats or other buildings, to evaluate the zone of influence and impact of blasting on the neighbourhood. Within 500 meters of such sites vulnerable to blasting vibrations avoidance of use of explosives and adoption of alternative means of mineral

extraction, such as ripper/dozer combination/rock breakers/surface miners etc. should be seriously considered and practiced wherever practicable. A provision for monitoring of each blast should be made so that the impact of blasting on nearby habitation and dwelling units could be ascertained. The covenant of lease deed under Rule 31 of MCR 1960 provides that no mining operations shall be carried out within 50 meters of public works such as public roads and buildings or inhabited sites except with the prior permission from the competent authority.

49. Implementation of Environment Management Policy of the Company w.r.t. judicious use of Mineral resources for growth & development synchronizing mining & environment with prosperity.

50. The Project Proponent shall also take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted in the study area.

51. The illumination and sound at night at project site, disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. Project Proponent must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/masks away from the villagers and keeping the noise levels well within

the prescribed limits for day light/night hours.

52. A comprehensive study for slope stabilization of mine benches and OB dumps shall be undertaken within one year.

53. The PP shall manage the overburden at the mining site if left after sale.

54. Washing of all transport vehicles should be done inside the mining lease.

55. The PP shall adhere to the approved mining plan and approved closure plan by the

competent authority.

56. Unit will submit the analysis reports from approved Lab of the Board from all effluent sources, air emission sources and noise sources within 90 days after grant of this CTO.

57. Unit will submit the compliance report of above mentioned conditions within 90 days otherwise this CTO will be revoked and legal action will be initiated.

*Regional Officer, Bhiwani  
Haryana State Pollution Control Board.*



## 45 Annexure - 05

### Compliance status of conditions of Consent to Operate issued vide letter No. HSPCB/Consent/ : 313100423BHICTO47775250 Dated:11/10/2023 by HSPCB.

Sr. No.	Conditions	Compliance Status
1.	The applicants shall maintain good house keeping both within factory and in the premises. All hose pipelines valves, storage tanks etc. shall be leak proof. In plant allowable pollutants levels, if specified by State Board should be met strictly.	Good housekeeping was observed during the inspection.
2.	The applicant/company shall comply with and carry out directive/orders issued by the Board in this consent order at all subsequent times without negligence of his /its part. The applicant/company shall be liable for such legal action against him as per provision of the law/act in case of violation of any order/directives. Issued at any time and or non compliance of the terms and conditions of his consent order.	The mining unit will continue to comply with all directions failing which legal action will be initiated against it.
3.	The applicant shall make an application for grant of consent at least 90 days before the date of expiry of this consent.	Will be complied
4.	Necessary fee as prescribed for obtaining renewal consent shall be paid by the applicant alongwith the consent application.	Necessary fee has been paid with CTE & CTO application.
5.	If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above required variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard vary all or such condition and there upon the applicant shall be bound to comply with the conditions so varied.	For future compliance.
6.	The industry shall provide adequate arrangement for fighting the accidental leakages, discharge of any pollutants gas/liquids from the vessels, mechanical equipment etc. which are likely to cause environment pollution.	Arrangement provided to control dust emission. However, it shall increase number of anti smog guns for better dust suppression.
7.	The industry shall comply noise pollution (Regulation and control) Rules, 2000.	Blasting is only done during day time, and is not conducted at night. The mine project is complying noise pollution rules, 2000.
8.	The industry shall comply all the direction/Rules/Instructions as may be issued by the MOEF/CPCB/HSPCB from time to time.	Unit shall continue to comply all the direction/Rules/Instructions as may be issued by the MOEF/CPCB/HSPCB from time to time.
9.	The industry shall ensure that various characteristics of the effluents remain within the tolerance limits as specified in EPA Standard and as amended from time to time and at no time the concentration of any characteristics should exceed these limits for discharge.	N.A
10.	The industry would immediately submit the	Unit will comply by applying consent if

	revised application to the Board in the event of any change in the raw material in process, mode of treatment/discharge of effluent. In case of change of process at any stage during the consent period, the industry shall submit fresh consent application alongwith the consent to operate fee, if found due, which may be on any account and that shall be paid by the industry and the industry would immediately submit the consent application to the Board in the event of any change during the year in the raw material, quantity, quality of the effluent, mode of discharge, treatment facilities etc.	any change in the existing process, production capacity etc. will make in future.
11.	The officer/official of the Board shall reserve the right to access for the inspection of the industry in connection with the various process and the treatment facilities. The consent to operate is subject to review by the Board at any time.	Will comply as per environmental norms provisions.
12.	Permissible limits for any pollutants mentioned in the consent to operate order should not exceed the concentration permitted in the effluent by the Board.	Complying, in case of exceed in permissible limit of pollutant limit, legal action will be taken as per Board policy.
13.	The industry shall pay the balance fee, in case it is found due from the industry at any time later on.	No balance fee is due on part of the mining unit.
14.	If the industry fails to adhere to any of the conditions of this consent to operate order, the consent to operate so granted shall automatically lapse.	Direction issued to unit for compliance of all conditions of CTO and environmental clearance.
15.	If the industry is closed temporarily at its own, they shall inform the Board and obtain permission before restart of the unit.	Direction being complied
16.	The industry shall comply all the Directions/ Rules/Instructions issued from time to time by the Board.	Complying Directions/ Rules/Instructions issued from time to time by the Board
<b>Specific Conditions:</b>		
1.	The CTE/CTO from pollution angle shall not provide immunity from any other Act/Rules applicable to the unit.	Applicable as per law.
2.	Unit will maintain PCDs (Pollution Control Devices i.e. ETP, APCM and septic tank followed by soak pit).	Unit has provided permanent sprinklers on main haulage, mobile tankers with sprinkles on other roads, 2 anti smog guns, and also provided STP.
3.	The unit will obtain prior permission from CGWA or HWRA the competent authority of the State for extraction of Ground Water if any.	Unit is not using groundwater, and is utilizing water from harvested rainwater in mining pits.
4.	Unit will provide Green Belt / tree plantation as per the conditions of EC issued by SEIAA.	As per Forest Department, no non - compliance has been reported at site, and unit has provided relevant green belt at the site.
5.	Unit will implement an Environment Management Plan and comply with all the provisions of Mining plan and will strictly abide by the conditions of EC granted by SEIAA.	Compliance is under process.
6.	Unit will do the mining activities only on the land for which permission (LOI) has been granted by Mines and geology Deptt. and for which NOC/permission/ CLU by Town and	Mining is done at the lease area, approved for mining, as reported by representative of Mines and Geology Department & Forest Department.

	country planning Department has been granted and for which EC obtained by unit.	
7.	Unit will execute the mining activity strictly as per the mining plan approved by Mining Deptt. & DGMS.	As reported by Mines and Geology Dept, no non-compliance has been reported.
8.	Regular water sprinkling shall be done by the unit to control the dust pollution generated during the mining activities.	water sprinkling is carried out regularly
9.	The mineral transportation will be done through covered trucks only.	Trucks with PUC only allowed at site. However, unit shall enhance supervision to allow only covered trucks for transporting minerals.
10.	Unit will not discharge any trade effluent/domestic effluent inside or outside the premises.	Complying.
11.	The Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers.	Unit has provided permanent water sprinklers on main haulage road and other roads are wetted with water tankers fitted with sprinklers.
12.	Unit will comply with the conditions of the EC granted to the unit and submit six monthly compliance report and compliance of conditions of EC uploaded.	Unit is regularly submitting six monthly compliance reports.
13.	The unit will maintain its effluent treatment plant, APCM / dust suppression system in well working condition.	Maintained dust suppression system. But unit shall increase number of anti smog guns to make more effective dust suppression.
14.	Unit will not install any mineral processing unit e.g. Stone crusher, Mineral grinding unit or Screening plant in its lease area.	Complying.
15.	Unit will operate ETP, APCM & will maintain logbook of ETP & APCD, electrical meter reading etc	Unit has provided STP, APCMs and has maintained logbook for the same.
16.	Unit will obtain all necessary permission/Authorization/registrations done well in time from all the concerned departments.	Obtained necessary permissions.
17.	CTE so granted is without prejudice to the any violation caused by the unit in past and will be deemed cancelled automatically, if at any stage to come to the notice of the board & further necessary action as per Environmental Laws will be initiated without giving any further notice.	Direction was issued.
18.	The unit will abide by all the directions / orders issued from time to time by all the court i.e. District Courts, Hon'ble Punjab & Haryana High Court, Chandigarh, Hon'ble NGT and Hon'ble Supreme Court of India w.r.t. mining projects.	Directions issued, and unit shall continue to abide by environmental laws.
19.	The unit will abide with the directions/guidelines HSPCB/CPCB/ any court decision/Direction of any competent authority.	Unit shall continue to abide with environmental laws/directions.
20.	If fails to comply the provisions of consent procedure & Board policy dated 26.02.2018 as amended till date, the (CTE) consent to establish so granted shall be revoked automatically without giving any notice.	Complying with provisions of consent procedure.
21.	If the unit is found not complying the conditions of CTE so granted at any stage, the unit will be liable for legal action, closure	No non- compliance observed.

	action as per the provisions of environmental Acts/laws and for levy of Environment Compensation on the basis of polluter pay principal as per the directions of Honble NGT / CAQM/CPCB/ HSPCB issued from time to time.	
22.	That Project Proponent shall create a buffer zone of 7.5 meter along with the Mining Lease area.	Unit has provided a green belt. It shall continue to strengthen the green belt with planting native trees & regular watering & manure required
23.	The unit is liable to pay the balance CTE fees if found due at any stage.	Not applicable, no financial due.
24.	The unit will provide the AAQ stations as per condition EC.	Unit will install AAQ stations as per 2009 notification.
25.	That the unit will comply with all the conditions of the ENVIRONMENTAL CLEARANCE ISSUED BY THE MOEF.	Directions issued to the unit.
26.	THE UNIT WILL IMPLEMENT THE ENVIRONMENTAL MANAGEMENT PLAN AND WILL SUBMIT THE COMPLIANCE IN THIS REGARD TO THE BOARD regularly.	Implementation of EMP is under process.
27.	UNIT WILL DO THE MINING AS PER THE MINING PLAN SUBMITTED.	No non - compliance reported by the Mines & Geology Department.
28.	UNIT WILL OBTAIN THE NECESSARY PERMISSIONS AS DESIRED FROM THE CONCERNED DEPARTMENTS.	Obtained.
29.	The unit will comply with the provisions of all environmental laws as per policy of the Board.	Direction issued to the unit.
30.	The Mining Lease Holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.	Can be checked after ceasing of mining operations at the end of project.
31.	That proposal to the enhancement of the capacity from 10 MTPA to 24 MTPA over an area of 258.30 ha located in village - Khanak, Tehsil- Tosham, District- Bhiwani, Haryana by M/s HSIIDC Ltd shall be strictly in accordance with the approved Mining Plan.	No non -compliance w.r.t implementation of mining plan observed at site.
32.	That Project Proponent shall not violate any provision under the Forest Act / Rules & other relevant Acts & Rules, as may be applicable besides the terms & conditions of contract between the Mines & Geology Department, Haryana.	No non- compliance reported by Mines & Geology and Forest Department officials.
33.	That Project Proponent shall ensure to adhere to the directions issued by MOEF & CC, GOI and HSPCB, from time to time for the conservation & protection of Environment.	Direction issued to the unit.
34.	The PP shall get the Wildlife Conservation Plan approved from competent authority before start of Mining Operations.	Unit has obtained the wildlife conservation plan approved from competent authority.
35.	The Environmental clearance is granted subject to the Final outcome of Hon'ble Supreme Court of India, Honble High Court of India and any other court of law, if any as applicable to this project.	Direction issued to the unit.

36.	The PP shall construct the pucca link roads to the mining site before the start of mining.	Unit has Provided pucca link.
37.	The PP shall prepare the Mine safety plan and get it approved from the competent authority before the start of mining.	Mine safety plan has been approved from the competent authority.
38.	The Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers.	Main haulage road in the mine has been provided with permanent water sprinklers.
39.	Transportation of the minerals by road passing through the village shall not be allowed. A „bypass road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sound, dust and accidents could be mitigated. The Project Proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the Project. No road movement should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.	PP has coordinated with PWD B & R, Panchayati Raj and Marketing Board Departments for widening, maintenance and strengthens of the public roads in the area around the mining lease.
40.	Likewise, Alteration or re-routing of foot paths, pagdandies, cart roads, and village infrastructure public utilities or roads (for purposes of land acquisition for mining) shall be avoided to the extent possible and in case such acquisition is inevitable, alternative arrangements shall be made first and then only the area acquired. In these types of cases, inspection Reports by site visit by experts may be insisted upon which should be done through reputed institutes.	Direction issued and no alteration of footpath/village road has been observed by committee.
41.	The PP shall ensure that total EMP Budget shall be spent on project during construction as well as during operational phase as per table given above. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted.	Utilization of EMP budget under process for Socio Economic activities. PP has establish Environment monitoring cell.
42.	Provision shall be made for the housing of construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. the housing may be in the form of temporary structures to be removed after the completion of the project.	Labor doesn't stay at night, as they are from neighboring areas. Unit has provided necessary facilities and also toilet facilities, and STP also provided.
43.	Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of	Unit has appointed occupational health specialist for regular and periodical medical examination of the workers engaged in the Project.

	National Institute for ensuring good occupational environment for mine workers shall be implemented.	
44.	Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated and improved upon after the implementation of the project.	Traffic management plan has been prepare & same is implemented by deploying personal through security agency.
45.	No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed the plantation in 33% of the total area of project site will be carried out including statutory boundary barrier, Gram Panchayat, nearby schools, hospitals and along the road in consultation with local authority or Govt. Body. Native plant species as suggested by villagers/specialist may be planted.	Unit has provided green plant Unit representative has mentioned ,they will increase the number of plants and also increase biodiversity by planting different local native species under supervision of experts from forest department
46.	The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment, forest and Climate Change and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out; The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry.	Unit is engaged in mining above the ground water table.
47.	There shall be planning, developing and implementing facility of rainwater harvesting measures on long terms basis in consultation with Regional Director, Central Groundwater Board and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.	Presently, unit is engaged in harvesting rain water in mined pits & further using this water for green belt watering & for dust suppression activities. The unit representative stated that are planning to develop rain water harvesting measures by consulting HWRA.
48.	Where ever blasting is undertaken as part of mining activity, the Project Proponent shall carry out vibration studies well before approaching any such habitats or other buildings, to evaluate the zone of influence and impact of blasting on the neighborhood. Within 500 meters of such sites vulnerable to blasting vibrations avoidance of use of explosives and adoption of alternative means of mineral extraction, such as ripper/dozer combination/rock breakers/surface miners etc. should be seriously considered and practiced wherever practicable. A provision for monitoring of each blast should be made so	The unit has already obtained necessary permission for blasting from competent author. Unit has provided vibration studies of last one year & same are reported within prescribed limits.

	that the impact of blasting on nearby habitation and dwelling units could be ascertained. The covenant of lease deed under Rule 31 of MCR 1960 provides that no mining operations shall be carried out within 50 meters of public works such as public roads and buildings or inhabited sites except with the prior permission from the competent authority.	
49.	Implementation of Environment Management Policy of the Company w.r.t. judicious use of Mineral resources for growth & development synchronizing mining & environment with prosperity.	Under process.
50.	The Project Proponent shall also take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted in the study area.	Unit has taken necessary permissions from Forest department in this regard .
51.	The illumination and sound at night at project site, disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. Project Proponent must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.	Arrangement provided to orient the floodlights/masks away from the villagers and to keep the noise levels well within the prescribed limits for day light/night hours. Blasting is done only for specified period in day, and not during night.
52.	A comprehensive study for slope stabilization of mine benches and OB dumps shall be undertaken within one year.	Unit will expedite the study for slope stabilization of mine benches.
53.	The PP shall manage the overburden at the mining site if left after sale.	Direction issued to the unit.
54.	Washing of all transport vehicles should be done inside the mining lease.	No Washing of transport vehicles inside the mine site has been found.
55.	The PP shall adhere to the approved mining plan and approved closure plan by the competent authority.	As per Mines & Geology Department, no non - compliance has been observed w.r.t the mining plan.
56.	Unit will submit the analysis reports from approved Lab of the Board from all effluent sources, air emission sources and noise sources within 90 days after grant of this CTO.	Latest air emission analysis report dated 28.10.2024 was reported within the prescribed limits.
57.	Unit will submit the compliance report of above mentioned conditions within 90 days otherwise this CTO will be revoked and legal action will be initiated.	Unit regularly submitting the compliance report of conditions mentioned in environmental clearance and conditions of CTO.

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 Record Time: 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

Serial Number: UM17364 V 10-90FB Micromate ISEE  
 Battery Level: 3.7 Volts  
 Unit Calibration: May 28, 2024 by UES New Delhi  
 File Name: UM17364\_20240901140356.IDFW

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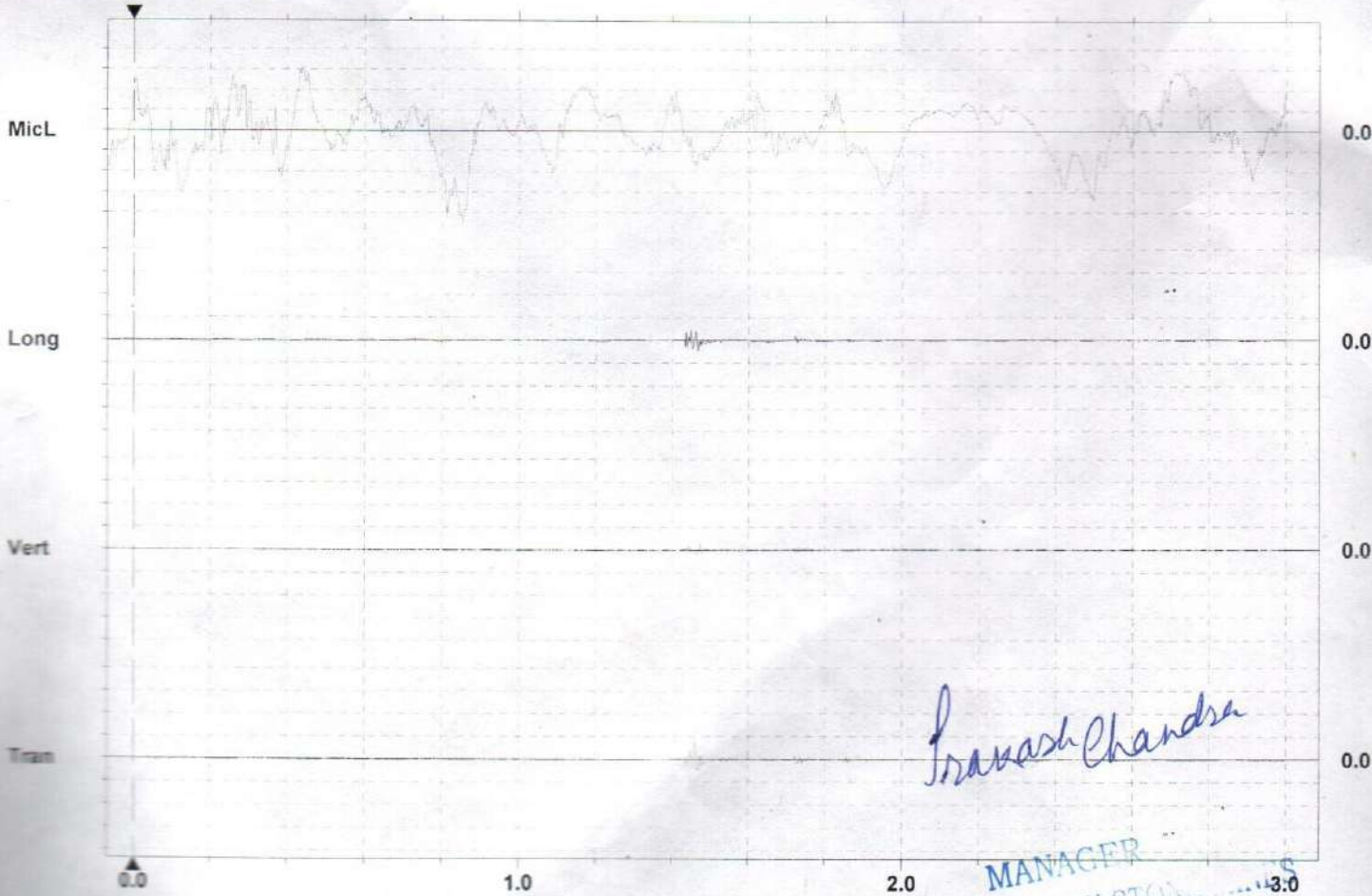
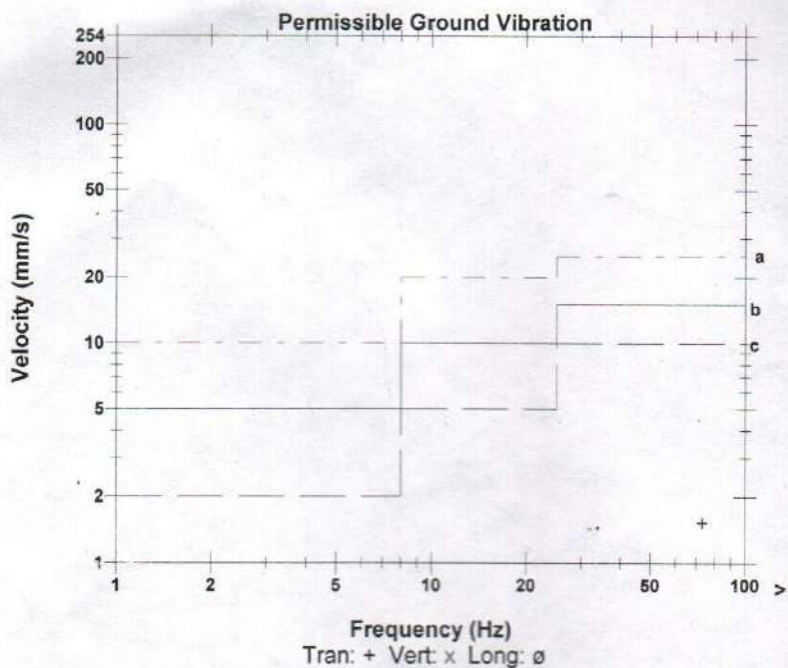
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 User Name:  
 General:

Microphone: Linear Weighting  
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PPV	1.529	0.607	0.977	mm/s
ZC Freq	73	>100	85	Hz
Time (Rel. to Trig)	1.462	1.474	1.449	sec
Peak Acceleration	0.072	0.059	0.109	g
Peak Displacement	0.003	0.002	0.003	mm
Sensor Check	Passed	Passed	Passed	

Peak Vector Sum: 1.768 mm/s at 1.462 sec

**DGMS India (A)**



*Pravash Chandra*

**MANAGER**  
**KHANAK STONE**

Date/Time Tran at 14:01:42 September 4, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.5 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
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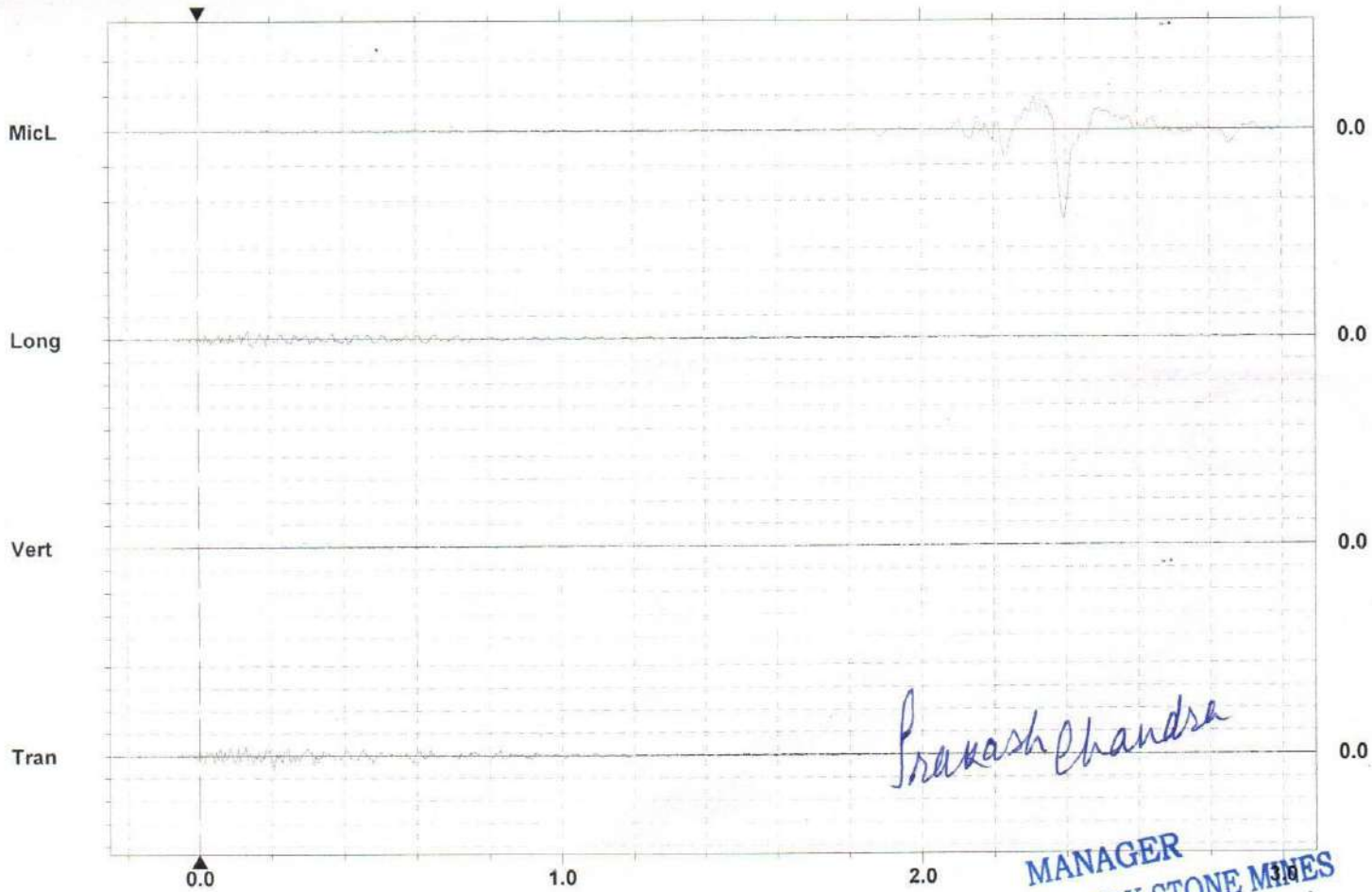
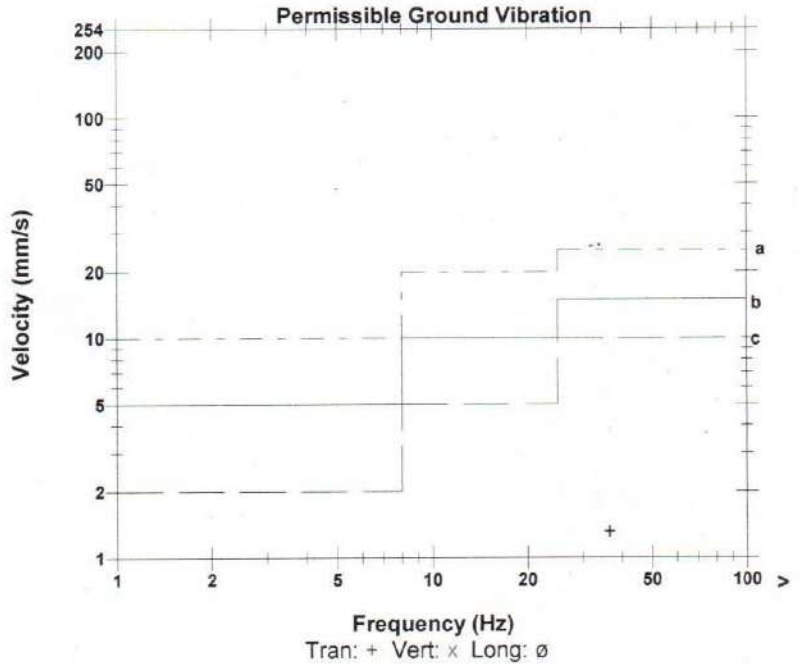
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 User Name:  
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Microphone Linear Weighting  
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	Tran	Vert	Long	
PPV	1.316	0.575	0.749	mm/s
ZC Freq	37	15	43	Hz
Time (Rel. to Trig)	0.207	0.213	0.137	sec
Peak Acceleration	0.038	0.020	0.032	g
Peak Displacement	0.005	0.006	0.005	mm
Sensor Check	Passed	Passed	Passed	

Peak Vector Sum 1.321 mm/s at 0.207 sec

**DGMS India (A)**



*Prakash Chandra*

**MANAGER  
 KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 5.000 pa.(L)/div  
 Trigger =

54

Date/Time Long at 14:10:04 September 5, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.5 Volts  
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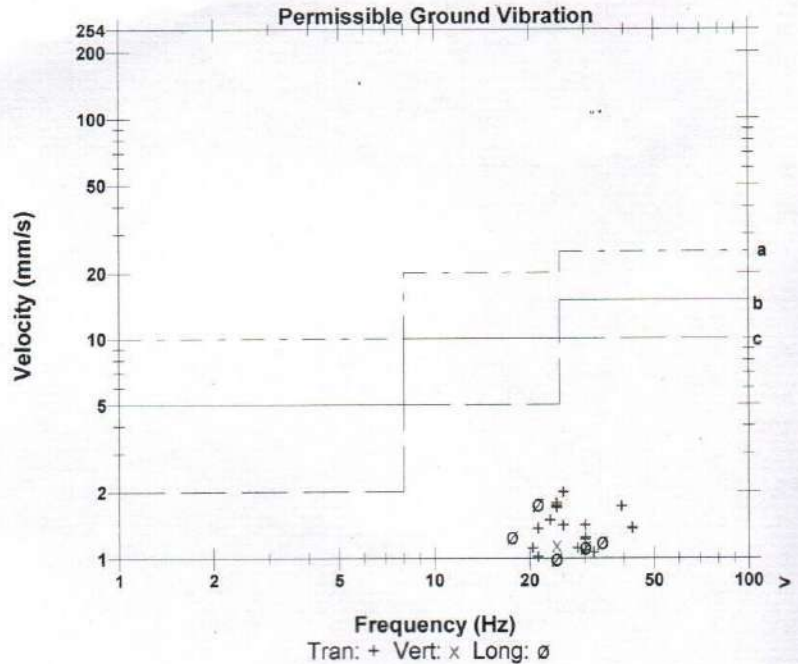
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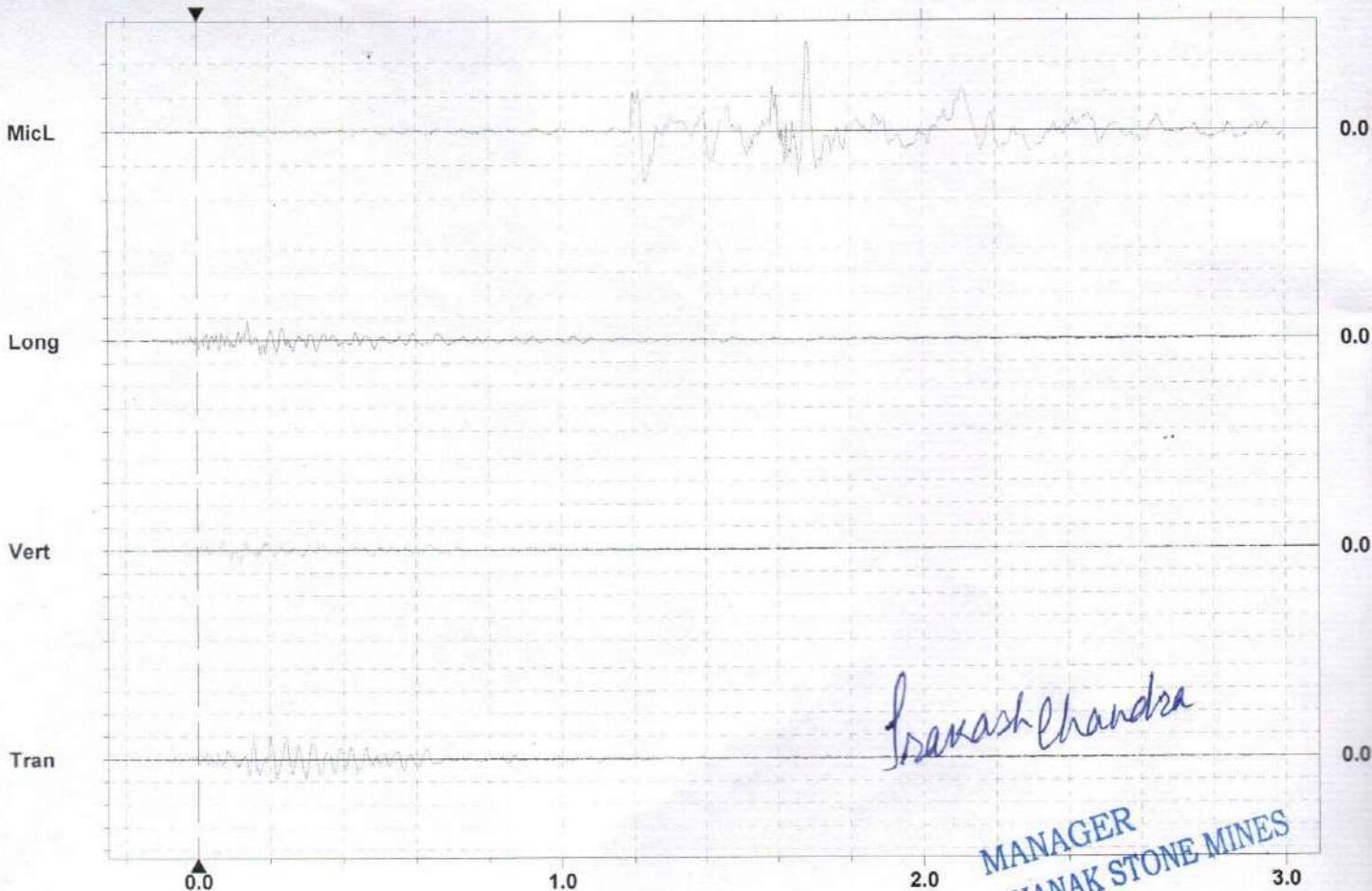
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 Channel Test Passed (Freq = 19.7 Hz Amp = 1231 mv)

	Tran	Vert	Long	
PPV	1.994	1.151	1.766	mm/s
ZC Freq	26	24	21	Hz
Time (Rel. to Trig)	0.200	0.118	0.140	sec
Peak Acceleration	0.055	0.035	0.047	g
Peak Displacement	0.010	0.006	0.009	mm
Sensor Check	Passed	Passed	Passed	
Peak Vector Sum	2.134 mm/s at 0.200 sec			

**DGMS India (A)**



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



*Prakash Chandra*

**MANAGER  
 KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 5.000 pa.(L)/div  
 Trigger =

55

Date/Time Tran at 14:42:05 September 6, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.7 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240906144205.IDFW

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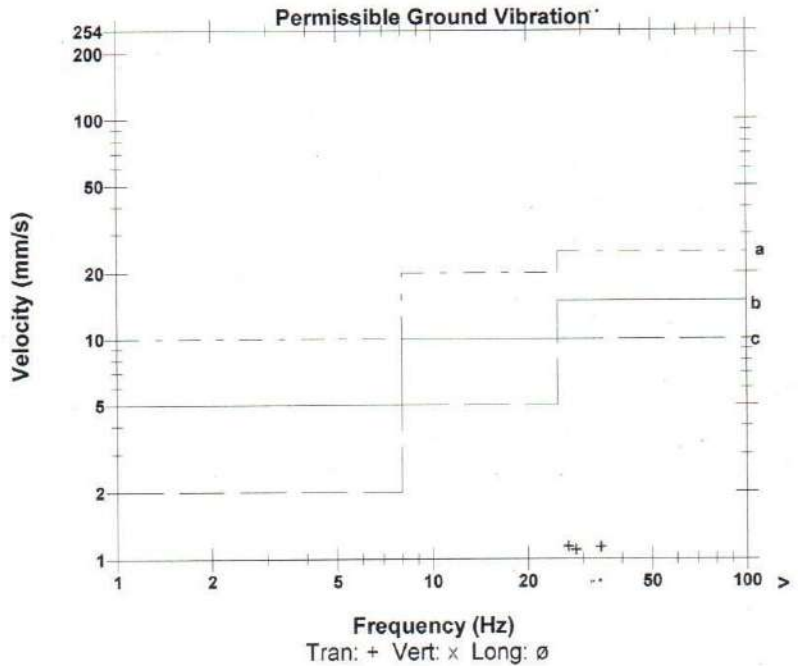
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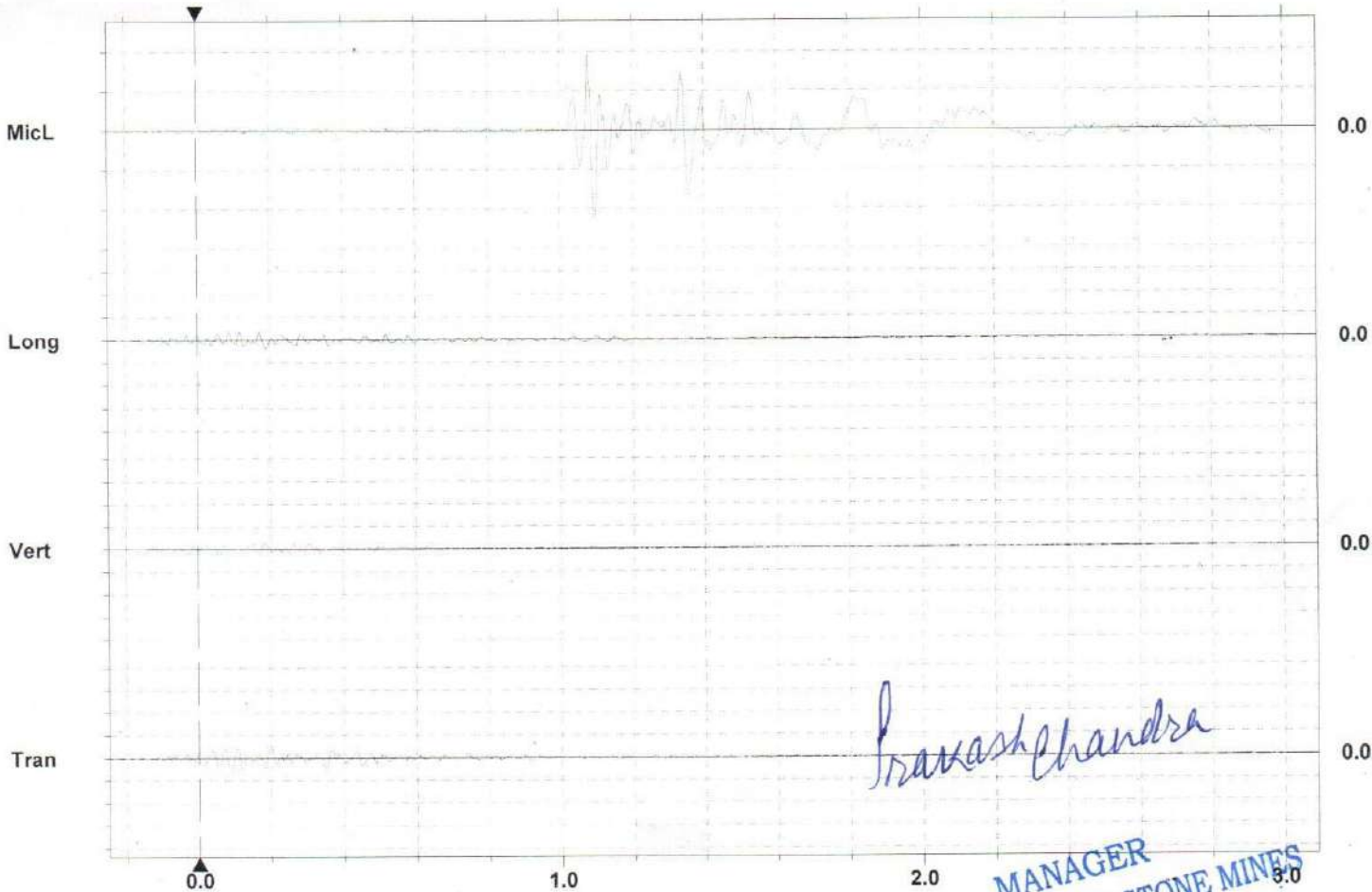
	Tran	Vert	Long	
PPV	1.135	0.654	0.796	mm/s
ZC Freq	27	24	37	Hz
Time (Rel. to Trig)	0.199	0.089	0.088	sec
Peak Acceleration	0.029	0.014	0.022	g
Peak Displacement	0.006	0.004	0.005	mm
Sensor Check	Passed	Passed	Passed	

Peak Vector Sum 1.377 mm/s at 0.089 sec

**DGMS India (A)**



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



*Pravashchandra*

**MANAGER  
 KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 5.000 pa.(L)/div  
 Trigger =

Date/Time MicL at 14:13:03 September 7, 2024  
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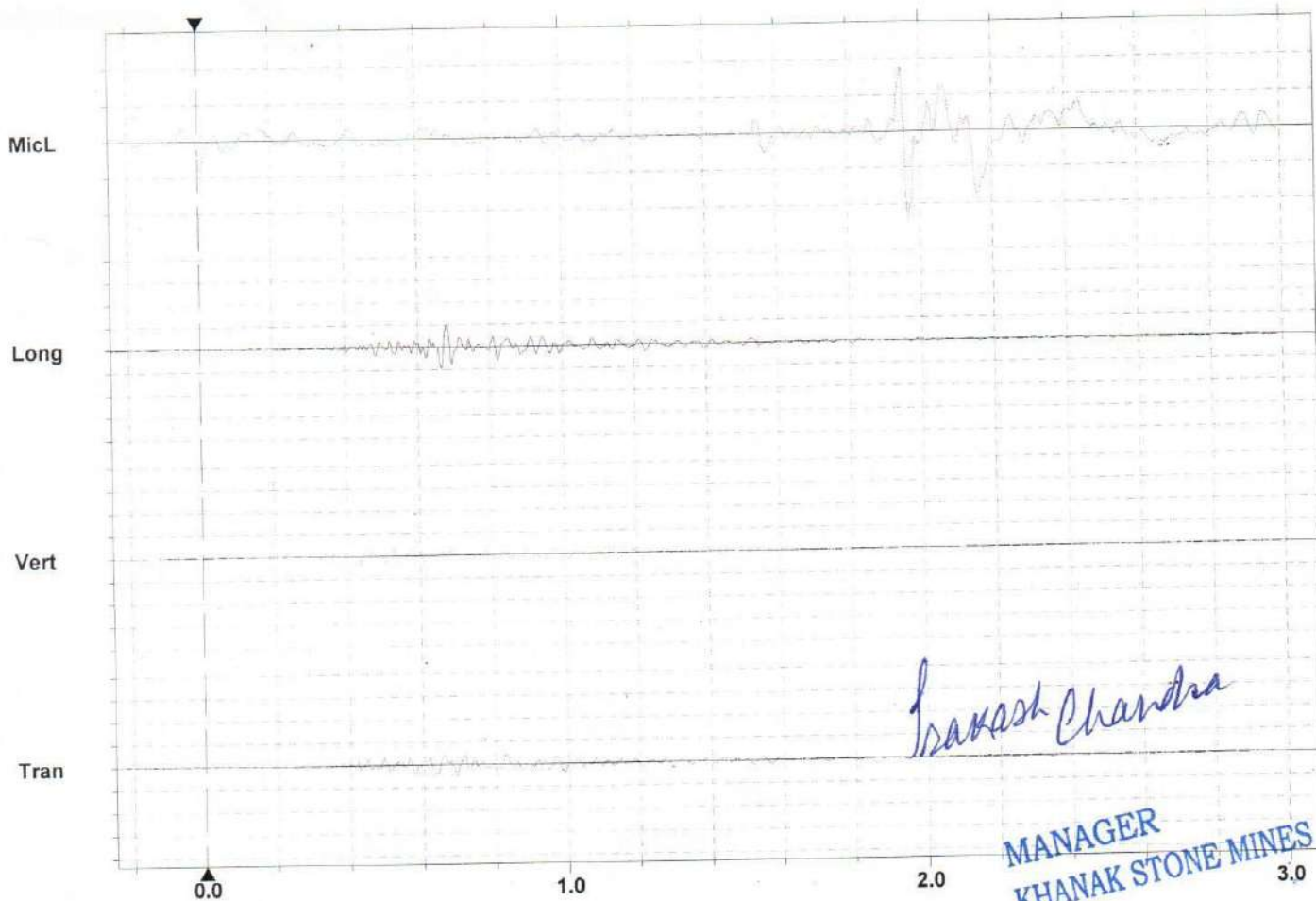
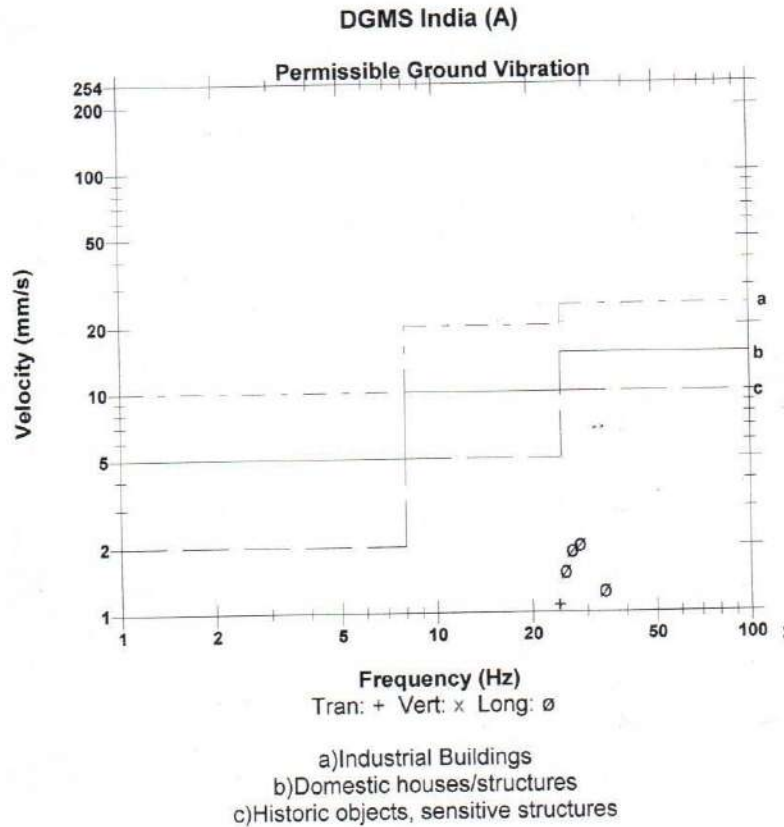
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 File Name UM17364\_20240907141303.IDFW

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Notes  
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 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 115.9 dB(L) at 1.968 sec  
 ZC Freq 9.5 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1200 mv)

	Tran	Vert	Long	
PPV	1.072	0.749	2.026	mm/s
ZC Freq	24	24	28	Hz
Time (Rel. to Trig)	0.690	0.524	0.680	sec
Peak Acceleration	0.021	0.019	0.052	g
Peak Displacement	0.008	0.005	0.012	mm
Sensor Check	Passed	Passed	Passed	
Peak Vector Sum	2.047 mm/s at 0.680 sec			



*Travash Chandra*

**MANAGER  
 KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 5.000 pa.(L)/div  
 Trigger =

Date/Time Long at 14:24:29 September 8, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

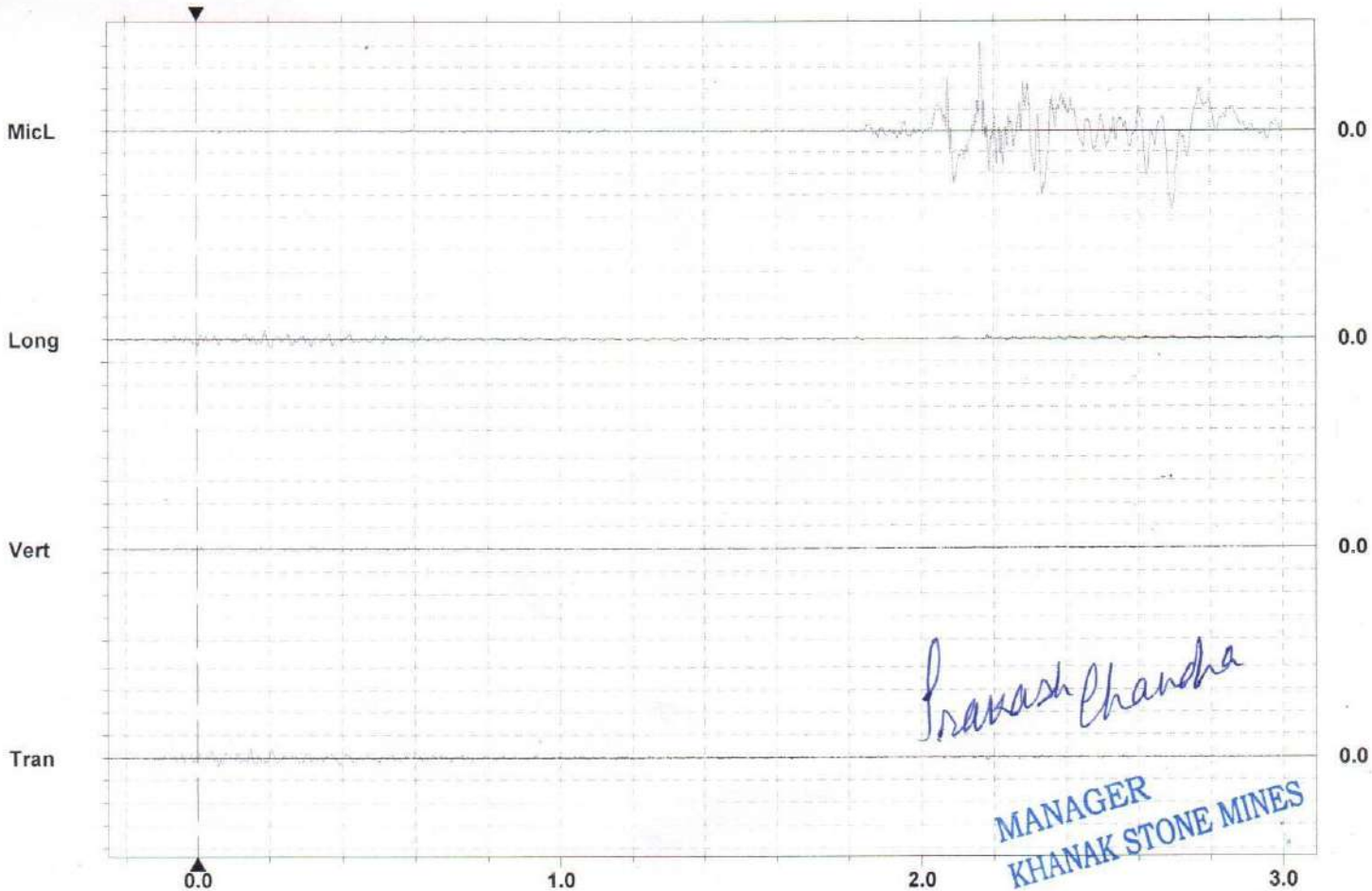
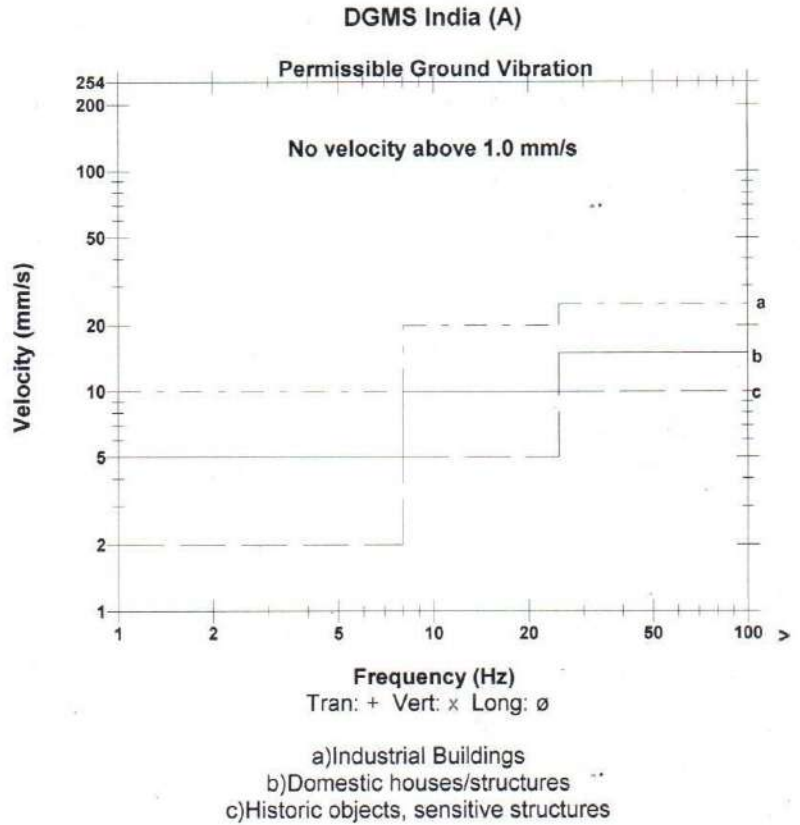
Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.5 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240908142429.IDFW

GPS Location Latitude Longitude  
 Source: 028 53.865 N 075 52.446 E  
 Sensor1: 028 54.038 N 075 52.411 E  
 Distance: 325.2 m

Notes  
 Location: WB - 01  
 Client:  
 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 120.4 dB(L) at 2.163 sec  
 ZC Freq 20 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1218 mv)

	Tran	Vert	Long	
PPV	0.977	0.497	0.883	mm/s
ZC Freq	43	24	43	Hz
Time (Rel. to Trig)	0.146	0.101	0.189	sec
Peak Acceleration	0.025	0.018	0.022	g
Peak Displacement	0.004	0.003	0.004	mm
Sensor Check	Passed	Passed	Passed	
Peak Vector Sum	1.055 mm/s at 0.146 sec			



*Pravash Chandra*  
**MANAGER**  
**KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 5.000 pa.(L)/div  
 Trigger =

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Date/Time Long at 14:25:31 September 8, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.4 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240908142531.IDFW

GPS Location Latitude Longitude  
 Source: 028 53.865 N 075 52.446 E  
 Sensor1: 028 54.038 N 075 52.411 E  
 Distance: 325.2 m

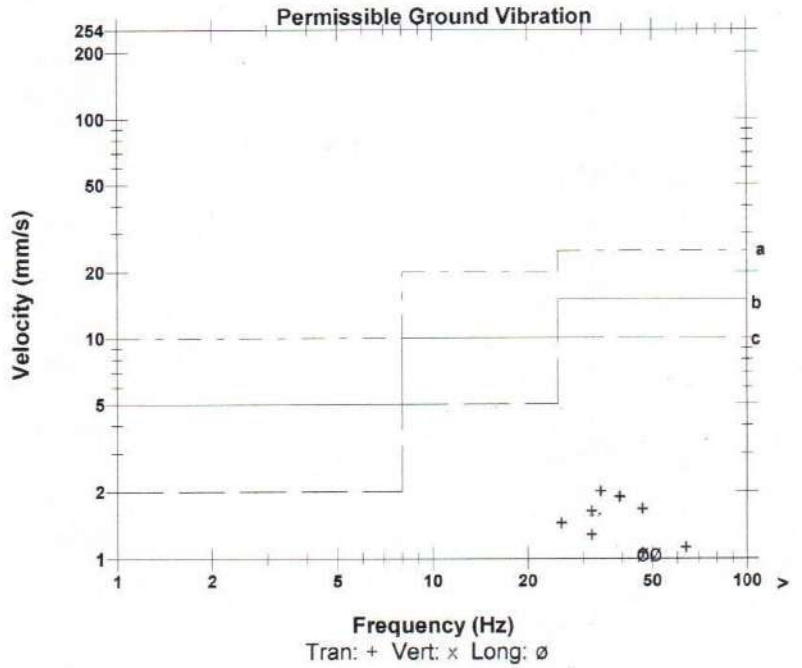
Notes  
 Location: WB - 01  
 Client:  
 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 114.6 dB(L) at 1.506 sec  
 ZC Freq 11 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1218 mv )

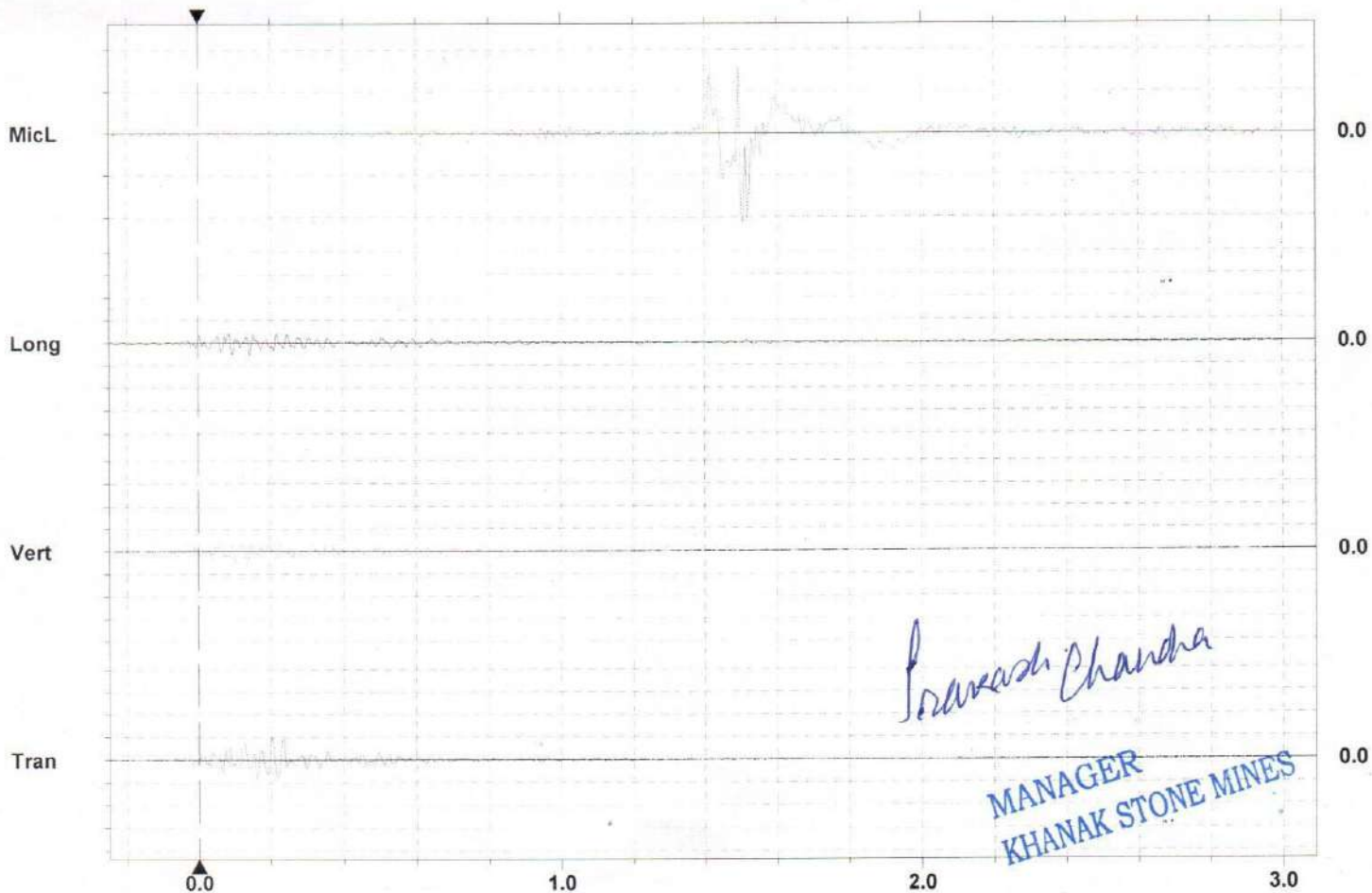
	Tran	Vert	Long	
PPV	2.002	0.946	1.048	mm/s
ZC Freq	34	39	47	Hz
Time (Rel. to Trig)	0.202	0.102	0.094	sec
Peak Acceleration	0.086	0.053	0.059	g
Peak Displacement	0.009	0.004	0.004	mm
Sensor Check	Passed	Passed	Passed	

Peak Vector Sum 2.041 mm/s at 0.202 sec

**DGMS India (A)**



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



*Praveesh Chandra*

**MANAGER  
 KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 5.000 pa.(L)/div  
 Trigger =

Date/Time Vert at 14:12:46 September 9, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

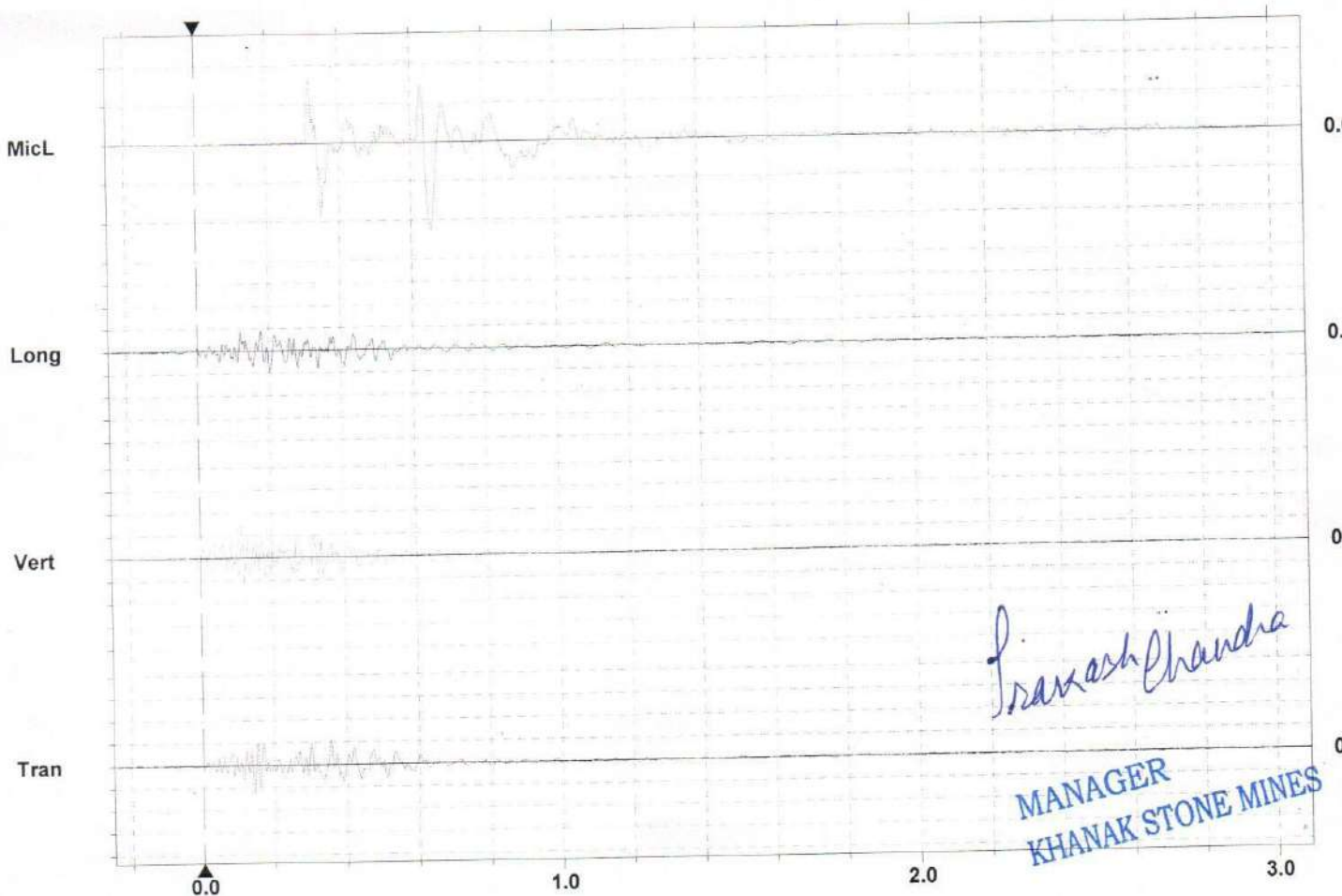
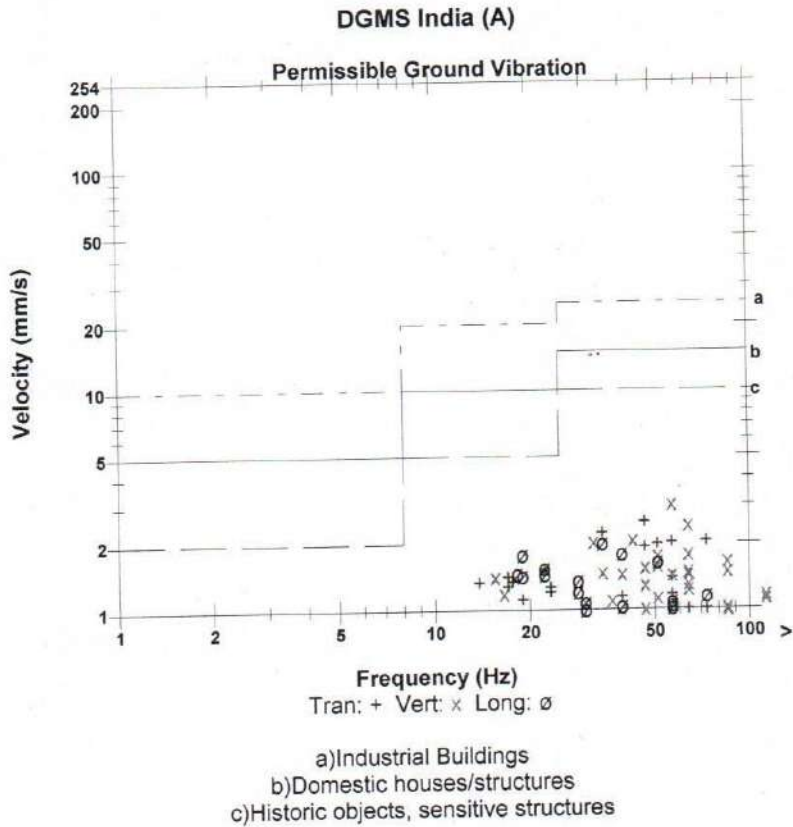
Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.7 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240909141246.IDFW

GPS Location Latitude Longitude  
 Source: 028 54.400 N 075 51.143 E  
 Sensor1: 028 54.412 N 075 50.922 E  
 Distance: 359.2 m

Notes  
 Location: WB - 7/8  
 Client:  
 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 127.2 dB(L) at 0.655 sec  
 ZC Freq 14 Hz  
 Channel Test Passed (Freq = 20.5 Hz Amp = 1095 mv)

	Tran	Vert	Long	
PPV	2.499	3.011	2.002	mm/s
ZC Freq	47	57	34	Hz
Time (Rel. to Trig)	0.144	0.115	0.202	sec
Peak Acceleration	0.091	0.131	0.054	g
Peak Displacement	0.011	0.010	0.010	mm
Sensor Check	Passed	Passed	Passed	
Peak Vector Sum	3.307 mm/s at 0.122 sec			



*Pranesh Chandra*  
**MANAGER**  
**KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 20.00 pa.(L)/div  
 Trigger =  $\blacktriangleright$   $\blacktriangleleft$

Date/Time Long at 14:51:38 September 11, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

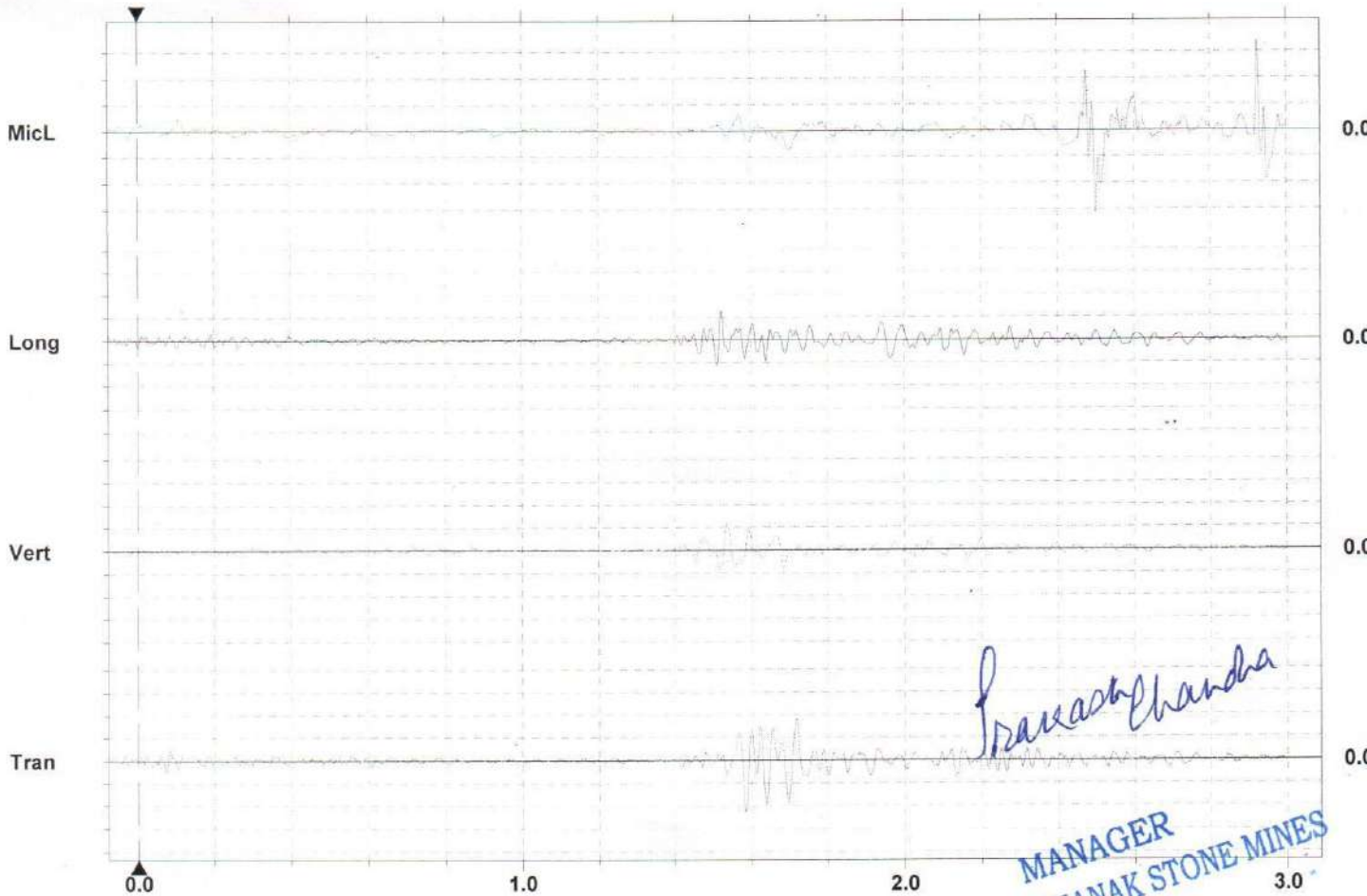
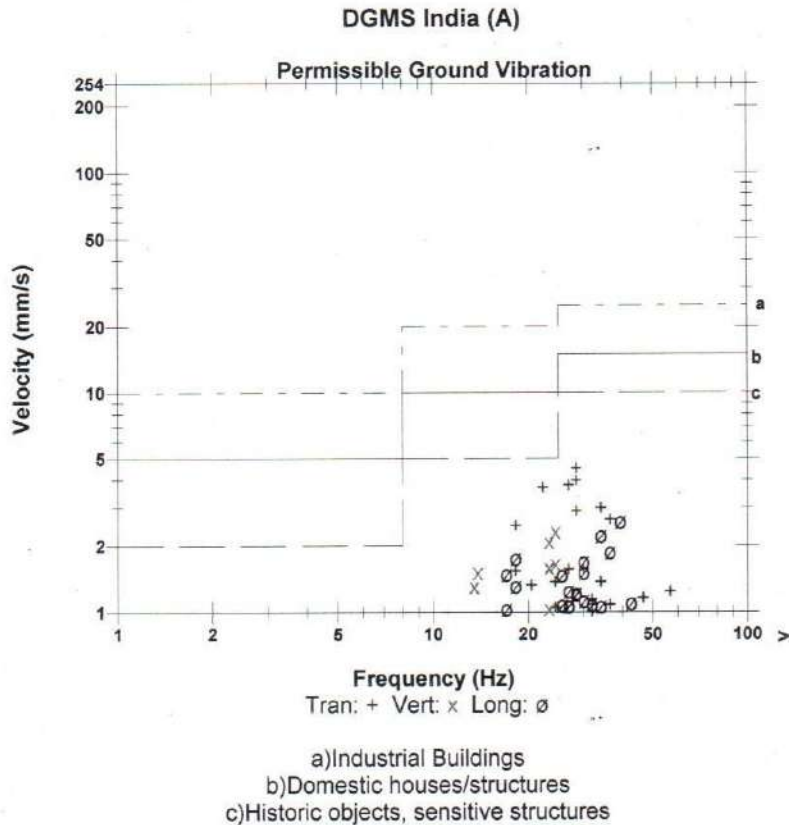
Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.7 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240911145138.IDFW

GPS Location Latitude Longitude  
 Source: 028 53.877 N 075 52.420 E  
 Sensor1: 028 54.035 N 075 52.411 E  
 Distance: 293.0 m

Notes  
 Location: WB - 01  
 Client:  
 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 118.7 dB(L) at 2.923 sec  
 ZC Freq 39 Hz  
 Channel Test Passed (Freq = 20.5 Hz Amp = 1171 mv)

	Tran	Vert	Long	
PPV	4.493	2.317	2.577	mm/s
ZC Freq	28	24	39	Hz
Time (Rel. to Trig)	1.585	1.536	1.523	sec
Peak Acceleration	0.084	0.044	0.065	g
Peak Displacement	0.025	0.017	0.015	mm
Sensor Check	Passed	Passed	Passed	
Peak Vector Sum	4.783 mm/s at 1.584 sec			



*Pravash Chandra*  
**MANAGER**  
**KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 5.000 pa.(L)/div  
 Trigger =

Date/Time Tran at 14:25:56 September 12, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

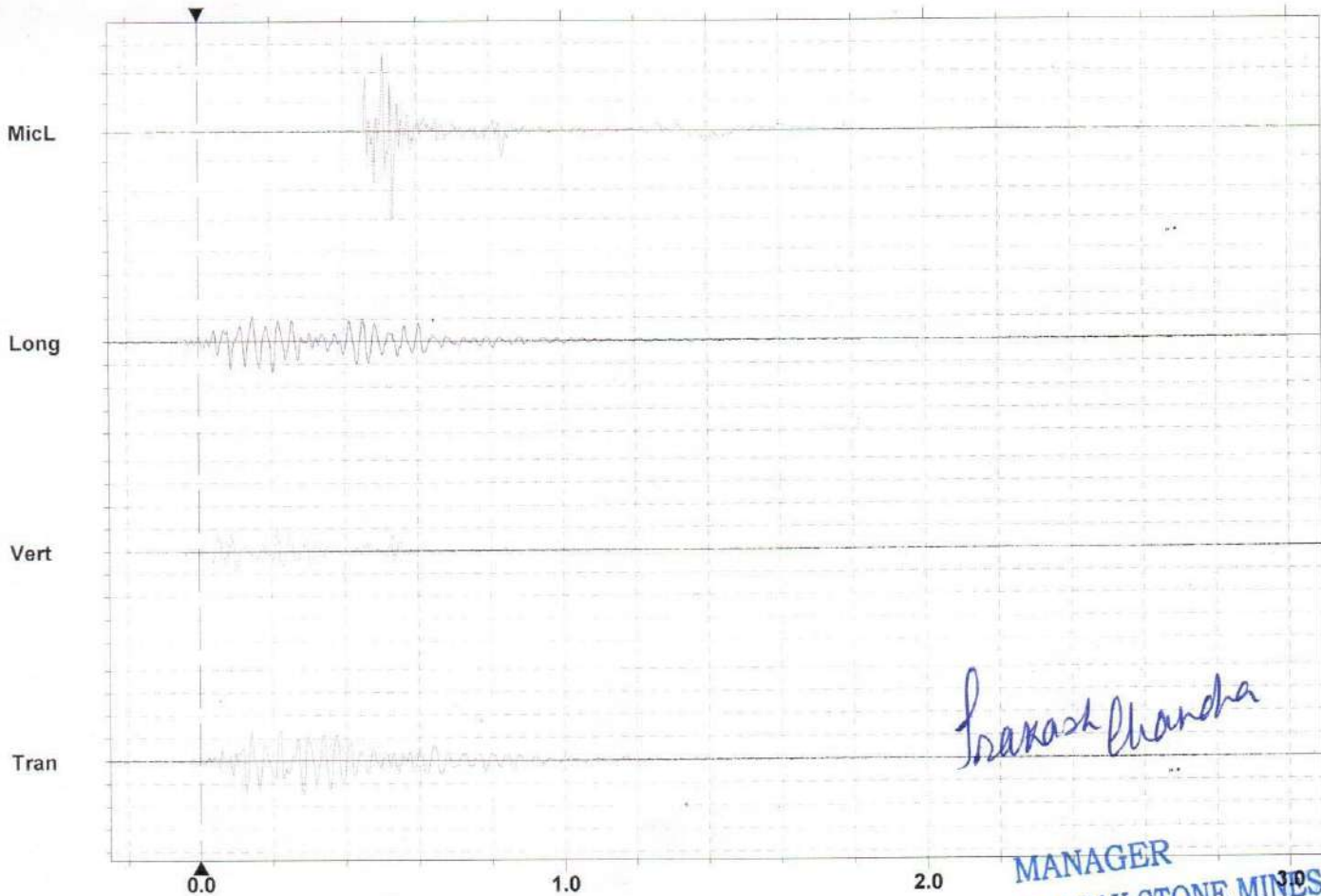
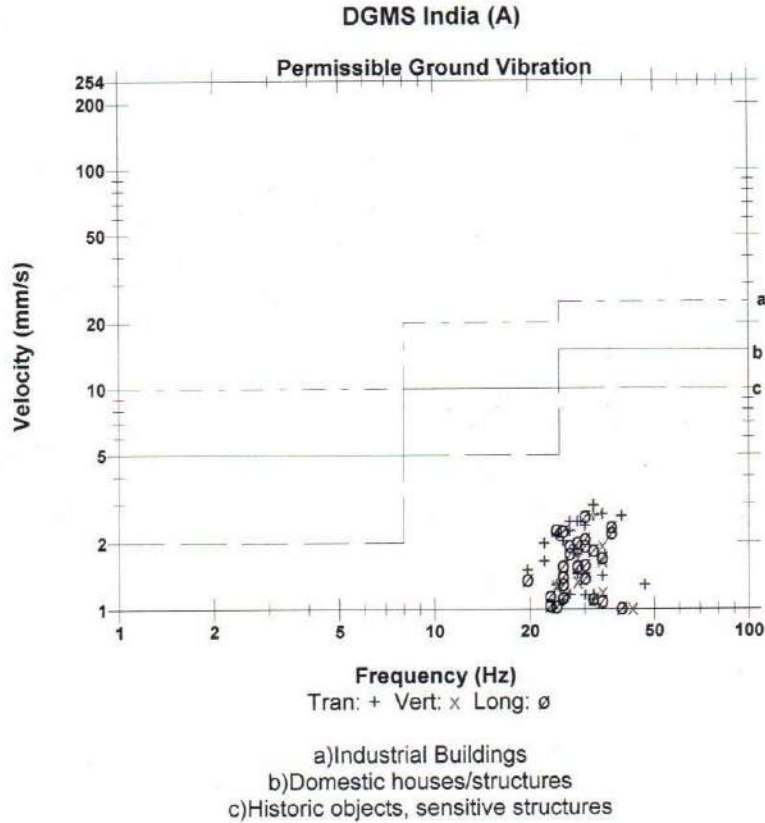
Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.7 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240912142556.IDFW

GPS Location Latitude Longitude  
 Source: 028 53.961 N 075 52.161 E  
 Sensor1: 028 54.035 N 075 52.411 E  
 Distance: 428.5 m

Notes  
 Location: WB - 01  
 Client:  
 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 129.8 dB(L) at 0.534 sec  
 ZC Freq 34 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1214 mv )

	Tran	Vert	Long	
PPV	2.940	1.939	2.648	mm/s
ZC Freq	32	34	30	Hz
Time (Rel. to Trig)	0.282	0.214	0.205	sec
Peak Acceleration	0.080	0.049	0.053	g
Peak Displacement	0.014	0.009	0.014	mm
Sensor Check	Passed	Passed	Passed	
Peak Vector Sum	3.362 mm/s at 0.220 sec			



*Tranash Chandra*  
**MANAGER**  
**KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 20.00 pa.(L)/div  
 Trigger =

**Date/Time** Tran at 14:27:45 September 13, 2024  
**Trigger Source** Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
**Range** Geo: 254.0 mm/s  
**Record Time** 3.0 sec at 1024 sps  
**Operator/Setup:** Operator/KHANAK STONE MINES.MMB

**Serial Number** UM17364 V 10-90FB Micromate ISEE  
**Battery Level** 3.7 Volts  
**Unit Calibration** May 28, 2024 by UES New Delhi  
**File Name** UM17364\_20240913142745.IDFW

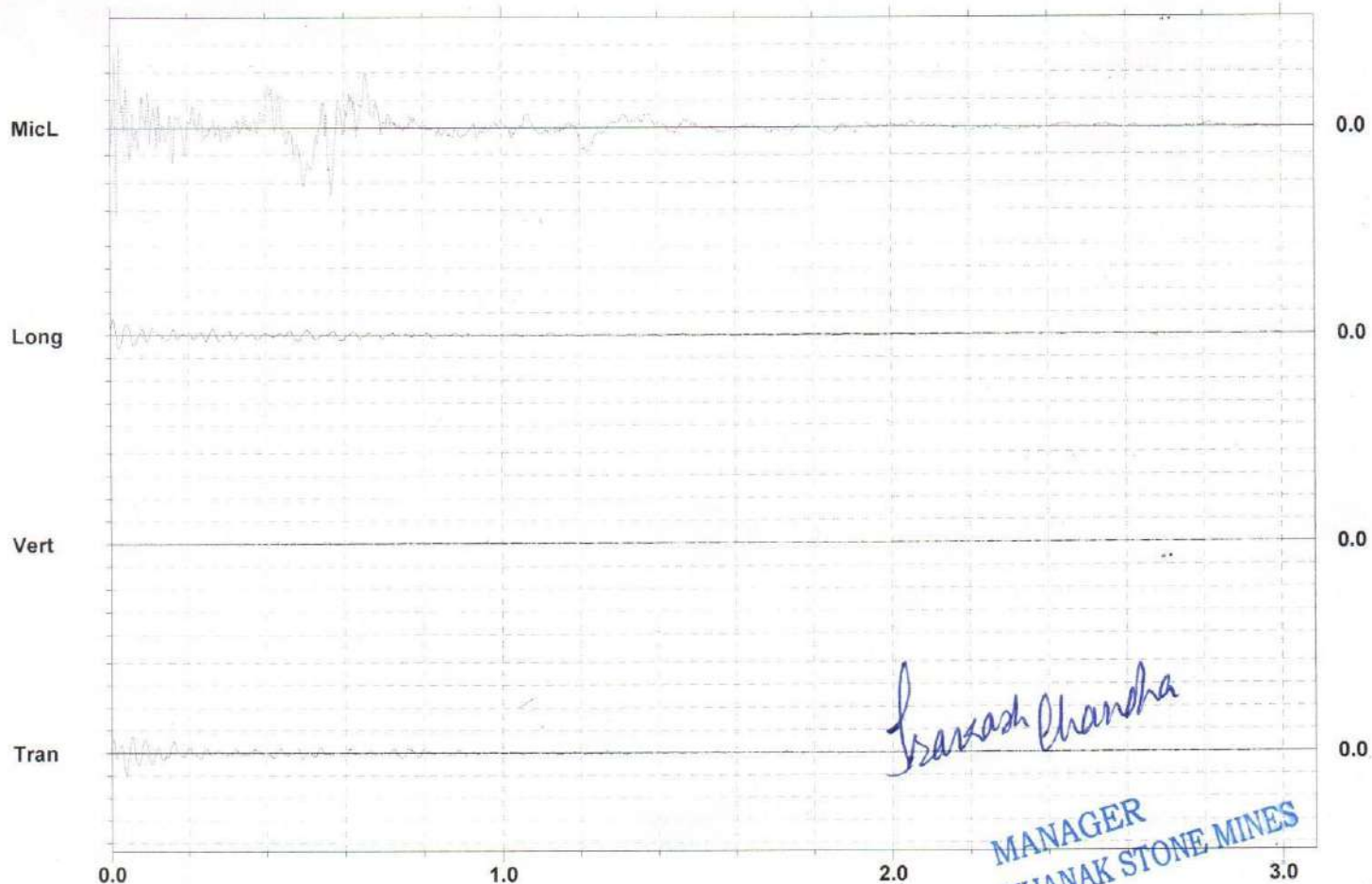
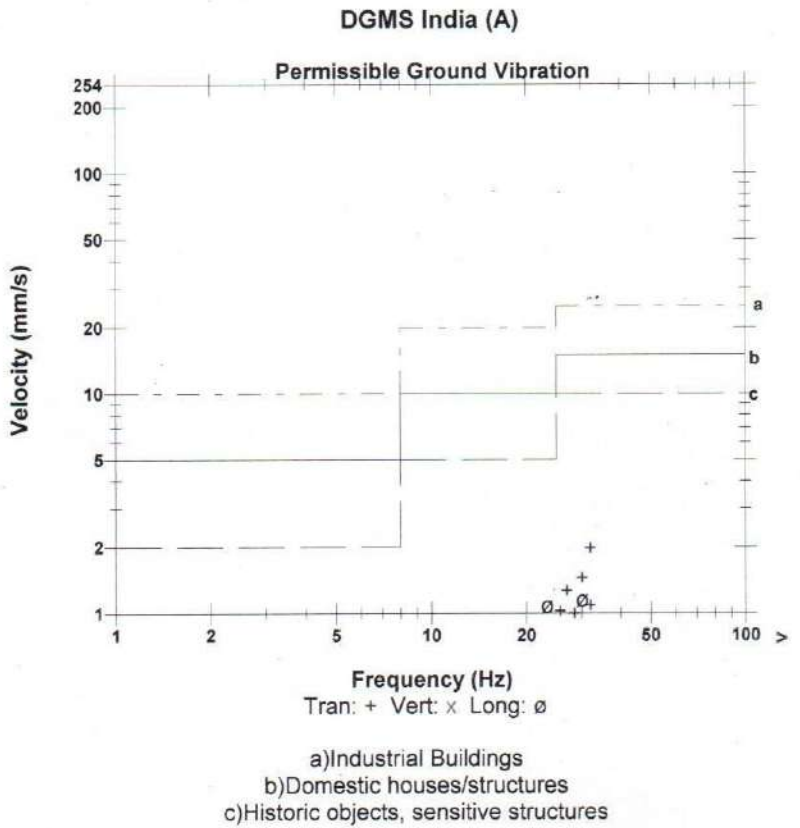
**GPS Location**      **Latitude**      **Longitude**  
 Source:      028 53.874 N      075 52.275 E  
 Sensor1:      028 54.035 N      075 52.411 E  
 Distance:      371.3 m

**Notes**  
 Location:      WB - 01  
 Client:  
 User Name:  
 General:

**Microphone** Linear Weighting  
**PSPL** 124.2 dB(L) at 0.016 sec  
**ZC Freq** 85 Hz  
**Channel Test** Passed (Freq = 19.7 Hz Amp = 1169 mv )

	Tran	Vert	Long	
PPV	1.978	0.875	1.498	mm/s
ZC Freq	32	23	N/A	Hz
Time (Rel. to Trig)	0.039	0.053	0.007	sec
Peak Acceleration	0.044	0.026	0.039	g
Peak Displacement	0.010	0.006	0.008	mm
Sensor Check	Passed	Passed	Passed	

**Peak Vector Sum** 2.299 mm/s at 0.039 sec  
 N/A: Not Applicable



**Time Scale:** 0.20 sec/div    **Amplitude Scale:** Geo: 2.000 mm/s/div Mic: 10.000 pa.(L)/div

Date/Time Vert at 14:10:10 September 14, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.6 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240914141010.IDFW

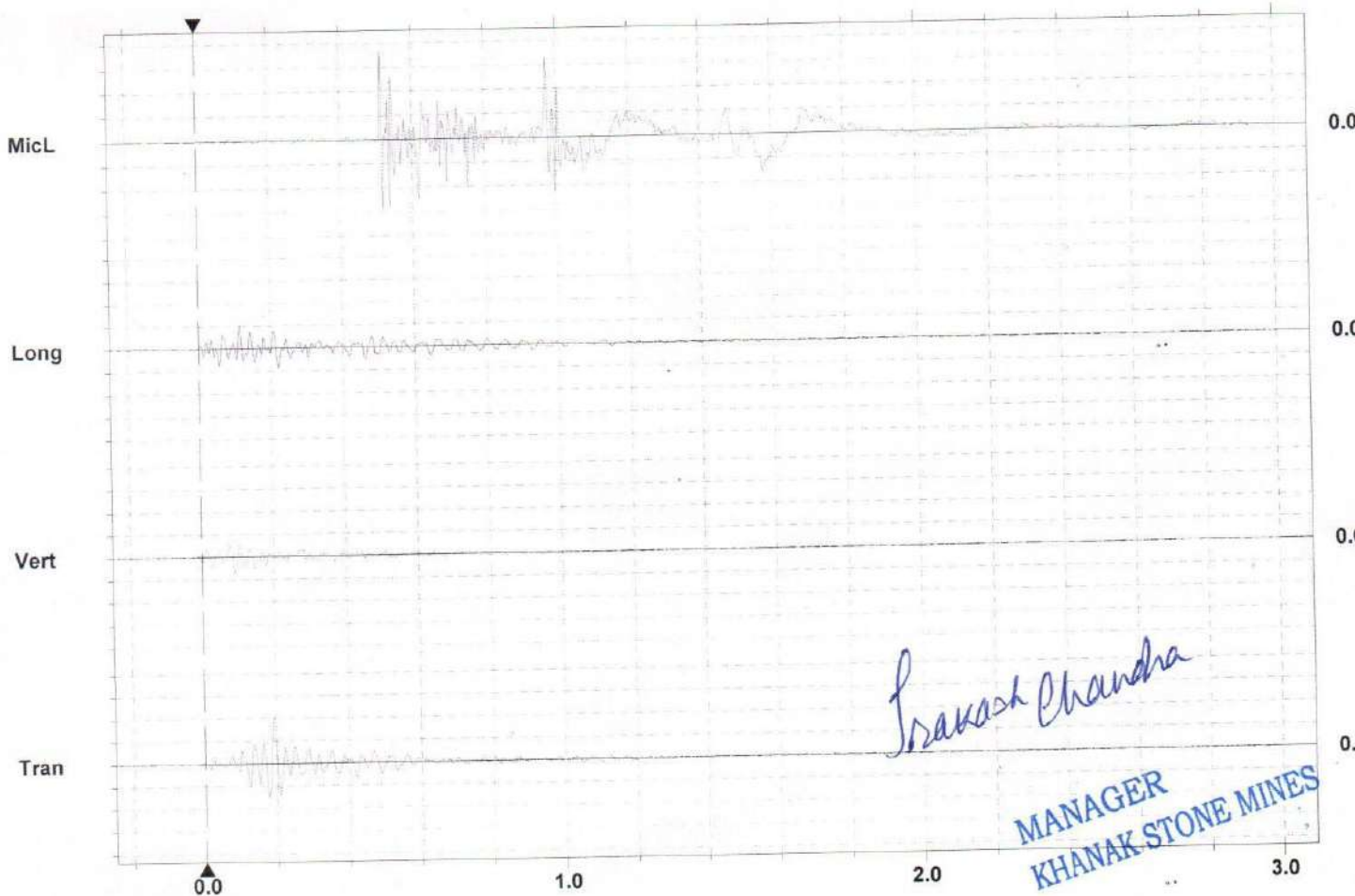
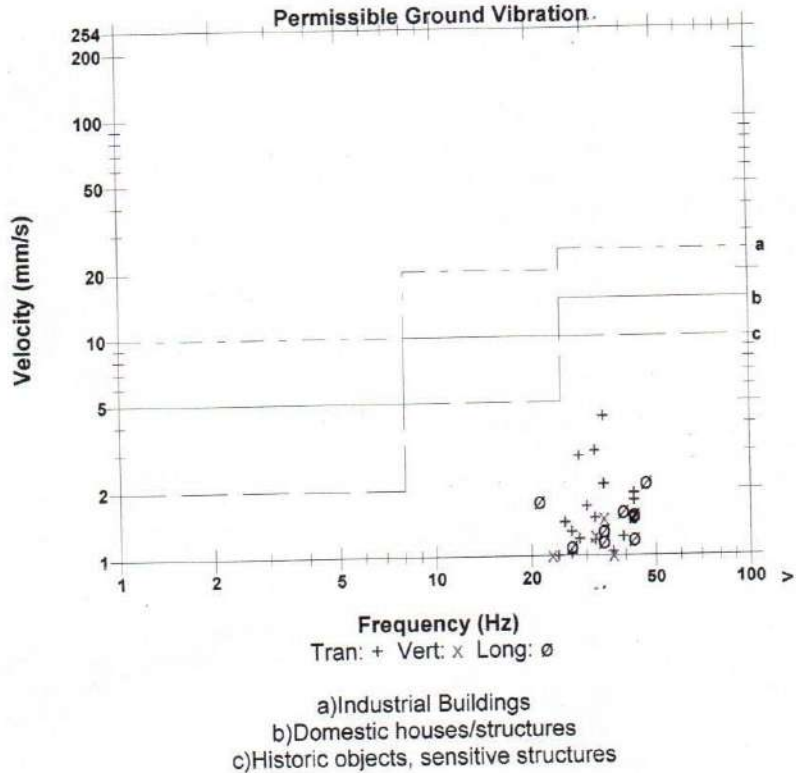
GPS Location Latitude Longitude  
 Source: 028 53.971 N 075 52.188 E  
 Sensor1: 028 54.035 N 075 52.411 E  
 Distance: 381.1 m

Notes  
 Location: WB - 01  
 Client:  
 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 119.3 dB(L) at 0.514 sec  
 ZC Freq 37 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1190 mv)

	Tran	Vert	Long	
PPV	4.288	1.474	2.136	mm/s
ZC Freq	34	34	47	Hz
Time (Rel. to Trig)	0.193	0.093	0.115	sec
Peak Acceleration	0.155	0.035	0.056	g
Peak Displacement	0.020	0.007	0.009	mm
Sensor Check	Passed	Passed	Passed	
Peak Vector Sum	4.289 mm/s at 0.193 sec			

**DGMS India (A)**



*Prakash Chandra*  
**MANAGER**  
**KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 5.000 pa.(L)/div  
 Trigger = ▶ ◀

Date/Time Long at 14:40:22 September 15, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.6 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240915144022.IDFW

GPS Location Latitude Longitude  
 Source: 028 53.855 N 075 52.431 E  
 Sensor1: 028 54.035 N 075 52.411 E  
 Distance: 334.9 m

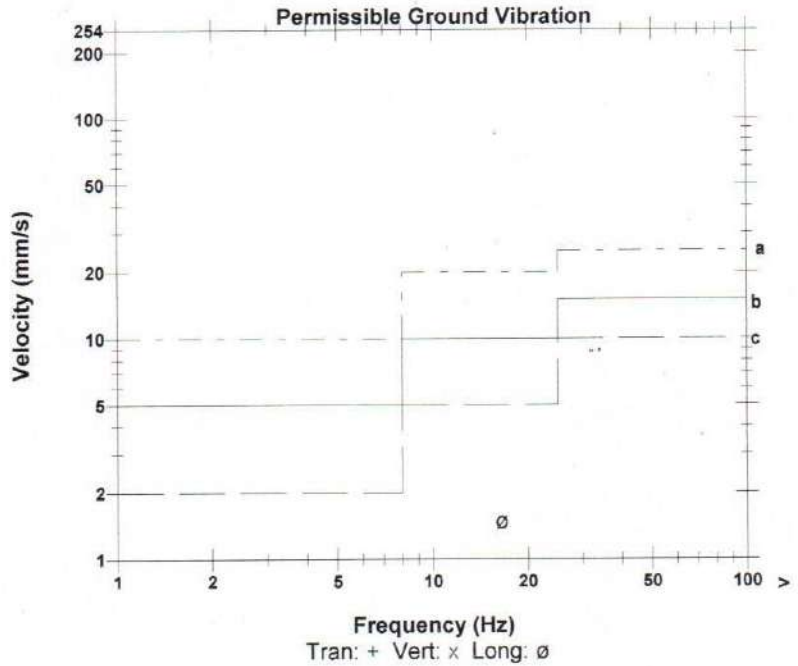
Notes  
 Location: WB - 01  
 Client:  
 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 107.0 dB(L) at 1.748 sec  
 ZC Freq 18 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1170 mv)

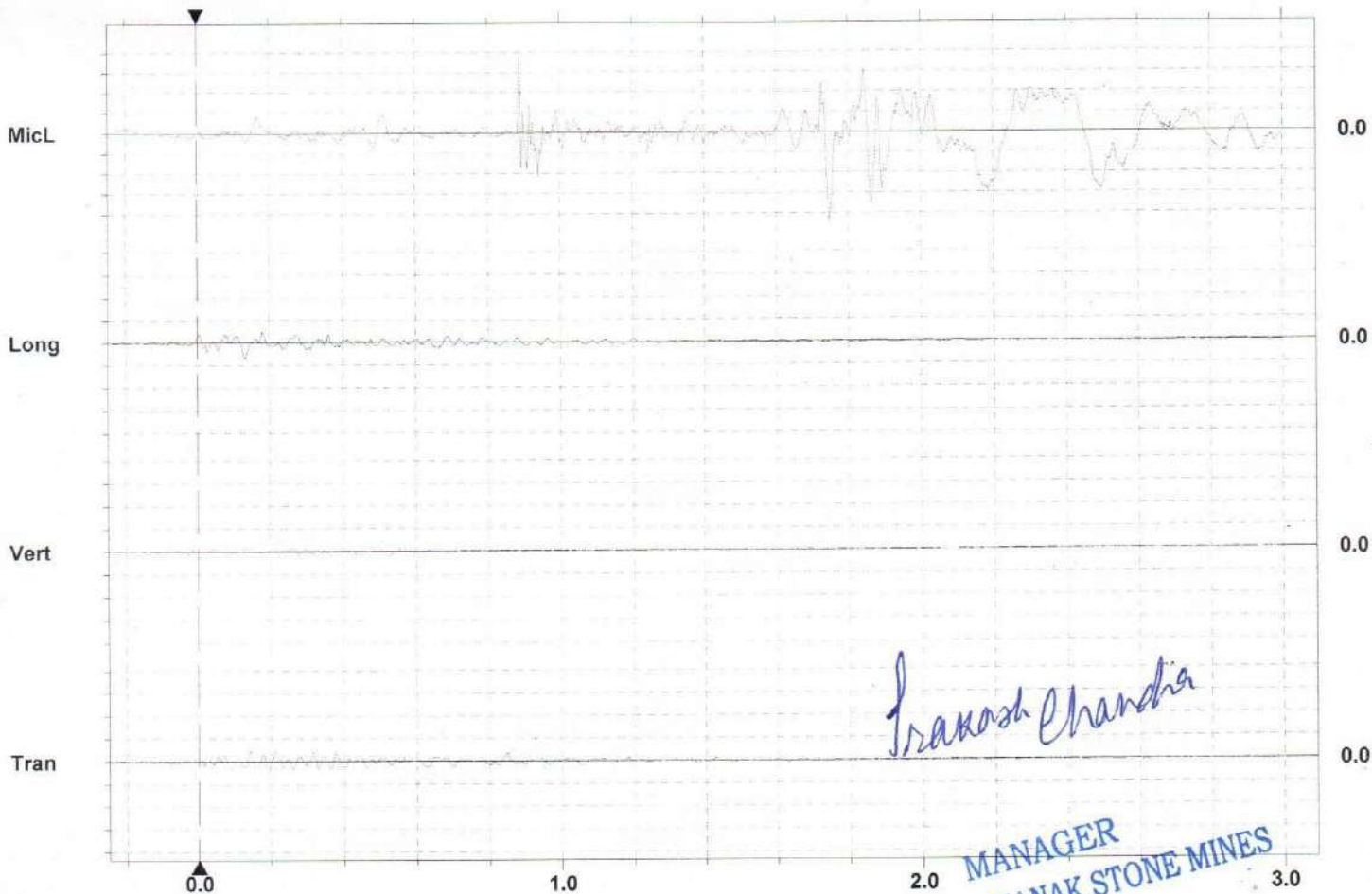
	Tran	Vert	Long	
PPV	0.954	0.560	1.490	mm/s
ZC Freq	20	26	17	Hz
Time (Rel. to Trig)	0.211	0.004	0.133	sec
Peak Acceleration	0.023	0.012	0.021	g
Peak Displacement	0.006	0.006	0.011	mm
Sensor Check	Passed	Passed	Passed	

Peak Vector Sum 1.584 mm/s at 0.132 sec

**DGMS India (A)**



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



*Prakash Chandra*

**MANAGER  
 KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div  
 Trigger =

Date/Time MicL at 14:41:14 September 16, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.6 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240916144114.IDFW

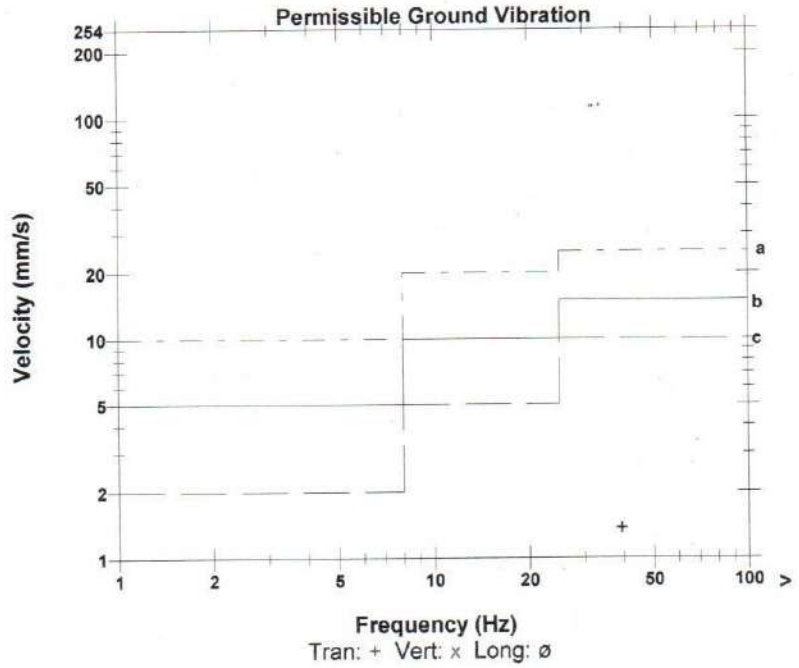
GPS Location Latitude Longitude  
 Source: 028 53.877 N 075 52.420 E  
 Sensor1: 028 54.035 N 075 52.411 E  
 Distance: 293.0 m

Notes  
 Location: WB - 01  
 Client:  
 User Name:  
 General:

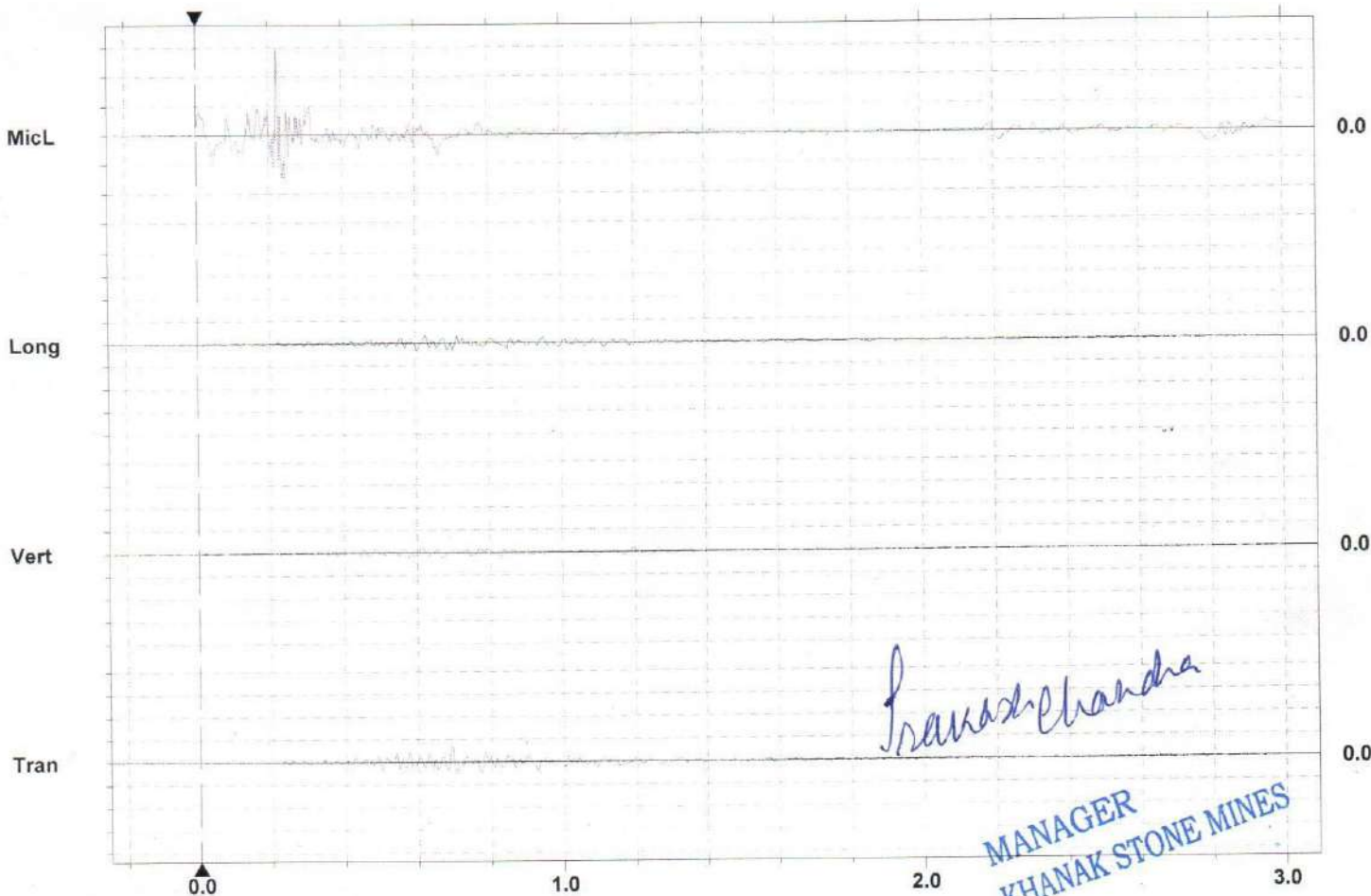
Microphone Linear Weighting  
 PSPL 123.7 dB(L) at 0.223 sec  
 ZC Freq 64 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1177 mv )

	Tran	Vert	Long	
PPV	1.364	0.544	0.701	mm/s
ZC Freq	39	22	27	Hz
Time (Rel. to Trig)	0.691	0.830	0.603	sec
Peak Acceleration	0.035	0.018	0.023	g
Peak Displacement	0.005	0.004	0.004	mm
Sensor Check	Passed	Passed	Passed	
Peak Vector Sum	1.404 mm/s at 0.691 sec			

**DGMS India (A)**



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 10.000 pa.(L)/div  
 Trigger =  $\blacktriangleright$   $\blacktriangleleft$

*Pranav Chandra*  
**MANAGER**  
**KHANAK STONE MINES**

Date/Time Vert at 13:50:52 September 18, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

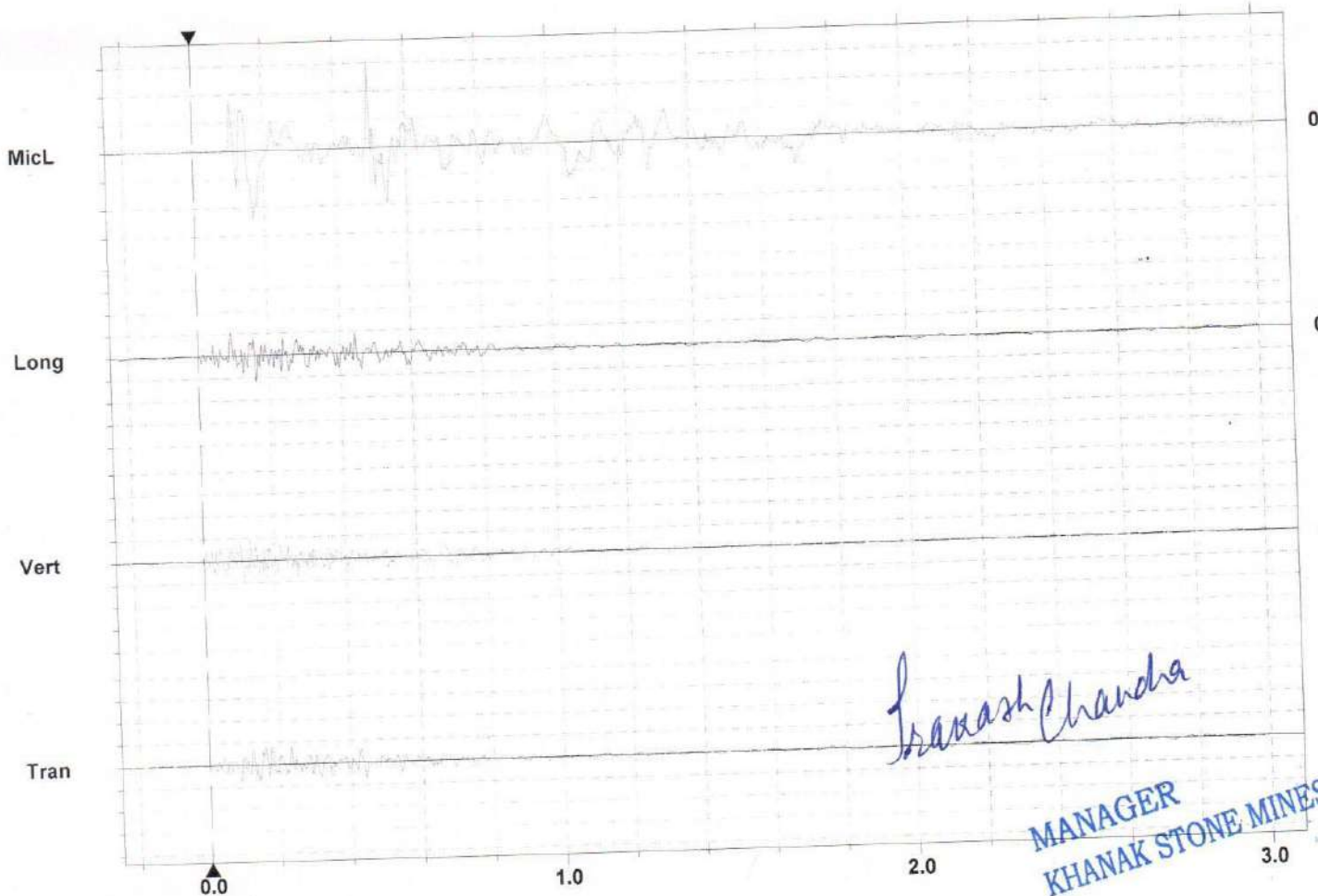
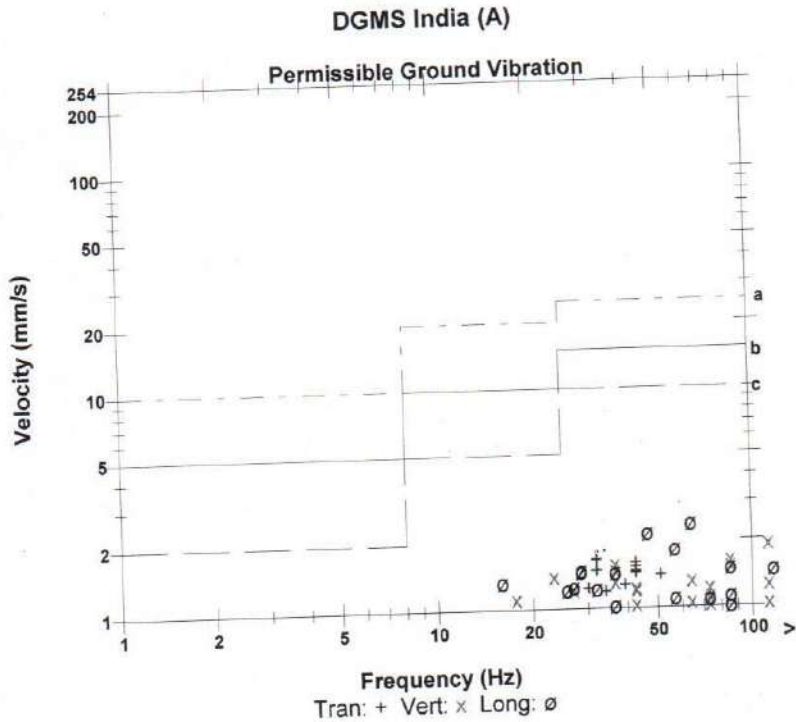
Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.6 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240918135052.IDFW

GPS Location Latitude Longitude  
 Source: 028 54.379 N 075 51.083 E  
 Sensor1: 028 54.412 N 075 50.922 E  
 Distance: 268.3 m

Notes  
 Location: WB - 7/8  
 Client:  
 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 123.8 dB(L) at 0.495 sec  
 ZC Freq 39 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1219 mv )

	Tran	Vert	Long	
PPV	1.655	1.907	2.380	mm/s
ZC Freq	32	>100	64	Hz
Time (Rel. to Trig)	0.158	0.132	0.163	sec
Peak Acceleration	0.070	0.124	0.104	g
Peak Displacement	0.009	0.009	0.010	mm
Sensor Check	Passed	Passed	Passed	
Peak Vector Sum	2.546 mm/s at 0.163 sec			



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 10.000 pa.(L)/div  
 Trigger = ▶ ◀

*Prakash Chandra*  
**MANAGER**  
**KHANAK STONE MINES**

**67**

Date/Time Vert at 14:53:57 September 19, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.6 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240919145357.IDFW

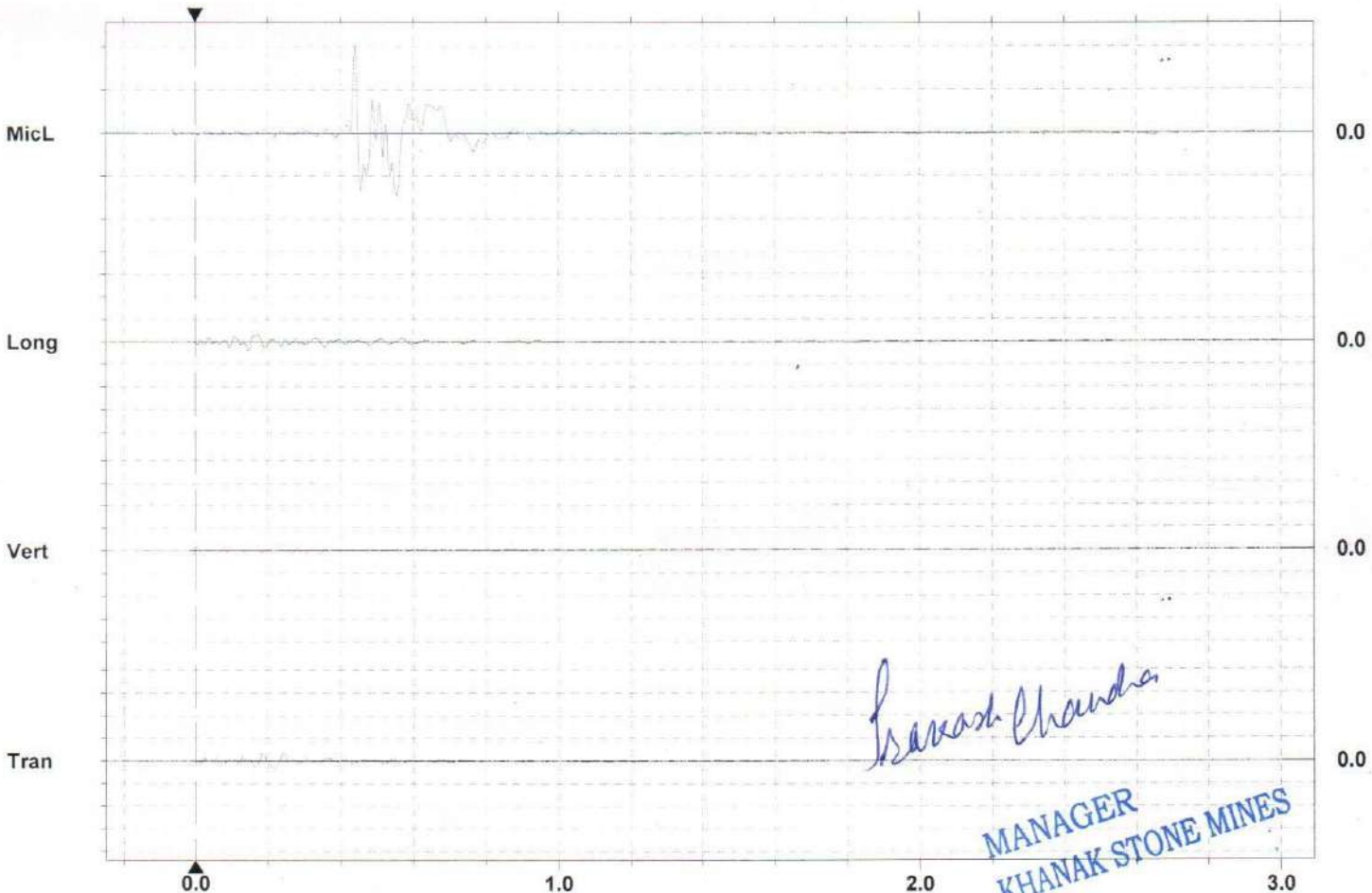
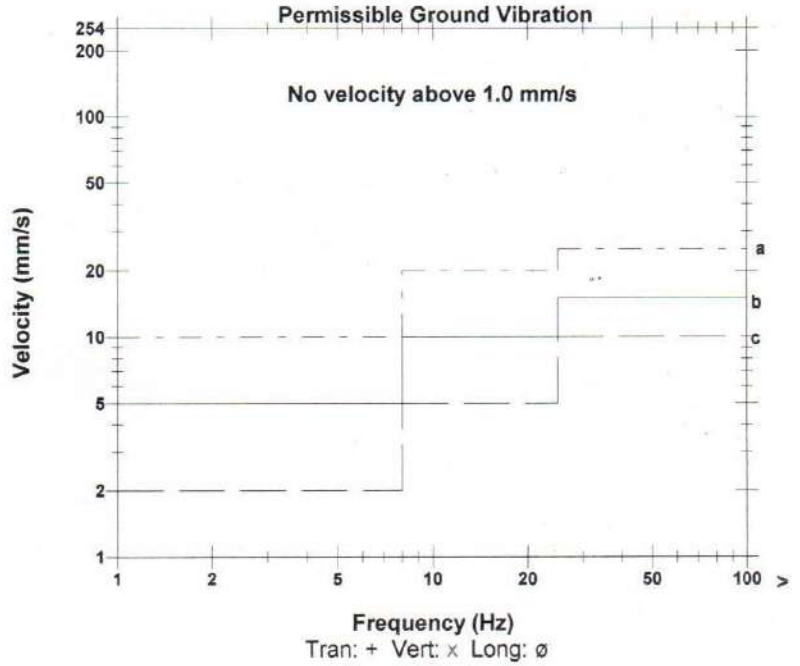
GPS Location Latitude Longitude  
 Source: 028 50.180 N 075 55.516 E  
 Sensor1: 028 50.235 N 075 55.415 E  
 Distance: 193.1 m

Notes  
 Location: NEAR NIGANA 1 PH  
 Client:  
 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 114.3 dB(L) at 0.440 sec  
 ZC Freq 9.8 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1204 mv)

	Tran	Vert	Long	
PPV	0.772	0.701	0.772	mm/s
ZC Freq	23	32	15	Hz
Time (Rel. to Trig)	0.187	0.036	0.147	sec
Peak Acceleration	0.018	0.022	0.021	g
Peak Displacement	0.007	0.005	0.007	mm
Sensor Check	Passed	Passed	Passed	
Peak Vector Sum	0.971 mm/s at 0.240 sec			

**DGMS India (A)**



*Savash Chandra*  
**MANAGER**  
**KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 5.000 pa.(L)/div  
 Trigger =

Date/Time Vert at 14:21:38 September 20, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.5 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240920142138.IDFW

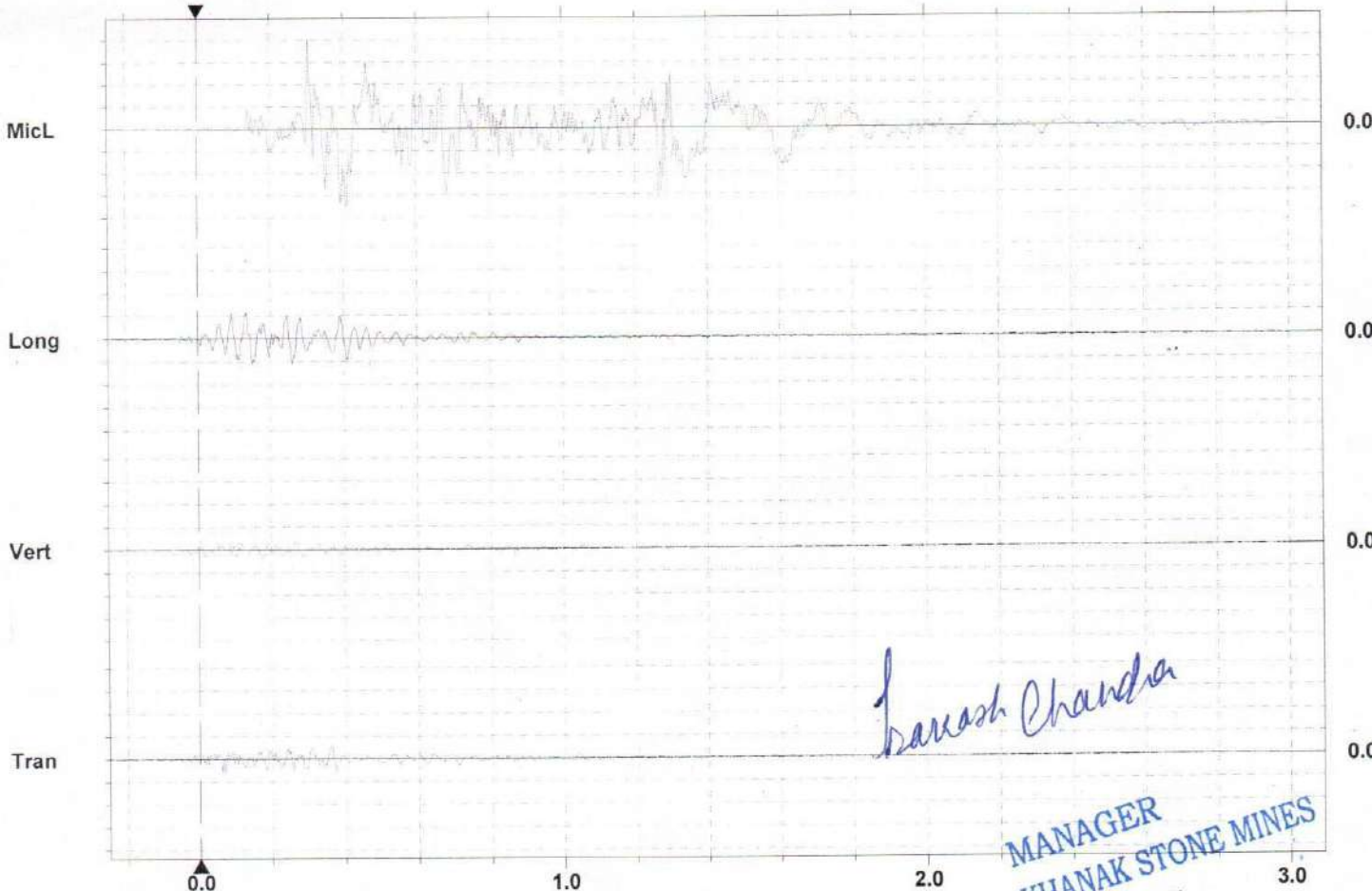
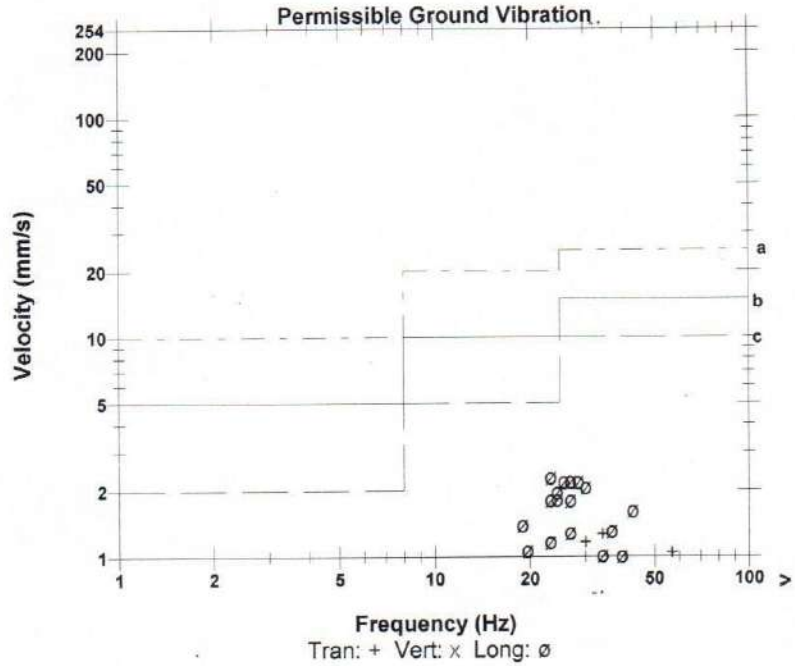
GPS Location Latitude Longitude  
 Source: 028 53.830 N 075 52.456 E  
 Sensor1: 028 54.036 N 075 52.415 E  
 Distance: 387.3 m

Notes  
 Location: WB - 01  
 Client:  
 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 120.2 dB(L) at 0.307 sec  
 ZC Freq 37 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1201 mv )

	Tran	Vert	Long	
PPV	1.269	0.843	2.301	mm/s
ZC Freq	34	30	23	Hz
Time (Rel. to Trig)	0.069	0.004	0.134	sec
Peak Acceleration	0.051	0.035	0.064	g
Peak Displacement	0.006	0.005	0.013	mm
Sensor Check	Passed	Passed	Passed	
Peak Vector Sum	2.307 mm/s at 0.134 sec			

**DGMS India (A)**



*Saravash Chandra*

**MANAGER  
 KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 5.000 pa.(L)/div  
 Trigger = ▶ ◀

*[Signature]*  
57

Date/Time Vert at 14:13:17 September 21, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

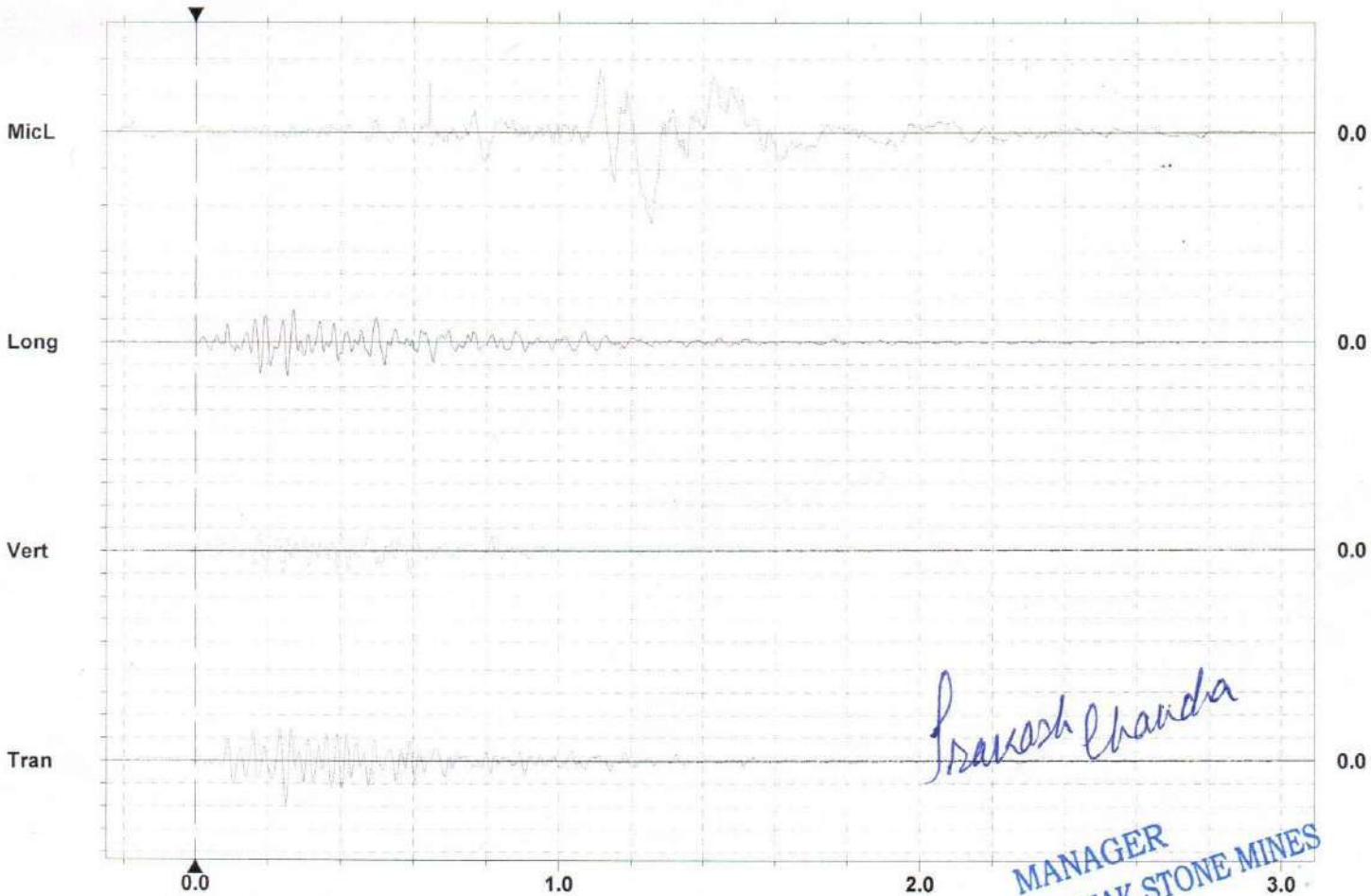
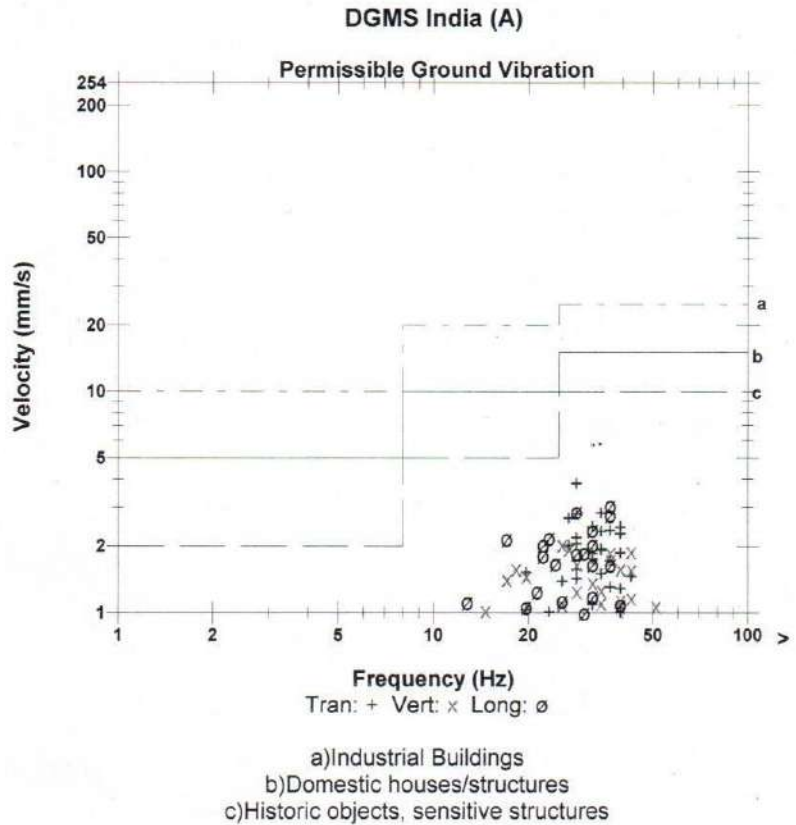
Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.5 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240921141317.IDFW

GPS Location Latitude Longitude  
 Source: 028 53.968 N 075 52.166 E  
 Sensor1: 028 54.036 N 075 52.415 E  
 Distance: 422.9 m

Notes  
 Location: WB - 01  
 Client:  
 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 115.8 dB(L) at 1.255 sec  
 ZC Freq 6.2 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1161 mv )

	Tran	Vert	Long	
PPV	3.831	2.034	3.042	mm/s
ZC Freq	28	26	37	Hz
Time (Rel. to Trig)	0.250	0.589	0.254	sec
Peak Acceleration	0.083	0.053	0.071	g
Peak Displacement	0.021	0.012	0.015	mm
Sensor Check	Passed	Passed	Passed	
Peak Vector Sum	4.423 mm/s at 0.252 sec			



*Prakash Chandra*  
**MANAGER**  
**KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 5.000 pa.(L)/div  
 Trigger =

Date/Time MicL at 15:04:04 September 22, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.5 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240922150404.IDFW

GPS Location Latitude Longitude  
 Source: 028 53.853 N 075 52.461 E  
 Sensor1: 028 54.036 N 075 52.415 E  
 Distance: 347.1 m

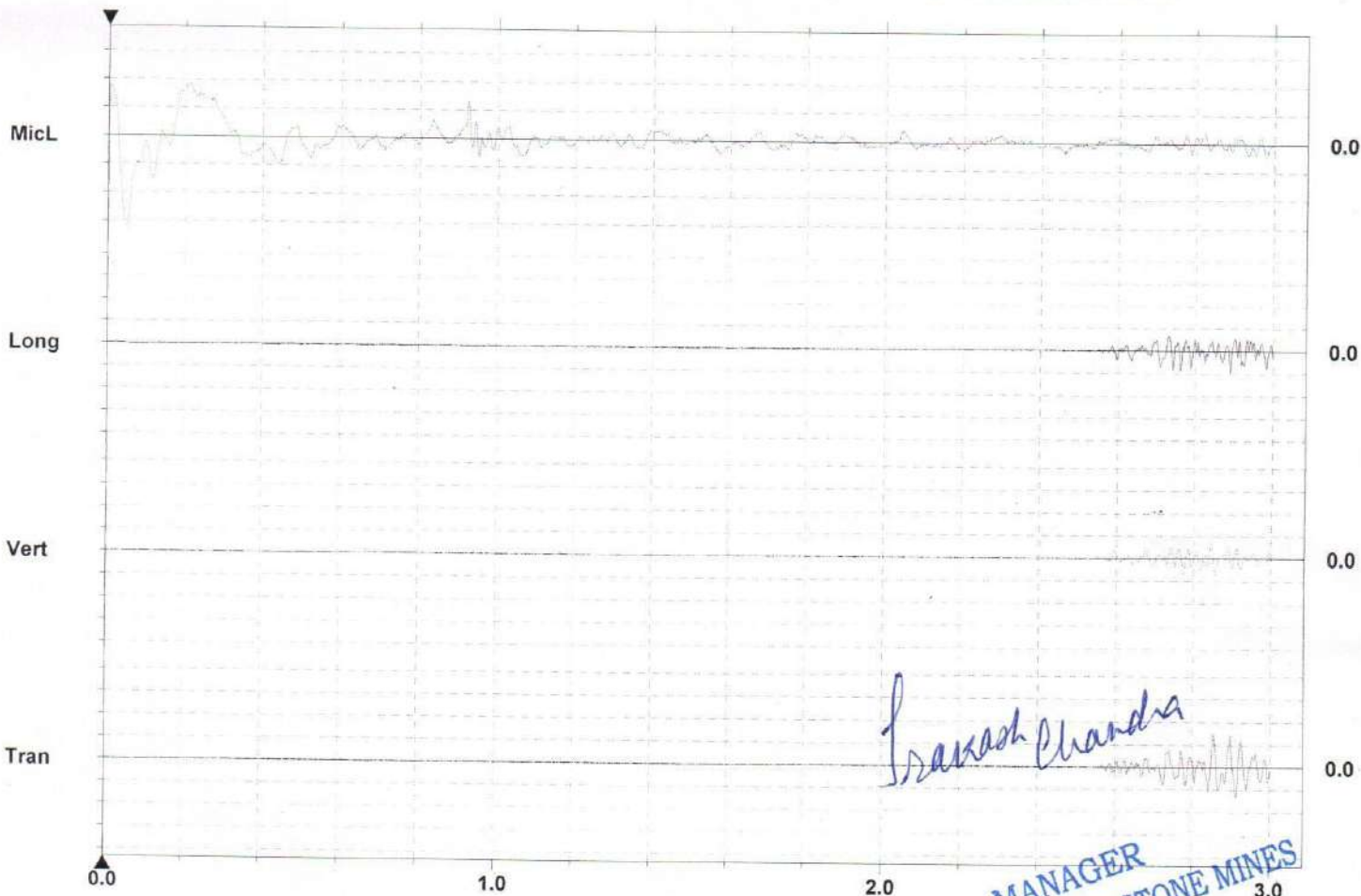
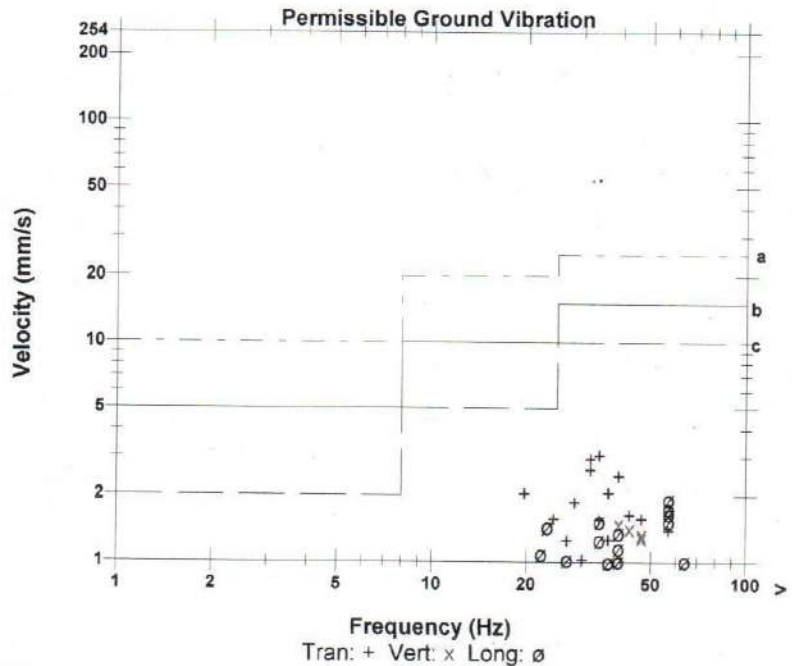
Notes  
 Location: WB - 01  
 Client:  
 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 110.0 dB(L) at 0.047 sec  
 ZC Freq 4.6 Hz  
 Channel Test Passed (Freq = 20.5 Hz Amp = 1320 mv )

	Tran	Vert	Long	
PPV	3.035	1.490	1.923	mm/s
ZC Freq	34	39	57	Hz
Time (Rel. to Trig)	2.854	2.846	2.891	sec
Peak Acceleration	0.077	0.044	0.072	g
Peak Displacement	0.015	0.007	0.008	mm
Sensor Check	Passed	Passed	Passed	

Peak Vector Sum 3.222 mm/s at 2.854 sec

**DGMS India (A)**



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 2.000 pa.(L)/div  
 Trigger =

*Prakash Chandra*

**MANAGER  
 KHANAK STONE MINES**

Date/Time MicL at 14:36:15 September 23, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup Operator/KHANAK STONE MINES.MMB

Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.5 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240923143615.IDFW

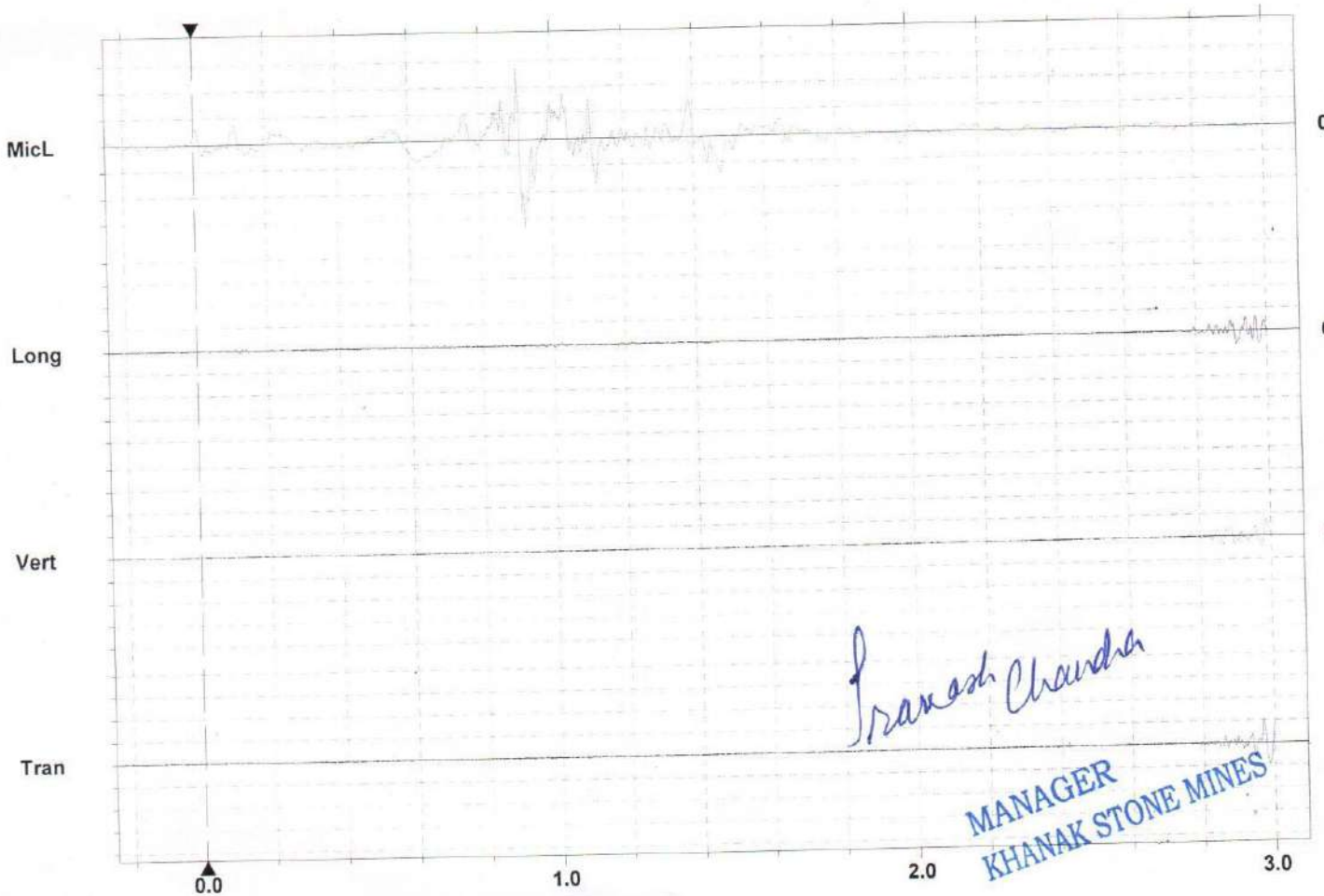
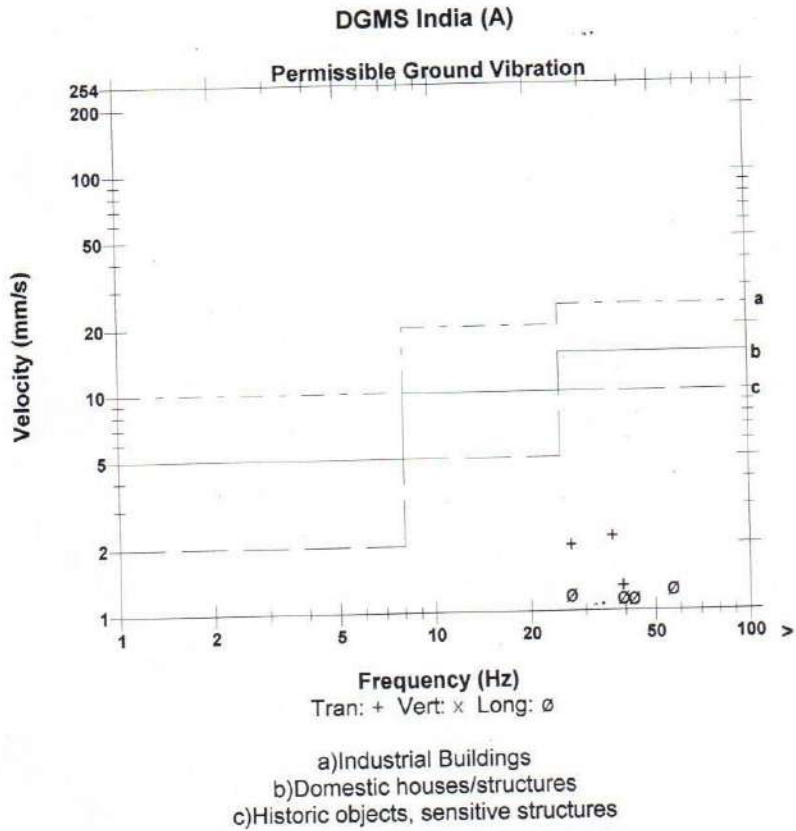
GPS Location Latitude Longitude  
 Source: 028 53.968 N 075 52.196 E  
 Sensor1: 028 54.036 N 075 52.415 E  
 Distance: 376.5 m

Notes  
 Location: WB - 01  
 Client:  
 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 118.5 dB(L) at 0.925 sec  
 ZC Freq 8.0 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1148 mv)

	Tran	Vert	Long	
PPV	2.175	1.442	1.261	mm/s
ZC Freq	37	N/A	57	Hz
Time (Rel. to Trig)	2.970	2.986	2.969	sec
Peak Acceleration	0.048	0.039	0.049	g
Peak Displacement	0.012	0.006	0.007	mm
Sensor Check	Passed	Passed	Passed	

Peak Vector Sum 2.556 mm/s at 2.970 sec  
 N/A: Not Applicable



*Pranesh Chandra*  
**MANAGER**  
**KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 5.000 pa.(L)/div  
 Trigger =  $\longleftrightarrow$

Date/Time Vert at 14:40:44 September 25, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.4 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240925144044.IDFW

GPS Location Latitude Longitude  
 Source: 028 54.274 N 075 51.548 E  
 Sensor1: 028 54.160 N 075 51.793 E  
 Distance: 450.4 m

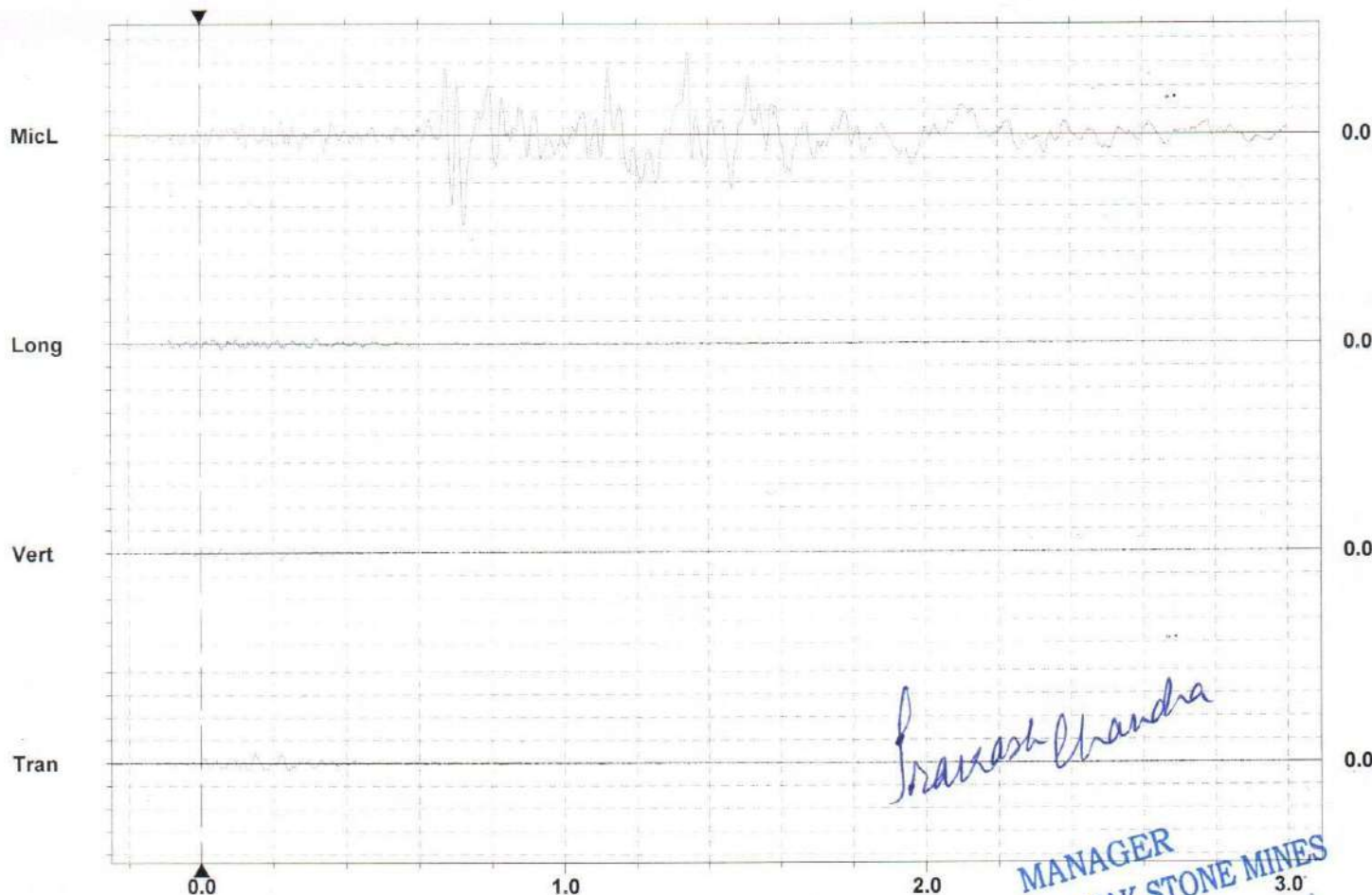
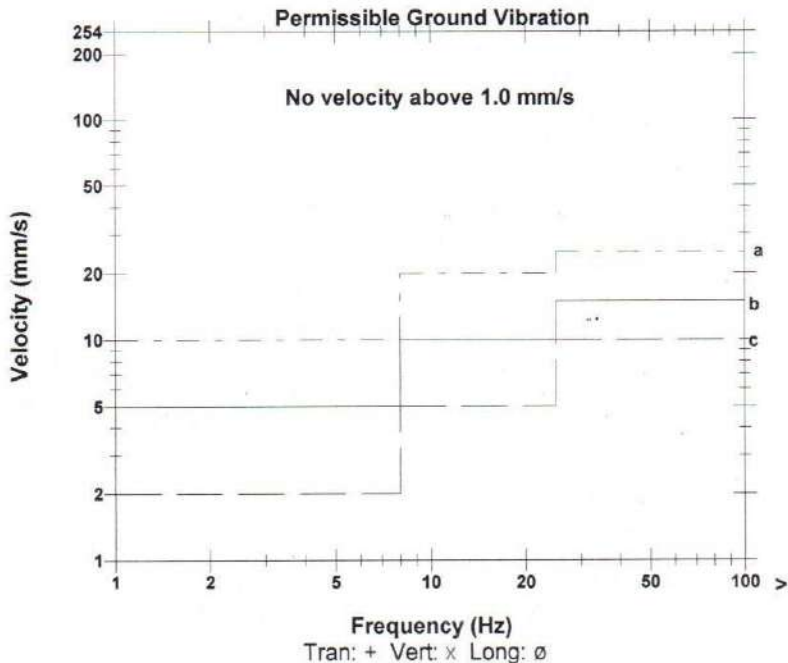
Notes  
 Location: B Block Mandir Side  
 Client:  
 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 111.5 dB(L) at 0.725 sec  
 ZC Freq 13 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1138 mv )

	Tran	Vert	Long	
PPV	0.891	0.757	0.528	mm/s
ZC Freq	21	34	21	Hz
Time (Rel. to Trig)	0.146	0.107	0.059	sec
Peak Acceleration	0.016	0.029	0.026	g
Peak Displacement	0.006	0.004	0.003	mm
Sensor Check	Passed	Passed	Passed	

Peak Vector Sum 1.008 mm/s at 0.146 sec

**DGMS India (A)**



*Pravash Chandra*  
**MANAGER**  
**KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 2.000 pa.(L)/div  
 Trigger =

Date/Time: MicL at 02:23:50 September 26, 2024  
 Trigger Source: Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range: Geo: 254.0 mm/s  
 Record Time: 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

Serial Number: UM17364 V 10-90FB Micromate ISEE  
 Battery Level: 3.5 Volts  
 Unit Calibration: May 28, 2024 by UES New Delhi  
 File Name: UM17364\_20240926022350.IDFW

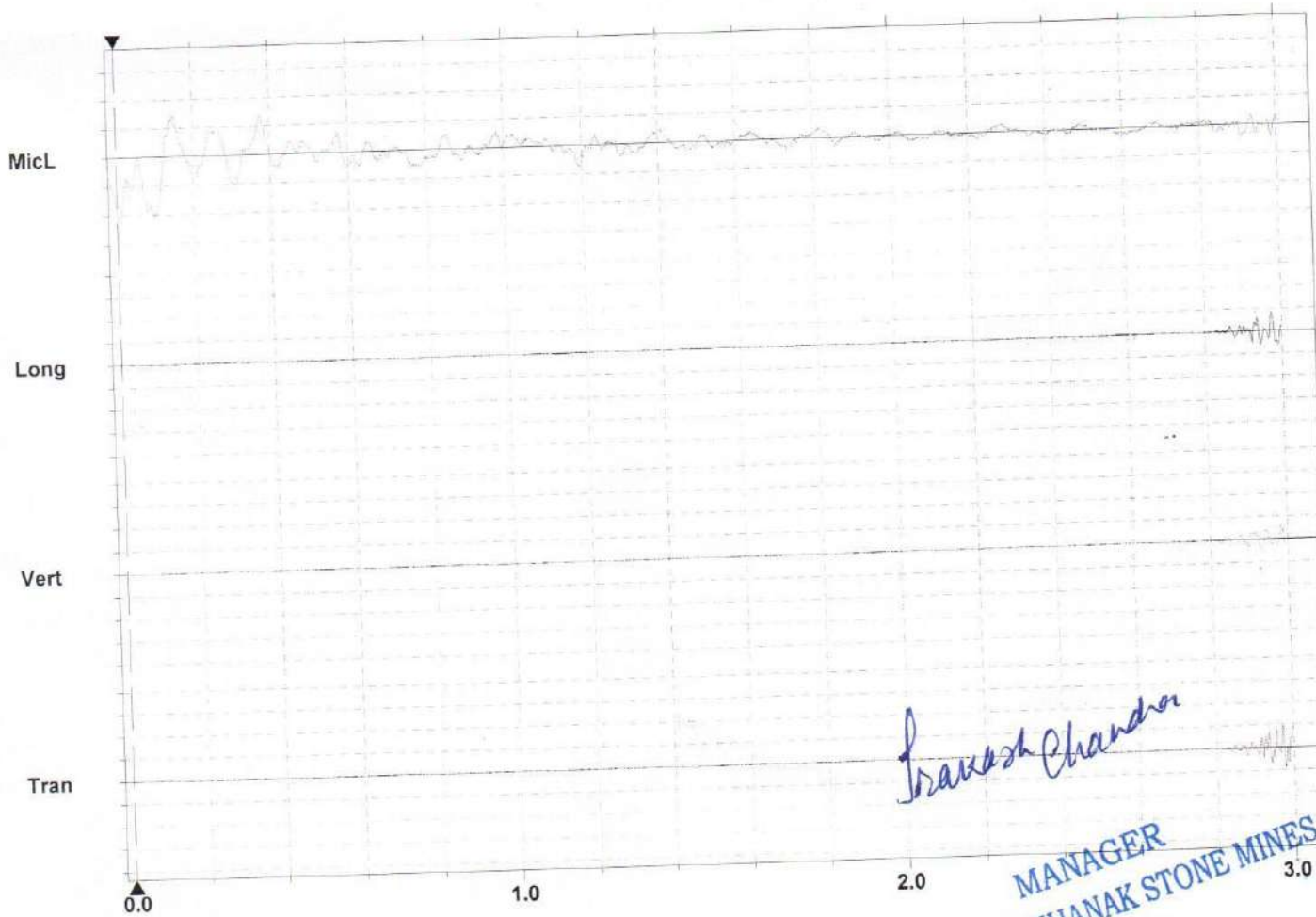
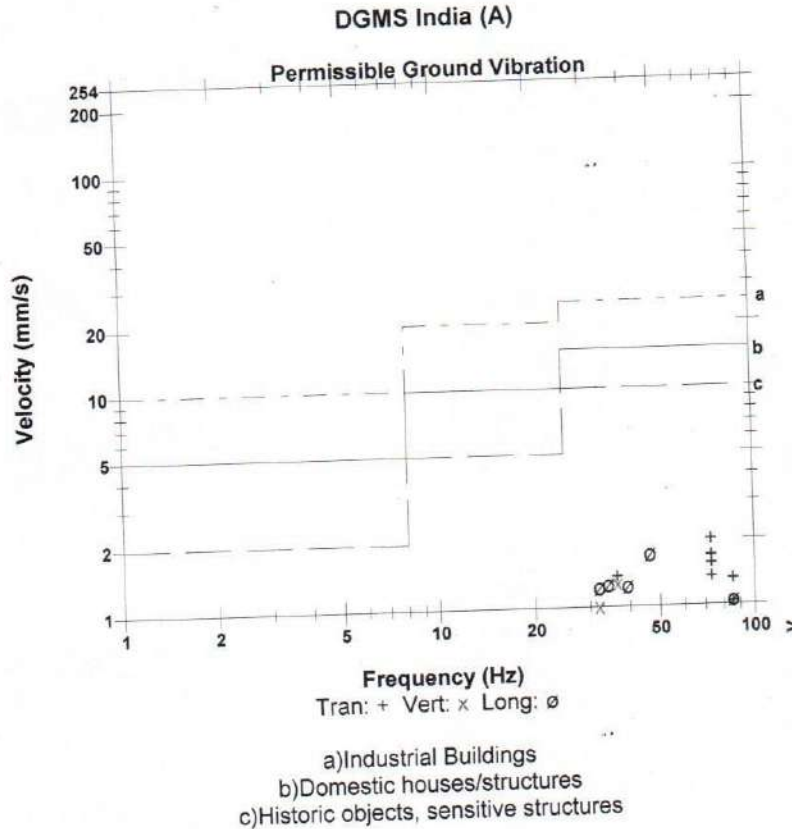
GPS Location: Latitude 028 53.815 N Longitude 075 52.472 E  
 Source: 028 53.815 N 075 52.472 E  
 Sensor1: 028 54.035 N 075 52.411 E  
 Distance: 419.2 m

Notes: Location: WB-01  
 Client:  
 User Name:  
 General:

Microphone: Linear Weighting  
 PSPL: 101.1 dB(L) at 0.005 sec  
 ZC Freq: 6.5 Hz  
 Channel Test: Passed (Freq = 19.7 Hz Amp = 1174 mv)

	Tran	Vert	Long	
PPV	2.002	1.269	1.718	mm/s
ZC Freq	73	37	47	Hz
Time (Rel. to Trig)	2.973	2.985	2.974	sec
Peak Acceleration	0.108	0.034	0.062	g
Peak Displacement	0.005	0.006	0.007	mm
Sensor Check	Passed	Passed	Passed	

Peak Vector Sum: 2.638 mm/s at 2.973 sec



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div  
 Trigger =

*Pranesh Chandra*  
**MANAGER**  
**KHANAK STONE MINES**

Date/Time Long at 14:20:37 September 27, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

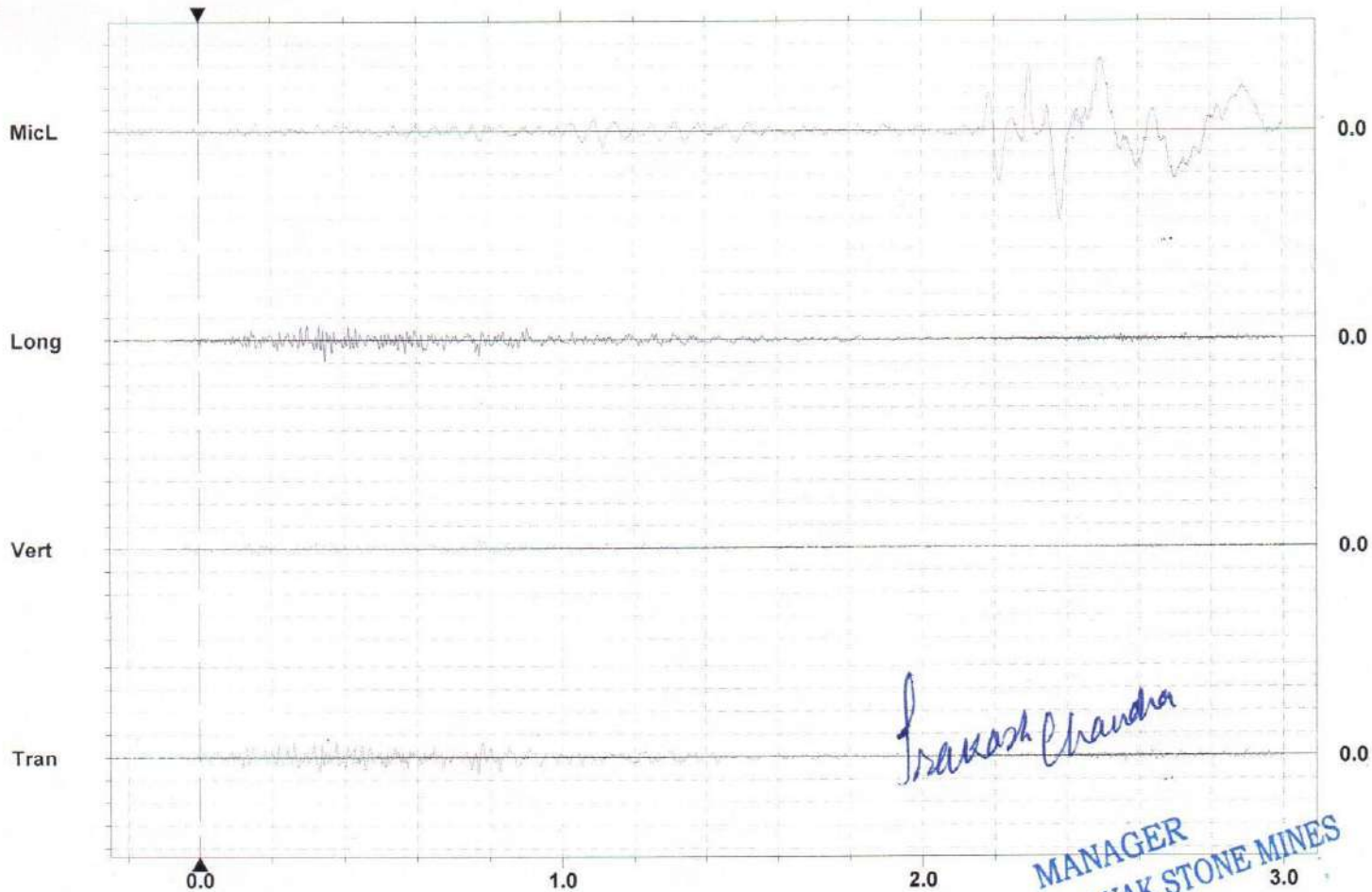
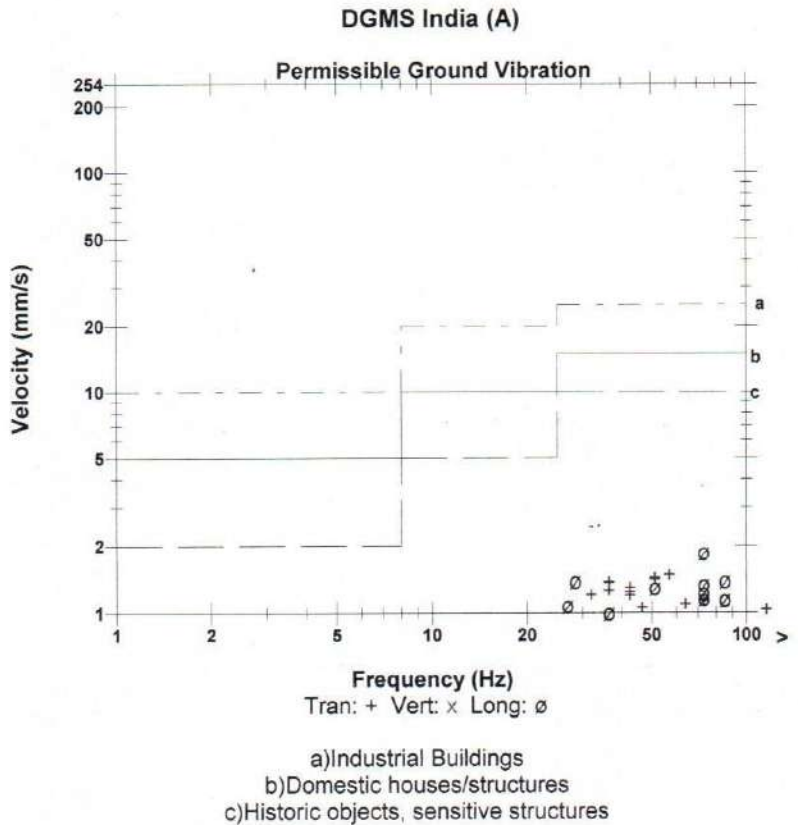
Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.5 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240927142037.IDFW

GPS Location Latitude Longitude  
 Source: 028 53.871 N 075 52.464 E  
 Sensor1: 028 54.035 N 075 52.411 E  
 Distance: 315.5 m

Notes  
 Location: WB -01  
 Client:  
 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 106.3 dB(L) at 2.382 sec  
 ZC Freq 9.5 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1170 mv )

	Tran	Vert	Long	
PPV	1.482	0.796	1.860	mm/s
ZC Freq	57	17	73	Hz
Time (Rel. to Trig)	0.768	0.770	0.348	sec
Peak Acceleration	0.063	0.024	0.081	g
Peak Displacement	0.007	0.006	0.006	mm
Sensor Check	Passed	Passed	Passed	
Peak Vector Sum	1.998 mm/s at 0.348 sec			



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div  
 Trigger =

Date/Time Vert at 14:06:00 September 28, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.6 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240928140600.IDFW

GPS Location Latitude Longitude  
 Source: 028 54.399 N 075 51.131 E  
 Sensor1: 028 54.412 N 075 50.922 E  
 Distance: 339.3 m

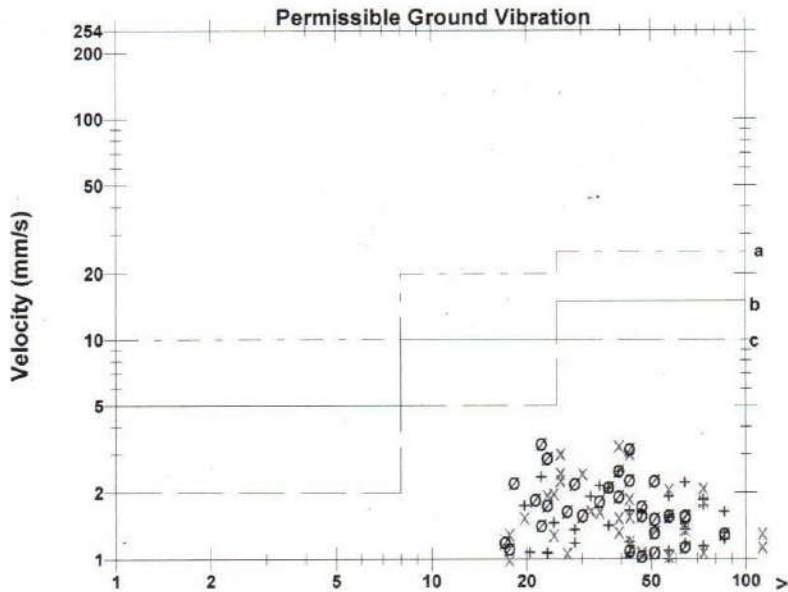
Notes  
 Location: WB - 7/8  
 Client:  
 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 114.9 dB(L) at 0.494 sec  
 ZC Freq 16 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1126 mv)

	Tran	Vert	Long	
PPV	2.491	3.295	3.381	mm/s
ZC Freq	39	39	22	Hz
Time (Rel. to Trig)	0.263	0.240	0.156	sec
Peak Acceleration	0.105	0.107	0.114	g
Peak Displacement	0.013	0.016	0.019	mm
Sensor Check	Passed	Passed	Passed	

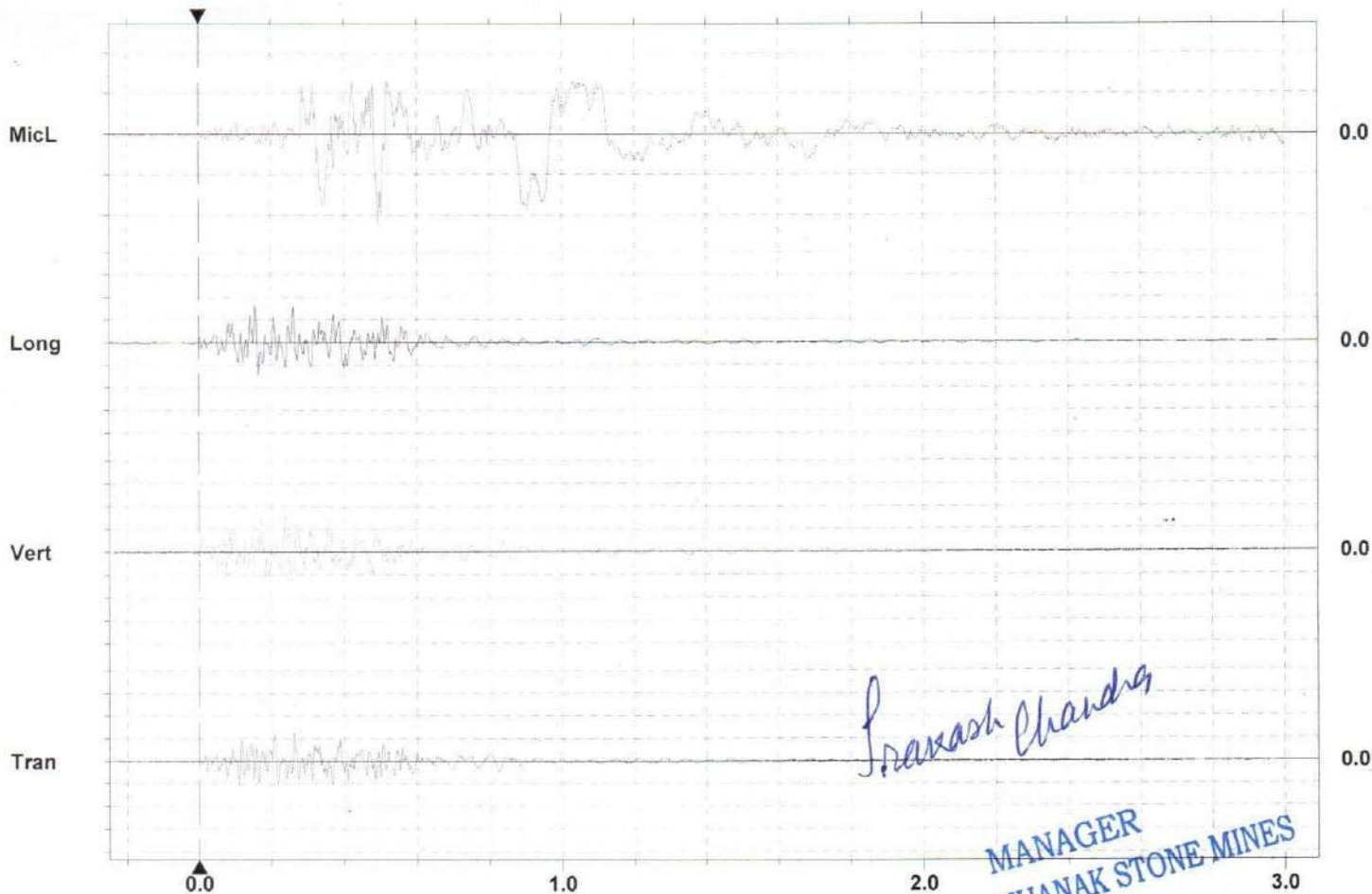
Peak Vector Sum 4.280 mm/s at 0.262 sec

**DGMS India (A)**



Frequency (Hz)  
 Tran: + Vert: x Long: o

- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



*Pravash Chaudhary*

**MANAGER  
 KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 5.000 pa.(L)/div  
 Trigger =

Date/Time Vert at 14:25:28 September 29, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

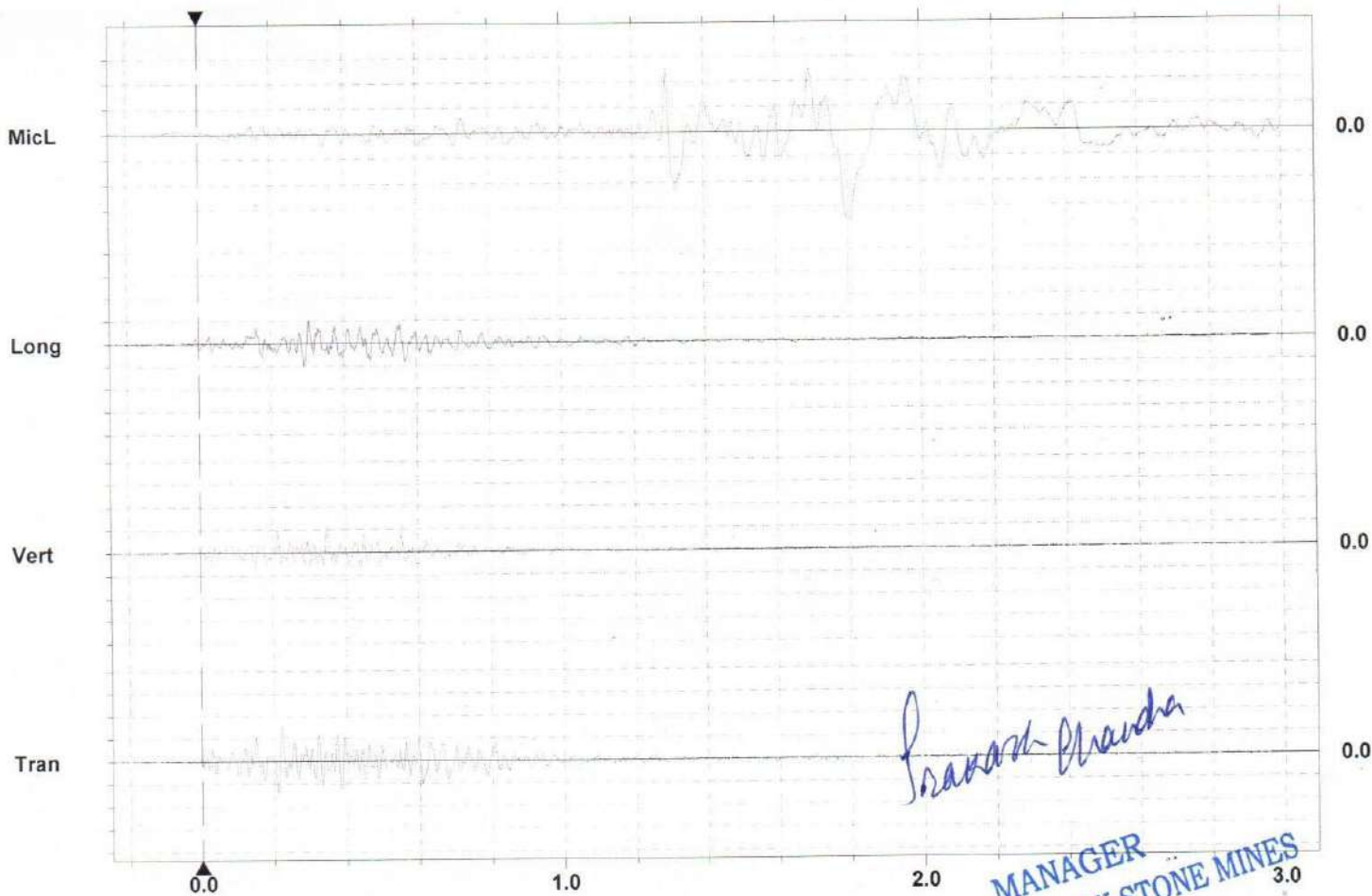
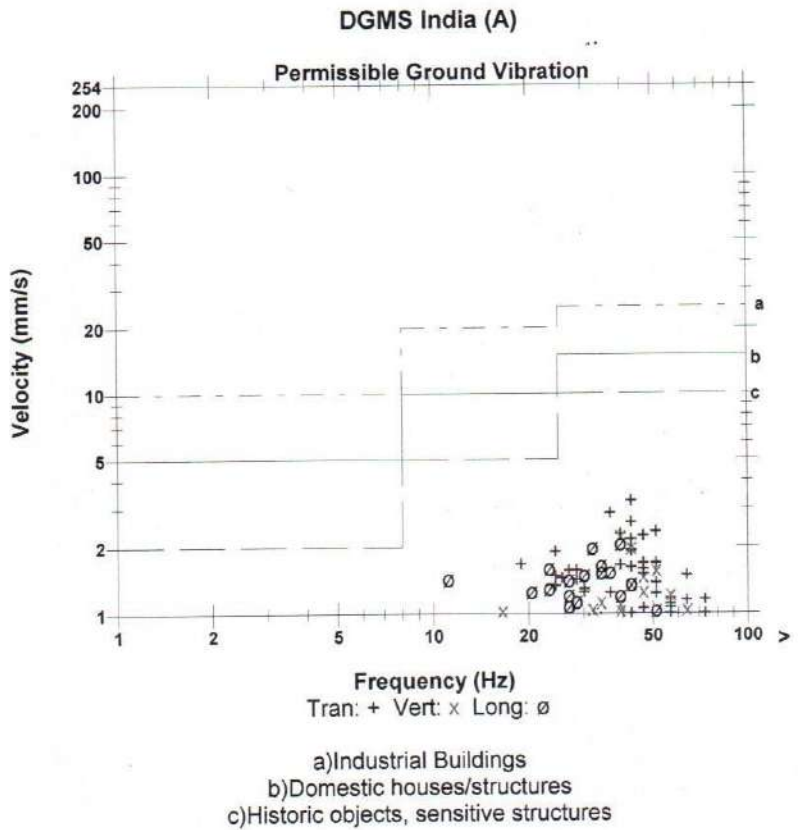
Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.6 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240929142528.IDFW

GPS Location Latitude Longitude  
 Source: 028 53.822 N 075 52.438 E  
 Sensor1: 028 54.036 N 075 52.415 E  
 Distance: 398.2 m

Notes  
 Location: WB - 7/8  
 Client:  
 User Name:  
 General:

Microphone Linear Weighting  
 PSPL 111.1 dB(L) at 1.802 sec  
 ZC Freq 4.5 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1171 mv )

	Tran	Vert	Long	
PPV	3.232	2.238	2.065	mm/s
ZC Freq	43	39	39	Hz
Time (Rel. to Trig)	0.222	0.349	0.305	sec
Peak Acceleration	0.095	0.059	0.061	g
Peak Displacement	0.012	0.008	0.014	mm
Sensor Check	Passed	Passed	Passed	
Peak Vector Sum	3.342 mm/s at 0.222 sec			



*Pranav Prakash*

**MANAGER  
 KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 2.000 pa.(L)/div  
 Trigger = ▶ ◀

Date/Time Vert at 14:21:55 September 30, 2024  
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/KHANAK STONE MINES.MMB

Serial Number UM17364 V 10-90FB Micromate ISEE  
 Battery Level 3.6 Volts  
 Unit Calibration May 28, 2024 by UES New Delhi  
 File Name UM17364\_20240930142155.IDFW

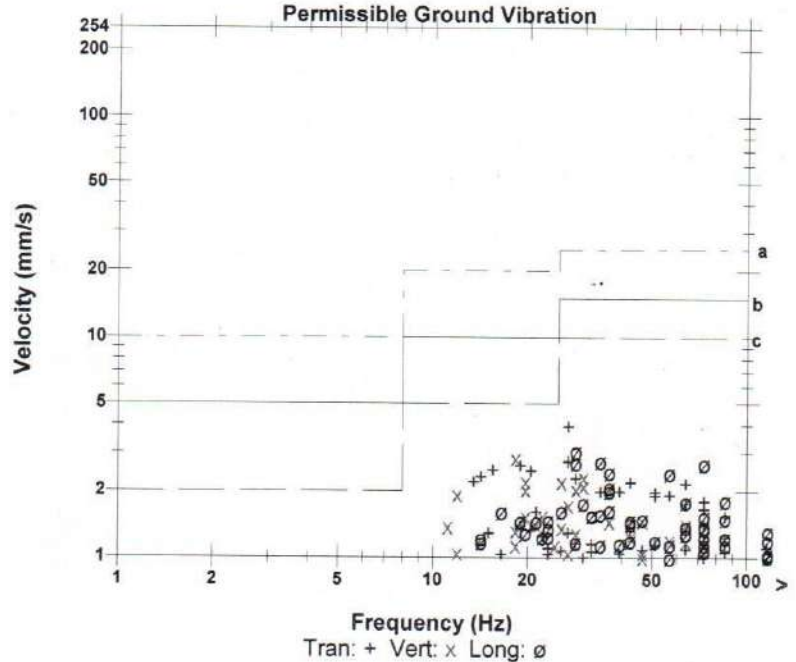
GPS Location Latitude Longitude  
 Source: 028 53.818 N 075 52.448 E  
 Sensor1: 028 54.036 N 075 52.415 E  
 Distance: 407.3 m

Notes  
 Location: WB - 01  
 Client:  
 User Name:  
 General:

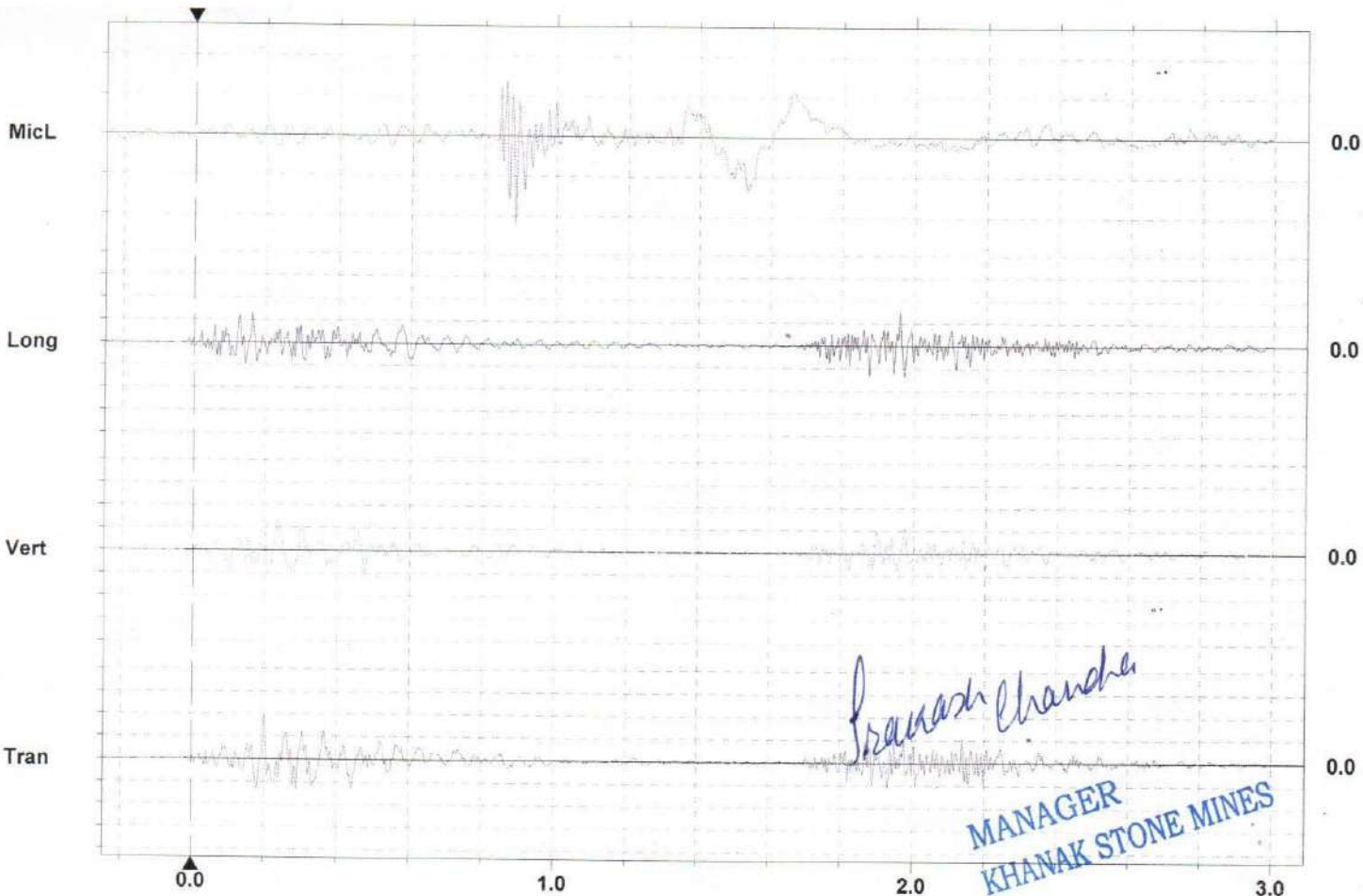
Microphone Linear Weighting  
 PSPL 115.0 dB(L) at 0.886 sec  
 ZC Freq 47 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1168 mv )

	Tran	Vert	Long	
PPV	3.925	2.822	3.035	mm/s
ZC Freq	27	18	28	Hz
Time (Rel. to Trig)	0.202	0.235	1.959	sec
Peak Acceleration	0.106	0.057	0.098	g
Peak Displacement	0.024	0.024	0.014	mm
Sensor Check	Passed	Passed	Passed	
Peak Vector Sum	4.228 mm/s at 0.202 sec			

**DGMS India (A)**



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



*Pranav Chandra*  
**MANAGER**  
**KHANAK STONE MINES**

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 5.000 pa.(L)/div  
 Trigger =

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Laboratory of the  
Haryana State Pollution Control Board  
Vikas Sadan, 1st Floor, Gurgaon

## FORM IV ( See Rule 14)

Report No.:- 533-534-535

Dated- 28<sup>th</sup> October, 2024

I, hereby, certify that I **Ramniwas Sharma** as Board Analyst, duly appointed under sub section (2) of section 29 of Air (Prevention and control of pollution) Act, 1981 (14 of 1981) received on the **25<sup>th</sup> day of October, 2023** from **Dr. Satish Kumar, Sc 'B'** a sample of process emission of **M/s HSIIDC Panchkula, Village-Khanak, Tehsil-Tosham, Bhiwani** collected on **24/10/2024 to 25/10/2024** from the premises of the unit for analysis. The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample from **25/10/2024 to 28/10/2024** and declare the result of analysis to be as follow:-

Sr. No.	Descriptions	Report No: 533	Report No: 534	Report No: 535
1.	Location of Sampling Point	Site-1 N 28 <sup>o</sup> .541107648 E 75 <sup>o</sup> .52245334	Site-2 N 28 <sup>o</sup> .534120512 E 75 <sup>o</sup> .5269582	Site-3 N 28 <sup>o</sup> .54672804 E 75 <sup>o</sup> .525091024
2.	Date of sampling	24/10/2024 to 25/10/2024	24/10/2024 to 25/10/2024	24/10/2024 to 25/10/2024
3.	Sampling started at	24/10/2024	24/10/2024	24/10/2024
4.	Sampling completed at	25/10/2024	25/10/2024	25/10/2024
5.	Actual time of sampling	24 Hrs.	24 Hrs.	24 Hrs.
6.	Flow rate of PM <sub>10</sub> (m <sup>3</sup> /min)	1.2	1.3	1.1
7.	Volume of air sampled for PM <sub>10</sub> (m <sup>3</sup> )	1728	1872	1584
8.	Flow rate of PM <sub>2.5</sub> LPM	16.7	16.7	16.7
9.	Volume of air sampled for PM <sub>2.5</sub> (m <sup>3</sup> )	24.04	24.04	24.04
10.	Average Ambient Temperature	30°C	30°C	30°C
11.	Weather condition	Normal	Normal	Normal

## RESULTS

				Prescribed Limits	
10.	PM <sub>10</sub> µg/Nm <sup>3</sup> ( 24 Hourly)	91.0	86.0	74.0	100.0
11.	PM <sub>2.5</sub> µg/Nm <sup>3</sup> (24 Hourly)	55.0	49.0	44.0	60.0
12.	Sulphur Dioxide µg/Nm <sup>3</sup>	16.6	14.2	9.8	80.0
13.	Oxides of Nitrogen µg/Nm <sup>3</sup>	11.8	9.6	5.2	80.0

The condition of the seal, fastening and container on receipt was as follows:

Container had its seals founded intact in order; slip on the container had the signature of the representative of the industry and the board representative.

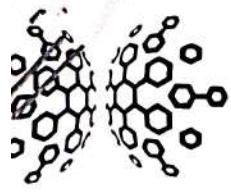
Signed this on 28<sup>th</sup> October, 2024

Laboratory of The  
Haryana State Pollution Control Board  
Vikas Sadan, Gurgaon

To

The Member Secretary  
Haryana State Pollution Control Board  
C-11, Sec.-6, Panchkula (Haryana)

*Ramniwas Sharma*  
Board Analyst



# HSIIDC

# 79

o/c

GSTIN: 06AAACH4114R2ZG  
Haryana State Industrial and Infrastructure  
Development Corporation Ltd.  
Panchayat Bhawan, KHANAK  
Email : mining.khanak@hsiidc.org.in

No. HSIIDC/Mine/Khanak/2024/ 357-361

Dated: 14-10-2024 .

The Director, Central Pollution Control Board Parivesh Bhawan, CBD - cum-office, Complex, East Arjun Nagar, Delhi - 110032	The Regional Director Ministry Of Environmental Forest & Climate Change, Regional office (NZ), Bays No. 24-25, Sector 31-A, Dakshin Marg, Chandigarh-160030.
The Chairman, Haryana State Pollution Control Board, C-11, Sector 6, Panchkula Haryana.	The Member Secretary, SEIAA, Haryana Bays No.55-58, Paryatan Bhawan, Sector-2 Panchkula-134115, Haryana.
The Advisor, Ministry of Environmental Forest & Climate Change, Regional office (NZ), Bays No. 24-25, Sector 31-A Dakshin Marg, Chandigarh- 160030.	

Sub: -Submission of half yearly compliance Status Report (1st April 2024 to 30th September 2024) of conditions stipulated in Environmental Clearance letter issued for proposed Expansion of Minor mineral of stone along with associated minor Minerals from 10 MTPA to 24 MTPA over an area of 258.30 hac.at Village Khanak Tehsil: Tosham, District: Bhiwani (Haryana) by HSIIDC.

Ref: - Environment clearance issued by SEIAA-Haryana, EC Id No. EC23B001HR164105 dated 08.08.2023.

Dear Sir,

This has reference to the above subject matter.

We hereby submit the compliance status report for aforementioned period of conditions stipulated in Environmental clearance vide Letter issued by SEIAA-Haryana for proposed Expansion of Minor mineral of stone along with associated minor Minerals from 10 MTPA to 24 MTPA over an area of 258.30 hac.at Village Khanak Tehsil: Tosham, District: Bhiwani (Haryana) by Haryana State Industrial & Infrastructure Development Corporation Ltd. (HSIIDC).

Thanking you,

Yours faithfully,

For - Haryana State Indl. & Infra. Dev. Corpn. Ltd.

  
Authorized Signatory


Encl.: -Half Yearly Compliance Status Report (1st April 2024 to 30th September 2024) of EC conditions.

Regd. Office No. 13-14, Sector-6 Panchkula 134109, Tel. : 2590481, Fax: 91(172) 2590474  
E-Mail: info@hsiidc.org.in Website : www.hsiidc.org.in

hsiidcesewa.org.in Corporate Identity Number : U29199HR1967SGC034545

**COMPLIANCE REPORT OF EC VIDE PROPOSAL NO. SIA/HR/MIN/421906/2023  
Village Khanak, Tehsil – Tosham, District Bhiwani, Haryana, by M/S HSIIDC Ltd.**

<b>A. Statutory compliance:-</b>		
1.	This Environmental Clearance (EC) is subject to orders/ judgment of Hon"ble Supreme Court of India, Hon"ble High Court, Hon"ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.	Noted
2.	The Project proponent complies with all the statutory requirements and judgment of Hon"ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors before commencing the mining operations.	At present, the said order / Judgement of Hon"ble Supreme Court is not applicable to this project. Further we will ensure the compliance if any will be applicable.
3.	The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon"ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors.	At present, the said order / Judgement of Hon"ble Supreme Court is not applicable to this project. Further we will ensure the compliance if any will be applicable.
4.	This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.	There is no wildlife area under this mine so not applicable. Further copy of Noc attached herewith. (Annexure I)
5.	This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.	There is no forest land covered under this Act. So Forest Clearance is not applicable. Further copy of Noc attached herewith. (Annexure I)
6.	Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish/Consent to Operate from the concerned State Pollution Control Board/Committee.	Consent to Operate already obtained from HSPCB vide letter No. HSPCB/CONSENT/313100423BHICTO47775250, dated 11.10.2023. – 30.09.2028 (Annexure II)
7.	The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS), Mines & Geology Department, Haryana and Indian Bureau of Mines from time to time.. Also adhere to Haryana Minor Mineral Concession, Stocking, Transportation of Minerals and Prevention of Illegal Mining Rules, 2012 .	Complied
8.	The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR	The Mine Area is already under the ownership of Project proponent i.e. HSIIDC.

  
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	Act, 1957 and rules made there under in respect of lands which are not owned by it.	
9.	The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No.Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".	Complied
10.	The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.	As we are not using any ground water so not applicable.
11.	A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.	Noted and complied.
12.	State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.	Noted.
13.	The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.	Noted and complied.
14.	The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.	Noted .
<b>I. Air Quality Monitoring and Preservation</b>		
1.	The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. . PM10,	Noted and complied.

  
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	PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.	
2.	Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be II. Water Quality Monitoring and Preservation carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/Central Pollution Control Board.	Water Sprinkling is being done regularly and fogures are also being used in the mining area.
<b>II. Water Quality Monitoring and Preservation</b>		
1.	In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.	There is no intersection of ground water table. So, Clearance from CGWA is not applicable. In future, if such condition come we will obtain the desired Permissions.
2.	Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table. The	Noted and complied.



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	Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.	
3.	Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.	Not Applicable.
4.	The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEF&CC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.	We are monitoring the ground Water quality of surrounding area on six monthly bases. Copy of reports are attached. (Annexure III)
5.	Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total	As there is no runoff during ordinary weather condition. The runoff is collected only during rainy season. We will collect the sample of accumulated runoff water and ensure the testing.

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	Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.	
6.	Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEF&CC annually.	Rainwater is collected in pits and same is used in the mining.
7.	Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.	Not Applicable.
8.	The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.	Noted.
<b>III. Noise and vibration monitoring and prevention</b>		
1.	The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.	Noted and complied.
2.	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/masks away from the villagers and keeping the noise levels well within the prescribed limits for day/night hours.	Noted and complied.
3.	. The Project Proponent shall take measures for control of noise levels below 85 dba in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health	Noted and complied.

  
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	aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.	
<b>IV. MINING PLAN</b>		
1.	The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form to Short Term Permit (STP), Query license or any other name	Noted and complied.
2.	The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/ Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change and SEIAA for record and verification.	Noted.
3.	The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation visà-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEF &CC and its concerned Regional Office.	Noted.
<b>V. Land reclamation</b>		

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1.	The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.	Noted and complied.
2.	The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.	Noted and complied.
3.	The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.	Noted.
4.	The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/levelling of dump mass. In critical areas, use of geo textiles/geo-membranes/clay liners/Bentonite etc. shall be undertaken for stabilization of the dump.	Noted and complied.
5.	The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC/SEIAA.	A Comprehensive study of slope stability is done by IIT Patna. (Report Attached) (Annexure IV)
6.	Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.).	Noted and complied.



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	The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be desilted regularly, particularly after monsoon season, and maintained properly.	
7.	Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.	Noted and complied.
8.	The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose	Noted and complied.
<b>VI. Transportation</b>		
1.	No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a „bypass“ road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly.	Noted and complied.

  
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	Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.	
2.	The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.	Noted and complied.
<b>VII. Green Belt</b>		
1.	The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.	Noted and Complied.
2.	The Project Proponent shall carryout plantation/afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/Tribal Welfare Department/Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.	Noted and Complied.
3.	The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to	Not Applicable.





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	compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon <sup>ble</sup> Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.	
4.	The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt.	Not Applicable.
5.	And implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.	Not Applicable.
<b>VIII. Public Hearing and Human Health Issues</b>		
1.	The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEF&CC Regional Office and DGMS on half-yearly basis.	An Occupational health specialist is appointed for Regular and Periodical medical examination of the workers engaged in the Project and the records are maintained accordingly. The occupational environment for mine workers is implemented.
2.	The Project Proponent must demonstrate commitment to work towards „Zero Harm“ from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on	Noted and Complied.

  
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	Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.	
3.	. The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium- Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminum, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).	Noted and Complied.
4.	The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1),Forced Vital	Noted and Complied.

  
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	Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEF&CC annually along with details of the relief and compensation paid to workers having above indications	
5.	The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.	Noted and Complied.
6.	Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.	Labour mostly has from the Local Village Khanak and other nearby village and reside in their respective place on their residence. As per the requirement some provision for housing of mining labour has been done in the nearby village rented building.
7.	The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.	Noted and complied.
<b>IX. Corporate Environment Responsibility (CER)</b>		
1.	The activities and budget earmarked for Corporate Environmental Responsibility (CER) as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 or as proposed by EAC should be kept in a separate bank account. The activities proposed for CER shall be implemented in a time bound manner and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude &	Noted and complied.

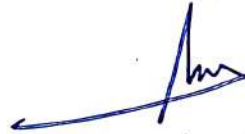
  
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	longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.																
2.	Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEF& CC and its concerned Regional Office.	<p>The EMP Budge is capital cost Rs 73.62 Lacs CER Budge is capital cost Rs 45 Lacs and requiring cost Rs 39 Lacs. We will use this fund for socio economic activities. The details of expenditure upto August 2024 under CSR, CER and EMP the details is given as under:-</p> <table border="1"> <thead> <tr> <th>Sr.No.</th> <th>Head</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>CER</td> <td>6,17,787.00</td> </tr> <tr> <td>2.</td> <td>EMP</td> <td>1,19,603.00</td> </tr> <tr> <td>3.</td> <td>CSR</td> <td>88,50,445.00</td> </tr> <tr> <td></td> <td>Total</td> <td>95,84,835.00</td> </tr> </tbody> </table>	Sr.No.	Head	Amount	1.	CER	6,17,787.00	2.	EMP	1,19,603.00	3.	CSR	88,50,445.00		Total	95,84,835.00
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<b>X. Miscellaneous</b>																	
1.	The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF& CC.	Noted.															
2.	The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	Noted.															
3.	The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEF&CC and its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.	Noted and Complied.															
4.	A separate Environmental Management Cell <sup>™</sup> with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF& CC.	Environmental unit is constituted vide letter No. HSIIDC/MINES/2023/773-782 dated 05.10.2023.															
5.	The concerned Regional Office of the MoEF&CC including other authorized organization shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) including other authorized officer by furnishing the requisite data/information	Noted.															
6.	The Project Proponent should intimate to the Authority as well as to the quarter concerned	Noted.															




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	in case of any change in the present communication address.	
7.	The Project proponent shall not violate any judicial orders/pronouncements issued by any Court/Tribunal	Noted.
8.	Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the Project Proponent if it was found that construction of the project has been started before obtaining prior Environmental Clearance.	Noted
9.	Any appeal against the this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted.
10.	The project proponent is responsible for compliance of all conditions in Environmental Clearance letter and project proponent can not absolve himself /herself of the responsibility by shifting it to any contractor engaged by project proponent.	Noted.



HSIIDC Mine Site  
Khanak (Bhiwani)



# **ANNEXURE-I**

# FOREST DEPARTMENT GOVT. OF HARYANA

## O/o Divisional Forest Officer, Bhiwani

Meham Road, Vidya Nagar, Bhiwani, Tel. No. 01664-242430, E-mail:-dfo.bhiwani@yahoo.com

क्रमांक / ..... ४५० .....

दिनांक / ..... ३१/६/१४ .....

सेवा में:- हरियाणा राज्य औद्योगिक एवं,  
आधारभूत संरचना विकास,  
निगम लि० रोहतक।

विषय: NOC from Forest Department w.r.t. proposed Minor Mineral project over an area of 258.30 hectares ( Khasra No. 274 min 275 min) in Village Khanak Tehsil Tosham] District Bhiwani in favour of HSIIDC.

संदर्भ: आपका पत्र क्रमांक HSIIDC:Mines:47 Dt. 16.6.2014 के संदर्भ में।

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संदर्भांकित पत्र के विषय में खसरा नं० 274 मीन में खनन हेतु उपलब्ध 3.90 हे० क्षेत्र बारे आपको अवगत करवाया जाता है कि संयुक्त निरीक्षण रिपोर्ट तथा अरावली पौधारोपण से सम्बन्धित पूर्व में की गई संयुक्त रिपोर्टों में उल्लेखों तथा मौका अनुसार गांव खानक स्थित गैर मुमकीन पहाड़ खसरा नं० 274 मीन के कुल क्षेत्र में 6 हेक्टेयर अरावली पौधारोपण क्षेत्र है। जो कि खनन हेतु उपलब्ध 3.90 हेक्टेयर ऐरिया के साथ लगता हुआ है। अतः गांव खानक के गैर मुमकीन पहाड़ खसरा नं० 274 मीन में 3.90 हेक्टेयर में खनन सम्बन्धि गतिविधियां चलाने की अनुमति इस कार्यालय द्वारा निम्न शर्तों के आधार पर दी जाती है:-

1. मौका पर भारतीय वन संरक्षण अधिनियम 1980 की पालना सुनिश्चित करनी होगी तथा अरावली पौधारोपण क्षेत्र/वन भूमि को गैर वन वानिकी उद्देश्य हेतु प्रयोग करने से पूर्व नियमानुसार वन विभाग से अनुमति लेनी होगी।
2. खनन ऐरिया सैक्शन-4 (सामान्य) के तहत आता है। इसलिये मौका पर पंजाब भू-संरक्षण अधिनियम 1900 तथा भारतीय वन संरक्षण अधिनियम 1927 की पालना सुनिश्चित करनी होगी।
3. मौका पर खनन क्षेत्र के साथ लगते हुये अरावली पौधारोपण को कोई हानि नहीं पहुंचाई जाएगी।
4. यूजर एजेंसी द्वारा मौका पर खनन क्षेत्र में लगवाये गये पिट्लरों पर जी०पी०एस० कोर्डिनेट अंकित करवाये जायेंगे।
5. भारतीय वन्य प्राणी अधिनियम 1972 की सभी शर्तों की पालना की जाएगी। इसके अतिरिक्त मौका पर उपरोक्त शर्तों के अलावा पर्यावरण को क्षति पहुंचाने की कोई भी गतिविधि/उल्लंघना पाई गई तो वन विभाग द्वारा यह अनापत्ति प्रमाण पत्र रद्द किया जा सकता।

वन मण्डल अधिकारी,  
भिवानी।

# FOREST DEPARTMENT GOVT. OF HARYANA

## O/o Divisional Forest Officer, Bhiwani

Meham Road, Vidya Nagar, Bhiwani, Tel. No. 01664-242430, E-mail:-dfo.bhiwani@yahoo.com

क्रमांक / 1684

दिनांक / 25-8-14

सेवा में:- हरियाणा राज्य औद्योगिक एवं  
आधारभूत संरचना विकास,  
निगम लि० रोहतक।

विषय: NOC from Forest Department w.r.t. proposed Minor Mineral project over an  
area of 258.30 hectares ( Khasra No. 274 min 275 min) in Village Khanak  
Tehsil Tosham] District Bhiwani in favour of HSHDC.

संदर्भ: इस कार्यालय का पत्र क्रमांक 407 दिनांक 20.5.2014 तथा पत्र क्रमांक 840 दिनांक 30.6.2014  
तथा आपका पत्र क्रमांक HSHDC:Mines:62 Dt. 23.8.2014 के संदर्भ में।

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उपरोक्त विषय के सम्बन्ध में आपको अवगत करवाया जाता है कि इस कार्यालय के पत्र  
क्रमांक 407 दिनांक 20.5.2014 द्वारा गांव खानक स्थित पहाड के खसरा नं० 275/1 व 275/2 मीन कुल  
338 हे० एरिया से 84 हे० अरावली पौधारोपण क्षेत्र को छांडकर 254 हे० एरिया में खनन गतिविधियां चलाने  
का अनापत्ति प्रमाण पत्र दिया गया था। इसके पश्चात आपके कार्यालय के पत्र क्रमांक 47 दिनांक 16.6.2014  
द्वारा खसरा नं० 274 मीन में 3.90 हे० में खनन गतिविधि चलाने की अनुमति मागी गई थी। जिराका  
अनापत्ति प्रमाण पत्र इस कार्यालय के पत्र क्रमांक 840 दिनांक 30.6.2014 द्वारा आपको भेज दिया गया था।  
अब आप द्वारा पुनः दिये गये आवेदन पर आगामी आवश्यक कार्यवाही करते हुये खसरा नं० 274 मीन में शेष  
बचे 0.40 हे० अर्थात् कुल 258.30 हे० क्षेत्र में खनन गतिविधि चलाने की अनुमति निम्न शर्तों के आधार पर  
दी जाती है:-

1. मौका पर भारतीय वन संरक्षण अधिनियम 1980 की पालना सुनिश्चित करनी होगी तथा अरावली  
पौधारोपण क्षेत्र/वन भूमि को गैर वन वानिकी उद्देश्य हेतु प्रयोग करने से पूर्व नियमानुसार वन  
विभाग से अनुमति लेनी होगी।
2. खनन ऐरिया: संवर्धन-4 (सागान्य) के तहत आता है। इसलिये मौका पर पंजाब गू-संरक्षण  
अधिनियम 1900 तथा भारतीय वन संरक्षण अधिनियम 1927 की पालना सुनिश्चित करनी होगी।
3. मौका पर खनन क्षेत्र के साथ लगते हुये अरावली पौधारोपण को कोई हानि नहीं पहुंचाई  
जाएगी।
4. यूजर एजेंसी द्वारा मौका पर खनन क्षेत्र में लगवाये गये पिट्लरों पर जी०पी०एस० कोर्डिनेट  
अंकित करवाये जायेंगे।
5. भारतीय वन प्राणी अधिनियम 1972 की सभी शर्तों की पालना की जाएगी।  
इसके अतिरिक्त मौका पर उपरोक्त शर्तों के अलावा पर्यावरण को क्षति पहुंचाने की कोई भी  
गतिविधि, उल्लंघना पाई गई तो वन विभाग द्वारा यह अनापत्ति प्रमाण पत्र रद्द किया जा  
सकता।

वन मण्डल अधिकारी,  
भिवानी।

**FOREST DEPARTMENT GOVT. OF HARYANA**  
**O/o Divisional Forest Officer, Bhiwani**

Meham Road, Vidya Nagar, Bhiwani, Tel. No. 01664-242430, E-mail:-dfo.bhiwani@yahoo.com

कमांक / 2369

दिनांक / 1.12.14

सेवा मे:- हरियाणा राज्य औद्योगिक एवं,  
आधारभूत संरचना विकास,  
निगम लि० रोहतक।

विषय: NOC from Forest Department w.r.t. proposed Minor Mineral project over an area of 258.30 hectares ( Khasra No. 274 min 275 min) in Village Khanak Tehsil Tosham, District Bhiwani in favour of HSHDC.

संदर्भ: आपका पत्र कमांक HSHDC:Mines:240 Dt. 27.11.2014 के संदर्भ में।

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उपरोक्त विषय के सम्बन्ध में आपको अवगत करवाया जाता है कि गाव खानक स्थित गंग भुमकीन पहाड के खसर नं० 274 min & 275 min में खनन हेतु प्रस्तावित 258.30 हे० क्षेत्र अरावली पौधरोपण क्षेत्र में नहीं आता तथा वर्णित क्षेत्र किसी प्रकार की वन भूमि (Forest Land) का Part भी नहीं है। अतः उक्त क्षेत्र में खनन गविविधि चलाने की अनुमति निम्न शर्तों के आधार पर दी जाती है:-

1. यूजर एजेंसी यदि खनन क्षेत्र में आने-जाने के लिये रेवेन्यू रास्ते का प्रयोग करेगी तो वन विभाग को कोई आपत्ति नहीं होगी, परंतु रास्ते के तौर पर वन भूमि का उपयोग करेगी तो नियमानुसार वन विभाग से अनुमति लेनी होगी।
2. खनन क्षेत्र सैक्सन-4 (सामान्य) के तहत आता है, इसलिये खनन क्षेत्र के अतिरिक्त क्षेत्र में पंजाब भू-संरक्षण अधिनियम 1900 तथा भारतीय वन संरक्षण अधिनियम 1927 की पालना सुनिश्चित करनी होगी।
3. यूजर एजेंसी यूजर एजेंसी द्वारा मौका पर खनन क्षेत्र में लगवाये गये पिल्लरों पर जी०पी०एस० कोर्डिनेट अंकित करवाये जायेंगे।
4. विषयक प्रस्ताव में इस क्षेत्र के वन अधिनियम कानून लागू माने जायेंगे।
5. भारतीय वन्य प्राणी अधिनियम 1972 की सभी शर्तों की पालना की जाएगी। इसके अतिरिक्त मौका पर उपरोक्त शर्तों के अलावा पर्यावरण को क्षति पहुंचाने की कोई भी गतिविधि/उल्लंघना पाई गई तो वन विभाग द्वारा यह अनापत्ति प्रमाण पत्र रद्द किया जा सकता।

वन मण्डल अधिकारी,  
भिवानी।

पृ०कमांक :

दिनांक:

इसकी एक प्रति वन राजिक अधिकारी तोशाम को मौका पर वन अधिनियमों की दृढता से पालना सुनिश्चित करने हेतु प्रेषित है।

वन मण्डल अधिकारी  
भिवानी।

# **ANNEXURE-II**



## HARYANA STATE POLLUTION CONTROL BOARD

SCF-32, sector 13, HUDA, Bhiwani Ph. 01664-240259 Email:- hspcbrojr@gmail.com

E-mail: hspcb@hry.nic.in



No. HSPCB/Consent/ : 313100423BHICTO47775250

Dated:11/10/2023

To.

M/s :HSI IDC Panchkula  
Village KHANAK Tehsil Tosham Distt Bhiwani

Subject: Grant of consent to operate to M/s HSI IDC Panchkula.

Please refer to your application no. 47775250 received on dated 2023-10-03 in regional office Bhiwani. With reference to your above application for consent to operate, M/s HSI IDC Panchkula is here by granted consent as per following specification/Terms and conditions.

<b>Consent Under</b>	BOTH
<b>Period of consent</b>	11/10/2023 - 30/09/2028
<b>Industry Type</b>	Mining and ore beneficiation
<b>Category</b>	RED
<b>Investment(In Lakh)</b>	14725.0
<b>Total Land Area(Sq. meter)</b>	2583000.0
<b>Total Builtup Area(Sq. meter)</b>	1500.0
<b>Quantity of effluent</b>	
1. Trade	5.0 KL/Day
2. Domestic	3.0 KL/Day
<b>Number of outlets</b>	2.0
<b>Mode of discharge</b>	
1. Domestic	septic tank with soak pit
2. Trade	ETP
<b>Domestic Effluent Parameters</b>	
1. NA	
<b>Trade Effluent Parameters</b>	
1. BOD	30 mg/l
2. COD	250 mg/l
3. TSS	100 mg/l
<b>Number of stacks</b>	1
<b>Height of stack</b>	
1. NA	
<b>Emission parameters</b>	
1. SPM	100 mg/m <sup>3</sup>
<b>Product Details</b>	

1. Stone	80000 Metric Tonnes/day
<b>Capacity of boiler</b>	
1. NA	Ton/hr
<b>Type of Furnace</b>	
1. NA	
<b>Type of Fuel</b>	
1. Electricity	Kilowatt/day
<b>Raw Material Details</b>	
Stone	80000 Metric Tonnes/Day

*Regional Officer, Bhiwani*  
*Haryana State Pollution Control Board.*

### Terms and conditions

1. The applicants shall maintain good house keeping both within factory and in the premises. All hose pipelines valves, storage tanks etc. shall be leak proof. In plant allowable pollutants levels, if specified by State Board should be met strictly.
2. The applicant/company shall comply with and carry out directive/orders issued by the Board in this consent order at all subsequent times without negligence of his /its part. The applicant/company shall be liable for such legal action against him as per provision of the law/act in case of violation of any order/directives. Issued at any time and or non compliance of the terms and conditions of his consent order.
3. The applicant shall make an application for grant of consent at least 90 days before the date of expiry of this consent.
4. Necessary fee as prescribed for obtaining renewal consent shall be paid by the applicant alongwith the consent application.
5. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above required variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard vary all or such condition and there upon the applicant shall be bound to comply with the conditions so varied.
6. The industry shall provide adequate arrangement for fighting the accidental leakages, discharge of any pollutants gas/liquids from the vessels, mechanical equipment etc. which are likely to cause environment pollution.
7. The industry shall comply noise pollution (Regulation and control) Rules, 2000.
8. The industry shall comply all the direction/Rules/Instructions as may be issued by the MOEF/CPCB/HSPCB from time to time.
9. The industry shall ensure that various characteristics of the effluents remain within the tolerance limits as specified in EPA Standard and as amended from time to time and at no time the concentration of any characteristics should exceed these limits for discharge.
10. The industry would immediately submit the revised application to the Board in the event of any change in the raw material in process, mode of treatment/discharge of effluent. In case of change of process at any stage during the consent period, the industry shall submit fresh consent application alongwith the consent to operate fee, if found due, which may be on any account and that shall be paid by the industry and the industry would immediately submit the

consent application to the Board in the event of any change during the year in the raw material, quantity, quality of the effluent, mode of discharge, treatment facilities etc.

11. The officer/official of the Board shall reserve the right to access for the inspection of the industry in connection with the various process and the treatment facilities. The consent to operate is subject to review by the Board at any time.

12. Permissible limits for any pollutants mentioned in the consent to operate order should not exceed the concentration permitted in the effluent by the Board.

13. The industry shall pay the balance fee, in case it is found due from the industry at any time later on.

14. If the industry fails to adhere to any of the conditions of this consent to operate order, the consent to operate so granted shall automatically lapse.

15. If the industry is closed temporarily at its own, they shall inform the Board and obtain permission before restart of the unit.

16. The industry shall comply all the Directions/ Rules/Instructions issued from time to time by the Board.

### Specific Conditions :

1. The CTE/CTO from pollution angle shall not provide immunity from any other Act/Rules applicable to the unit.

2. Unit will maintain PCDs (Pollution Control Devices i.e. ETP, APCM and septic tank followed by soak pit).

3. The unit will obtain prior permission from CGWA or HWRA the competent authority of the State for extraction of Ground Water if any.

4. Unit will provide and maintain Green Belt / tree plantation as per the conditions of EC issued by SEIAA.

7. Unit will implement an Environment Management Plan and comply with all the provisions of Mining plan and will strictly abide by the conditions of EC granted by SEIAA and CTE granted by HSPCB.

8. Unit will do the mining activities only on the land for which permission (LOI) has been granted by Mines and geology Deptt. and for which NOC/permission/ CLU by Town and country planning Department has been granted and for which EC obtained by unit.

9. Unit will execute the mining activity strictly as per the mining plan approved by Mining Deptt. & DGMS.

10. Regular water sprinkling shall be done by the unit to control the dust pollution generated during the mining activities.

11. The mineral transportation will be done through covered trucks only.

12. Unit will not discharge any trade effluent/domestic effluent inside or outside the premises.

13. The Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers.

14. Unit will comply with the conditions of the EC/CTE granted by the authorities and submit six monthly compliance reports.

15. The unit will maintain its effluent treatment plant, APCM / dust suppression system in well working condition.

16. Unit will not install any mineral processing unit e.g. Stone crusher, Mineral grinding unit or Screening plant in its lease area.

17. Unit will operate ETP, APCM & will maintain logbook of ETP & APCD, electrical meter

reading etc.

18. Unit will obtain all necessary permission/Authorization/registrations done well in time from all the concerned departments.

18. CTE/CTO so granted is without prejudice to the any violation caused by the unit in past and will be deemed cancelled automatically, if at any stage to come to the notice of the board & further necessary action as per Environmental Laws will be initiated without giving any further notice.

19. The unit will abide by all the directions / orders issued from time to time by all the court i.e.

District Courts, Hon'ble Punjab & Haryana High Court, Chandigarh, Hon'ble NGT and Hon'ble Supreme Court of India w.r.t. mining projects.

20. The unit will abide with the directions/guidelines HSPCB/CPCB/ any court decision/Direction of any competent authority.

21. If fails to comply the provisions of consent procedure & Board policy dated 26.02.2018 as amended till date, the (CTE/CTO) so granted shall be revoked automatically without giving any notice.

22. If the unit is found not complying the conditions of CTE/CTO so granted at any stage, the unit

will be liable for legal action, closure action as per the provisions of environmental Acts/laws and for lavvy of Environment Compensation on the basis of polluter pay principal as per the directions of Honble NGT / CAQM/CPCB/ HSPCB issued from time to time.

23. That Project Proponent shall maintain a buffer zone of 7.5 meter along with the Mining Lease area.

24. The unit is liable to pay the balance CTE/CTO fees if found due at any stage.

25. The unit will maintain the AAQ stations as per condition of EC.

26. That the unit will comply with all the conditions of the ENVIRONMENTAL CLEARANCE issued by the MOEF/SEIAA.

27. THE UNIT WILL IMPLEMENT THE ENVIRONMENTAL MANAGEMENT PLAN AND WILL SUBMIT THE COMPLIANCE IN THIS REGARD TO THE BOARD regularly.

28. UNIT WILL DO THE MINING AS PER THE MINING PLAN SUBMITTED.

29. UNIT WILL OBTAIN THE NECESSARY PERMISSIONS AS DESIRED FROM THE CONCERNED DEPARTMENTS.

30. The unit will comply with the provisions of all environmental laws as per policy of the Board.

31. The Mining Lease Holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.

32. That proposal to the enhancement of the capacity from 10 MTPA to 24 MTPA over an area of 258.30 ha located in village - Khanak, Tehsil- Tosham, District- Bhiwani, Haryana by M/s HSIIDC Ltd shall be strictly in accordance with the approved Mining Plan.

33. That Project Proponent shall not violate any provision under the Forest Act / Rules & other relevant Acts & Rules, as may be applicable besides the terms & conditions of contract between the Mines & Geology Department, Haryana.

34. That Project Proponent shall ensure to adhere to the directions issued by MOEF & CC,

GOI and HSPCB, from time to time for the conservation & protection of Environment.

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41. Likewise, Alteration or re-routing of foot paths, pagdandies, cart roads, and village infrastructure public utilities or roads (for purposes of land acquisition for mining) shall be avoided to the extent possible and in case such acquisition is inevitable, alternative arrangements shall be made first and then only the area acquired. In these types of cases, inspection Reports by site visit by experts may be insisted upon which should be done through reputed institutes.

42. The PP shall ensure that total EMP Budget shall be spent on project during construction as well as during operational phase as per table given above. The EMP cost on Socio Economic activities shall be used before the commencement of the project & EMP recurring inside the project shall be implemented throughout the operation of the project. The PP shall establish Environment monitoring cell as per documents submitted.

42. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. the housing may be in the form of temporary structures to be removed after the completion of the project.

43. Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented.

44. Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is marinated and improved upon after the implementation of the project.

45. No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80

sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed the plantation in 33% of the total area of project site will

be carried out including statutory boundary barrier, Gram Panchayat, nearby schools, hospitals and along the road in consultation with local authority or Govt. Body. Native plant species as suggested by villagers/specialist may be planted.

46. The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment, forest and Climate Change and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out; The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry.

47. There shall be planning, developing and implementing facility of rainwater harvesting measures on long terms basis in consultation with Regional Director, Central Groundwater Board and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.

48. Where ever blasting is undertaken as part of mining activity, the Project Proponent shall carry out vibration studies well before approaching any such habitats or other buildings, to evaluate the zone of influence and impact of blasting on the neighbourhood. Within 500 meters of such sites vulnerable to blasting vibrations avoidance of use of explosives and adoption of alternative means of mineral

extraction, such as ripper/dozer combination/rock breakers/surface miners etc. should be seriously considered and practiced wherever practicable. A provision for monitoring of each blast should be made so that the impact of blasting on nearby habitation and dwelling units could be ascertained. The covenant of lease deed under Rule 31 of MCR 1960 provides that no mining operations shall be carried out within 50 meters of public works such as public roads and buildings or inhabited sites except with the prior permission from the competent authority.

49. Implementation of Environment Management Policy of the Company w.r.t. judicious use of Mineral resources for growth & development synchronizing mining & environment with prosperity.

50. The Project Proponent shall also take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted in the study area.

51. The illumination and sound at night at project site, disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. Project Proponent must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.

52. A comprehensive study for slope stabilization of mine benches and OB dumps shall be undertaken within one year.

53. The PP shall manage the overburden at the mining site if left after sale.

54. Washing of all transport vehicles should be done inside the mining lease.

55. The PP shall adhere to the approved mining plan and approved closure plan by the

competent authority.

56. Unit will submit the analysis reports from approved Lab of the Board from all effluent sources, air emission sources and noise sources within 90 days after grant of this CTO.

57. Unit will submit the compliance report of above mentioned conditions within 90 days otherwise this CTO will be revoked and legal action will be initiated.

VIJAY  
CHAUDHARY  
*Regional Officer, Bhiwani*

Digitally signed by VIJAY  
CHAUDHARY  
Date: 2023.10.11 17:09:11  
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*Haryana State Pollution Control Board.*




**HARYANA STATE POLLUTION CONTROL BOARD**
**HSPCB SCF-32, sector 13, HUDA, Bhiwani Ph. 01664-240259**
**Email:- hspcbrojr@gmail.com**
**Website: www.hrocmmns.nic.in E-Mail - hspcbho@gmail.com**
**Telephone No.: 0172-2577870-73**

**No. HSPCB/Consent/ : 313100423BHICTE3396735**
**Dated:29/09/2023**
**To.**

**M/s : HSIIDC Panchkula**  
**Village KHANAK Tehsil Tosham Distt Bhiwani**  
**BHIWANI**  
**127021**

**Sub. : Grant of consent to Establish to M/s HSIIDC Panchkula**

Please refer to your application no. 3396735 received on dated 2023-08-24 in regional office Bhiwani.

With reference to your above application for consent to establish, M/s HSIIDC Panchkula is here by granted consent as per following specification/Terms and conditions.

<b>Consent Under</b>	AIR/WATER
<b>Period of consent</b>	29/09/2023 - 07/08/2033
<b>Industry Type</b>	Mining and ore beneficiation
<b>Category</b>	RED
Investment(In Lakh)	14725.0
Total Land Area (Sq. meter)	2583000.0
Total Builtup Area (Sq. meter)	1500.0
<b>Quantity of effluent</b>	
1. Trade	0.0 KL/Day
2. Domestic	0.3 KL/Day
Number of outlets	0.0
<b>Mode of discharge</b>	
1. Domestic	Septic Tank
2. Trade	
<b>Permissible Domestic Effluent Parameters</b>	
1. NA	
<b>Permissible Trade Effluent Parameters</b>	
1. NA	mg/l
Number of stacks	1
<b>Height of stack</b>	
1. NA	
<b>Permissible Emission parameters</b>	

1. SPM	100 mg/m <sup>3</sup>
<b>Capacity of boiler</b>	
1. NA	Ton/hr
<b>Type of Furnace</b>	
1. NA	
<b>Type of Fuel</b>	
1. NA	KL/day

**Regional Officer, Bhiwani**  
Haryana State Pollution Control Board.

### Terms and conditions

1. The industry has declared that the quantity of effluent shall be 0.3 KL/Day i.e 0KL/Day for Trade Effluent, 0 KL/Day for Cooling, 0.3 KL/Day for Domestic and the same should not exceed .
2. The above 'Consent to Establish' is valid for 60 months from the date of its issue to be extended for another one year at the discretion of the Board or till the time the unit starts its trial production whichever is earlier. The unit will have to set up the plant and obtain consent during this period.
3. The officer/official of the Board shall have the right to access and inspection of the industry in connection with the various processes and the treatment facilities being provided simultaneously with the construction of building/machinery. The effluent should conform the effluent standards as applicable
4. That necessary arrangement shall be made by the industry for the control of Air Pollution before commissioning the plant. The emitted pollutants will meet the emission and other standards as laid/will be prescribed by the Board from time to time.
5. The applicant will obtain consent under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21/22 of the Air (Prevention & Control of Pollution) Act,1981 as amended to-date-even before starting trial production
6. The above Consent to Establish is further subject to the conditions that the unit complies with all the laws/rules/decisions and competent directions of the Board/Government and its functionaries in all respects before commissioning of the operation and during its actual working strictly.
7. No in-process or post-process objectionable emission or the effluent will be allowed, if the scheme furnished by the unit turns out to be defective in any actual experience
8. The Electricity Department will give only temporary connection and permanent connection to the unit will be given after verifying the consent granted by the Board, both under Water Act and Air Act.
9. Unit will raise the stack height of DG Set/Boiler as per Board's norms.
10. Unit will maintain proper logbook of Water meter/sub meter before/after commissioning.
11. That in the case of an industry or any other process the activity is located in an area approved and that in case the activity is sited in an residential or institutional or commercial or agricultural area, the necessary permission for siting such industry and process in an residential or institutional or commercial or agricultural area or controlled area under Town and Country Planning laws CLU or Municipal laws has to be obtained from the competent Authority in law permitting this deviation and be submitted in original with the request for consent to operate.

12. That there is no discharge directly or indirectly from the unit or the process into any interstate river or Yamuna River or River Ghaggar.
13. That the industry or the unit concerned is not sited within any prohibited distances according to the Environmental Laws and Rules, Notification, Orders and Policies of Central Pollution control Board and Haryana State Pollution Control Board.
14. That of the unit is discharging its sewage or trade effluent into the public sewer meant to receive trade effluent from industries etc. then the permission of the Competent Authority owing and operating such public sewer giving permission letter to his unit shall be submitted at time of consent to operate.
15. That if at any time, there is adverse report from any adjoining neighbor or any other aggrieved party or Municipal Committee or Zila Parishad or any other public body against the unit's pollution; the Consent to Establish so granted shall be revoked.
16. That all the financial dues required under the rules and policies of the Board have been deposited in full by the unit for this Consent to Establish.
17. In case of change of name from previous Consent to Establish granted, fresh Consent to Establish fee shall be levied.
18. Industry should adopt water conservation measures to ensure minimum consumption of water in their Process. Ground water based proposals of new industries should get clearance from Central Ground Water Authority for scientific development of previous resource.
19. That the unit will take all other clearances from concerned agencies, whenever required.
20. That the unit will not change its process without the prior permission of the Board.
21. That the Consent to Establish so granted will be invalid, if the unit falls in Aravali Area or non conforming area.
22. That the unit will comply with the Hazardous Waste Management Rules and will also make the non-leachate pit for storage of Hazardous waste and will undertake not to dispose off the same except for pit in their own premises or with the authorized disposal authority.
23. That the unit will submit an undertaking that it will comply with all the specific and general conditions as imposed in the above Consent to Establish within 30 days failing which Consent to Establish will be revoked.
24. That unit will obtain EIA from MoEF, if required at any stage.
25. In case of unit does not comply with the above conditions within the stipulated period, Consent to Establish will be revoked.
26. That unit will obtain consent to operate from the board before the start of product activity.

#### **Specific Conditions**

#### **Other Conditions :**



1. The CTE from pollution angle shall not provide immunity from any other Act/Rules applicable to the unit.
2. Unit will install adequate PCDs (Pollution Control Devices i.e. ETP/ APCM) before commissioning as per scheme submitted and undertaking given.
4. Unit will start expansion portion only after obtaining valid CTO from the Board.
5. The unit will obtain prior permission from CGWA or HWRA the competent authority of the State for extraction of Ground Water if any.
6. Unit will provide Green Belt / tree plantation as per the conditions of EC issued by SEIAA.
7. Unit will implement an Environment Management Plan and comply with all the provisions of Mining plan and will strictly abide by the conditions of EC granted by SEIAA.
8. Unit will do the mining activities only on the land for which permission (LOI) has been granted by Mines and geology Deptt. and for which NOC/permission/ CLU by Town and country planning Department has been granted and for which EC obtained by unit.
9. Unit will execute the mining activity strictly as per the mining plan approved by Mining Deptt. & DGMS.
10. Regular water sprinkling shall be done by the unit to control the dust pollution generated during the mining activities.
11. The mineral transportation will be done through covered trucks only.
12. Unit will not discharge any trade effluent/domestic effluent inside or outside the premises.
13. The Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers.
14. Unit will comply with the conditions of the EC granted to the unit and submit six monthly compliance report and compliance of conditions of EC uploaded.
15. The unit will maintain its effluent treatment plant, APCM / dust suppression system in well working condition.
16. Unit will not install any mineral processing unit e.g. Stone crusher, Mineral grinding unit or Screening plant in its lease area.
17. Unit will operate ETP, APCM & will maintain logbook of ETP & APCD, electrical meter reading etc.
18. Unit will obtain all necessary permission/Authorization/registrations done well in time from all the concerned departments.
18. CTE so granted is without prejudice to the any violation caused by the unit in past and will be deemed cancelled automatically, if at any stage to come to the notice of the board & further necessary action as per Environmental Laws will be initiated without giving any further notice.
19. The unit will abide by all the directions / orders issued from time to time by all the court i.e. District Courts, Hon'ble Punjab & Haryana High Court, Chandigarh, Hon'ble NGT and Hon'ble Supreme Court of India w.r.t. mining projects.
20. The unit will abide with the directions/guidelines HSPCB/CPCB/ any court decision/Direction of any competent authority.
21. If fails to comply the provisions of consent procedure & Board policy dated 26.02.2018 as amended till date, the (CTE) consent to establish so granted shall be revoked automatically without giving any notice.
22. If the unit is found not complying the conditions of CTE so granted at any stage, the unit will be liable for legal action, closure action as per the provisions of environmental Acts/laws and for lavvy of Environment Compensation on the basis of polluter pay principal as per the directions of Honble NGT / CAQM/CPCB/ HSPCB issued from time to time.
23. That Project Proponent shall create a buffer zone of 7.5 meter along with the Mining Lease area.
24. The unit is liable to pay the balance CTE fees if found due at any stage.
25. The unit will provide the AAQ stations as per condition EC.
26. That the unit will comply with all the conditions of the ENVIRONMENTAL CLEARANCE ISSUED BY THE MOEF.
27. THE UNIT WILL IMPLEMENT THE ENVIRONMENTAL MANAGEMENT PLAN AND WILL SUBMIT THE COMPLIANCE IN THIS REGARD TO THE BOARD regularly.
28. UNIT WILL DO THE MINING AS PER THE MINING PLAN SUBMITTED.
29. UNIT WILL OBTAIN THE NECESSARY PERMISSIONS AS DESIRED FROM THE CONCERNED DEPARTMENTS.
30. The unit will comply with the provisions of all environmental laws as per policy of the Board.
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**HARYANA STATE**

VIJAY

CHAUDHARY

*Regional Officer, Bhiwani*

Digitally signed by VIJAY  
CHAUDHARY  
Date: 2023.09.29 18:47:46  
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*Haryana State Pollution Control Board.*



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# **ANNEXURE-III**



# Envirochem Testing & Consultancy LLP

(Formerly known as Envirochem Testing Lab & Research Centre)

(NABL ACCREDITED AND GOVT. APPROVED LAB)

(An ISO 9001 : 2015, ISO 14001 : 2015, ISO 45001 : 2018 Certified Lab)

Plot No. 165, 1st Floor, Sector-25, Part-II, HUDA, Panipat-132103, Hr.

M. : +91 90348 91129, 89501 75388

Email : envirochemtestinglab@gmail.com

Web : www.etlrc.com



TC-6015

## TEST REPORT

Report No	ETL/ PNP/ 53450	Report Date	07.09.2024	Doc No.	ETL/QF/7.8/01
Issue to:	Party's Ref No: Nil		Work Order No: 39452		
M/s Haryana State Industrial & Infrastructure Development corporation Limited , Panchkula Village- Khanak, Tehsil-Tosham, Bhiwani	Period of Testing: 04.09.2024-07.09.2024				

### SAMPLE PARTICULARS

1	Type of sample	:	GROUND WATER
2	Point of Sample Collection	:	Borewell (Khanak Mine Site)
3	Date of sample collection/ received	:	02.09.2024
4	Purpose of analysis	:	Monitoring purpose
5	Sample collected/ supplied by	:	By Lab Representative
6	Sample Quantity	:	5litre
7	Method of sampling	:	IS 153025(P-1)

### TEST RESULTS

Sr. No.	Parameters	Results	Protocol Used
1.	Colour, Hazen units	<5	IS 3025 (P-4) : 2021
2.	Turbidity, NTU	<1	IS 3025 (P-10) : 2023
3.	pH	7.99	IS 3025 (P-11) : 1983
4.	Total Hardness (as CaCO <sub>3</sub> ), mg/l	310	IS 3025 (P-21) : 2009
5.	Calcium Hardness (as Ca), mg/l	65.6	IS 3025 (P-40) : 1991
6.	Magnesium Hardness (as Mg), mg/l	36.3	IS 3025 (P-46) : 2023
7.	Iron (as Fe), mg/l	<0.05	IS 3025 (P-53) : 2003
8.	Total Alkalinity (as CaCO <sub>3</sub> ), mg/l	305	IS 3025 (P-23) : 2023
9.	Chloride (as Cl) mg/l	140	IS 3025 (P-32) : 1988
10.	Residual Free Chlorine, mg/l	<0.1	IS 3025 (P-26) : 2021
11.	Hexavalent Chromium (as Cr <sup>6+</sup> ), mg/l	<0.01	IS 3025 (P-52) : 2003
12.	Nitrate (as NO <sub>3</sub> ), mg/l	5.1	IS 3025 (P-34) : 2023
13.	Potassium (as K), mg/l	6.6	IS 3025 (P-45) : 1993
14.	Lead (as Pb), mg/l	<0.01	IS 3025 (P-47) : 1994
15.	Nickel (as Ni), mg/l	<0.01	IS 3025 (P-54) : 2003
16.	Zinc (as Zn), mg/l	<0.05	IS 3025 (P-49) : 1994
17.	Copper (as Cu), mg/l	<0.05	IS 3025 (P-42) : 1992
18.	Electrical Conductivity, μmhos/cm	1840	IS 3025 (P-14) : 1984
19.	Sulphate (as SO <sub>4</sub> ), mg/l	50	IS 3025 (P-24) : 2022
20.	Total Dissolved Solids, mg/l	1240	IS 3025 (P-16) : 2023
21.	Fluoride (as F), mg/l	0.11	APHA Method
22.	Sodium (as Na), mg/l	105	IS 3025 (P-45) : 1993
23.	Total Chromium (as Cr), mg/l	<0.05	IS 3025 (P-52) : 2003

*Bilal*  
Verified By  
Bilal

*[Signature]*

*Neha Singh*  
Date: 07-09-2024  
Authorised By  
Neha Singh

- N 1. Samples shall be disposed off after 15 days issue of test report unless specified.  
O 2. Results listed above related to the tested samples, Endorsement of the same is neither inferred nor implemented.  
T 3. The test report shall not be reproduced full or in part & can't be used as proof in the court of law.  
E 4. The test report should not be used in any advertising agency/media without the written approval of laboratory



# 114 Envirochem Testing & Consultancy LLP

(Formerly known as Envirochem Testing Lab & Research Centre)

(GOVT. APPROVED LAB)

(An ISO 9001 : 2015, ISO 14001 : 2015, ISO 45001 : 2018 Certified Lab)

Plot No. 165, 1st Floor, Sector-25, Part-II, HUDA, Panipat-132103, Hr.

M. : +91 90348 91129, 89501 75388

Email : envirochemtestinglab@gmail.com

Web. : www.etlrc.com



## TEST REPORT

Report No	ETL/ PNP/ 53451	Report Date	07.09.2024	Doc No.	ETL/QF/7.8/01
Issue to: M/s Haryana State Industrial & Infrastructure Development corporation Limited , Panchkula Village- Khanak, Tehsil-Tosham, Bhiwani		Party's Ref No: Nil Work Order No: 39453 Period of Testing: 04.09.2024-07.09.2024			

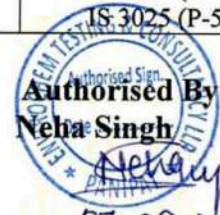
### SAMPLE PARTICULARS

1	Type of sample	: GROUND WATER
2	Point of Sample Collection	: Borewell (HSIIDC Office)
3	Date of sample collection/ received	: 02.09.2024
4	Purpose of analysis	: Monitoring purpose
5	Sample collected/ supplied by	: By Lab Representative
6	Sample Quantity	: 5 litre
7	Method of sampling	: IS 153025(P-1)

### TEST RESULTS

Sr. No.	Parameters	Results	Protocol Used
1.	Colour, Hazen units	<5	IS 3025 (P-4) : 2021
2.	Turbidity, NTU	<1	IS 3025 (P-10) : 2023
3.	pH	7.29	IS 3025 (P-11) : 1983
4.	Total Hardness (as CaCO <sub>3</sub> ), mg/l	270.4	IS 3025 (P-21) : 2009
5.	Calcium Hardness (as Ca), mg/l	52.6	IS 3025 (P-40) : 1991
6.	Magnesium Hardness (as Mg), mg/l	34.5	IS 3025 (P-46) : 2023
7.	Iron (as Fe), mg/l	<0.05	IS 3025 (P-53) : 2003
8.	Total Alkalinity (as CaCO <sub>3</sub> ), mg/l	250	IS 3025 (P-23) : 2023
9.	Chloride (as Cl) mg/l	120	IS 3025 (P-32) : 1988
10.	Residual Free Chlorine, mg/l	<0.1	IS 3025 (P-26) : 2021
11.	Hexavalent Chromium (as Cr <sup>6+</sup> ), mg/l	<0.01	IS 3025 (P-52) : 2003
12.	Nitrate (as NO <sub>3</sub> ), mg/l	5.1	IS 3025 (P-34) : 2023
13.	Potassium (as K), mg/l	10.2	IS 3025 (P-45) : 1993
14.	Lead (as Pb), mg/l	<0.01	IS 3025 (P-47) : 1994
15.	Nickel (as Ni), mg/l	<0.01	IS 3025 (P-54) : 2003
16.	Zinc (as Zn), mg/l	<0.05	IS 3025 (P-49) : 1994
17.	Copper (as Cu), mg/l	<0.05	IS 3025 (P-42) : 1992
18.	Electrical Conductivity, µmhos/cm	2010	IS 3025 (P-14) : 1984
19.	Sulphate (as SO <sub>4</sub> ), mg/l	41	IS 3025 (P-24) : 2022
20.	Total Dissolved Solids, mg/l	1248	IS 3025 (P-16) : 2023
21.	Fluoride (as F), mg/l	0.12	APHA Method
22.	Sodium (as Na), mg/l	95	IS 3025 (P-45) : 1993
23.	Total Chromium (as Cr), mg/l	<0.05	IS 3025 (P-52) : 2003

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Bilal



07-09-2024

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Plot No. 165, 1st Floor, Sector-25, Part-II, HUDA, Panipat-132103, Hr.

M. : +91 90348 91129, 89501 75388

Email : envirochemtestinglab@gmail.com

Web : www.etlrc.com



TC-6015

## TEST REPORT

Report No	ETL/ PNP/ 53452	Report Date	07.09.2024	Doc No.	ETL/QF/7.8/01
Issue to:	Party's Ref No: Nil				
M/s Haryana State Industrial & Infrastructure Development corporation Limited , Panchkula	Work Order No: 39454				
Village- Khanak, Tehsil-Tosham, Bhiwani	Period of Testing: 04.09.2024-07.09.2024				

### SAMPLE PARTICULARS

1	Type of sample	:	GROUND WATER
2	Point of Sample Collection	:	Borewell (Petrol Pump)
3	Date of sample collection/ received	:	02.09.2024
4	Purpose of analysis	:	Monitoring purpose
5	Sample collected/ supplied by	:	By Lab Representative
6	Sample Quantity	:	5 litre
7	Method of sampling	:	IS 153025(P-1)

### TEST RESULTS

Sr. No.	Parameters	Results	Protocol Used
1.	Colour, Hazen units	<5	IS 3025 (P-4) : 2021
2.	Turbidity, NTU	<1	IS 3025 (P-10) : 2023
3.	pH	7.41	IS 3025 (P-11) : 1983
4.	Total Hardness (as CaCO <sub>3</sub> ), mg/l	340.7	IS 3025 (P-21) : 2009
5.	Calcium Hardness (as Ca), mg/l	62.3	IS 3025 (P-40) : 1991
6.	Magnesium Hardness (as Mg), mg/l	45.8	IS 3025 (P-46) : 2023
7.	Iron (as Fe), mg/l	<0.05	IS 3025 (P-53) : 2003
8.	Total Alkalinity (as CaCO <sub>3</sub> ), mg/l	330	IS 3025 (P-23) : 2023
9.	Chloride (as Cl) mg/l	155	IS 3025 (P-32) : 1988
10.	Residual Free Chlorine, mg/l	<0.1	IS 3025 (P-26) : 2021
11.	Hexavalent Chromium (as Cr <sup>6+</sup> ), mg/l	<0.01	IS 3025 (P-52) : 2003
12.	Nitrate (as NO <sub>3</sub> ), mg/l	5.4	IS 3025 (P-34) : 2023
13.	Potassium (as K), mg/l	9.6	IS 3025 (P-45) : 1993
14.	Lead (as Pb), mg/l	<0.01	IS 3025 (P-47) : 1994
15.	Nickel (as Ni), mg/l	<0.01	IS 3025 (P-54) : 2003
16.	Zinc (as Zn), mg/l	<0.05	IS 3025 (P-49) : 1994
17.	Copper (as Cu), mg/l	<0.05	IS 3025 (P-42) : 1992
18.	Electrical Conductivity, µmhos/cm	2036	IS 3025 (P-14) : 1984
19.	Sulphate (as SO <sub>4</sub> ), mg/l	65	IS 3025 (P-24) : 2022
20.	Total Dissolved Solids, mg/l	1310	IS 3025 (P-16) : 2023
21.	Fluoride (as F), mg/l	0.14	APHA Method
22.	Sodium (as Na), mg/l	90	IS 3025 (P-45) : 1993
23.	Total Chromium (as Cr), mg/l	<0.05	IS 3025 (P-52) : 2003

\*\*\*\*\*End Report\*\*\*\*\*

Verified By  
Bilal

Authorised By  
Neha Singh

Date  
07-09-2024

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## TEST REPORT

Report No	ETL/ PNP/ 53453	Report Date	07.09.2024	Doc No.	ETL/QF/7.8/01
Issue to:		Party's Ref No: Nil			
M/s Haryana State Industrial & Infrastructure Development corporation Limited , Panchkula Village- Khanak, Tehsil-Tosham, Bhiwani		Work Order No: 39455			
		Period of Testing: 04.09.2024-07.09.2024			

### SAMPLE PARTICULARS

1	Type of sample	:	GROUND WATER
2	Point of Sample Collection	:	Borewell (Tosham Govt. School)
3	Date of sample collection/ received	:	02.09.2024
4	Purpose of analysis	:	Monitoring purpose
5	Sample collected/ supplied by	:	By Lab Representative
6	Sample Quantity	:	2 litre
7	Method of sampling	:	IS 153025(P-1)

### TEST RESULTS

Sr. No.	Parameters	Results	Protocol Used
1.	Colour, Hazen units	<5	IS 3025 (P-4) : 2021
2.	Turbidity, NTU	<1	IS 3025 (P-10) : 2023
3.	pH	7.26	IS 3025 (P-11) : 1983
4.	Total Hardness (as CaCO <sub>3</sub> ), mg/l	290	IS 3025 (P-21) : 2009
5.	Calcium Hardness (as Ca), mg/l	55	IS 3025 (P-40) : 1991
6.	Magnesium Hardness (as Mg), mg/l	37.9	IS 3025 (P-46) : 2023
7.	Iron (as Fe), mg/l	<0.05	IS 3025 (P-53) : 2003
8.	Total Alkalinity (as CaCO <sub>3</sub> ), mg/l	250	IS 3025 (P-23) : 2023
9.	Chloride (as Cl) mg/l	110	IS 3025 (P-32) : 1988
10.	Residual Free Chlorine, mg/l	<0.1	IS 3025 (P-26) : 2021
11.	Hexavalent Chromium (as Cr <sup>6+</sup> ), mg/l	<0.01	IS 3025 (P-52) : 2003
12.	Nitrate (as NO <sub>3</sub> ), mg/l	3.6	IS 3025 (P-34) : 2023
13.	Potassium (as K), mg/l	5.9	IS 3025 (P-45) : 1993
14.	Lead (as Pb), mg/l	<0.01	IS 3025 (P-47) : 1994
15.	Nickel (as Ni), mg/l	<0.01	IS 3025 (P-54) : 2003
16.	Zinc (as Zn), mg/l	<0.05	IS 3025 (P-49) : 1994
17.	Copper (as Cu), mg/l	<0.05	IS 3025 (P-42) : 1992
18.	Electrical Conductivity, μmhos/cm	1955	IS 3025 (P-14) : 1984
19.	Sulphate (as SO <sub>4</sub> ), mg/l	82	IS 3025 (P-24) : 2022
20.	Total Dissolved Solids, mg/l	1340	IS 3025 (P-16) : 2023
21.	Fluoride (as F), mg/l	0.15	APHA Method
22.	Sodium (as Na), mg/l	105	IS 3025 (P-45) : 1993
23.	Total Chromium (as Cr), mg/l	<0.05	IS 3025 (P-52) : 2003

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Neha Singh  
Date: 07-09-2024

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## TEST REPORT

Report No	ETL/ PNP/ 53454	Report Date	07.09.2024	Doc No.	ETL/QF/7.8/01
Issue to: M/s Haryana State Industrial & Infrastructure Development corporation Limited , Panchkula Village- Khanak, Tehsil-Tosham, Bhiwani		Party's Ref No: Nil Work Order No: 39456 Period of Testing: 04.09.2024-07.09.2024			

### SAMPLE PARTICULARS

1	Type of sample	:	SOIL
2	Point of Sample Collection	:	Khanak Mile Site
3	Date of sample collection/ received	:	02.09.2024
4	Purpose of analysis	:	Monitoring purpose
5	Sample collected/ supplied by	:	By Lab Representative
6	Quantity of Sample	:	1 Kg
7	Method of Sampling	:	As per standard

### TEST RESULTS

Sr. No.	Parameters	Results	Protocol used
1.	pH (Sludge/water 1:2)	8.12	ETL/SOP/SW01
2.	Moisture (%)	12.7	USEPA 6010 B Dec. 1996
3.	Organic Matter (%age)	0.42	ETL/SOP/SW01
4.	Specific Conductivity (1:2 Ratio) MS/cm	305	USEPA 6010 B Dec. 1996
5.	Nickel (as Ni), Kg/HA	22	USEPA 6010 B Dec. 1996
6.	Available Potassium (as K), Kg/HA	92	USEPA 6010 B Dec. 1996
7.	Available Phosphorous as P, Kg/HA	76	USEPA 6010 B Dec. 1996
8.	Copper (as Cu), Kg/HA	22.4	USEPA 6010 B Dec. 1996
9.	Nitrogen as N, Kg/HA	207	ETL/SOP/SW/25
10.	Zinc (as Zn), Kg/HA	55.1	USEPA 6010 B Dec. 1996
11.	Cadmium, Kg/HA	ND	USEPA 6010 B Dec. 1996
12.	Total Chromium, Kg/HA	ND	USEPA 6010 B Dec. 1996
13.	Lead (as Pb), Kg/HA	ND	USEPA 6010 B Dec. 1996
14.	Mercury Kg/HA	ND( DL- 1 Kg/HA)	APHA Method
15.	Available Sodium (as Na). Kg/HA	29.7	IS 3025 (P-45) : 1993

Remarks: Parameters at Sr. No. 1, 2 & 4 on received basis, others are on dry basis

\*\*\*\*\*End Report\*\*\*\*\*

*Bilal*  
Verified By  
Bilal

Authorised By  
Neha Singh  
Date *Neha Singh*  
07-09-2024

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## TEST REPORT

Report No	ETL/ PNP/ 53455	Report Date	07.09.2024	Doc No.	ETL/QF/7.8/01
Issue to: M/s Haryana State Industrial & Infrastructure Development corporation Limited , Panchkula Village- Khanak, Tehsil-Tosham, Bhiwani		Party's Ref No: Nil Work Order No: 39457 Period of Testing: 04.09.2024-07.09.2024			

### SAMPLE PARTICULARS

1	Type of sample	:	SOIL
2	Point of Sample Collection	:	HSIIDC Office
3	Date of sample collection/ received	:	02.09.2024
4	Purpose of analysis	:	Monitoring purpose
5	Sample collected/ supplied by	:	By Lab Representative
6	Quantity of Sample	:	1 Kg
7	Method of Sampling	:	As per standard

### TEST RESULTS

Sr. No.	Parameters	Results	Protocol used
1.	pH (Sludge/water 1:2)	8.15	ETL/SOP/SW01
2.	Moisture (%)	17.2	USEPA 6010 B Dec. 1996
3	Organic Matter (%age)	0.42	ETL/SOP/SW01
4	Specific Conductivity (1:2 Ratio) MS/cm	270	USEPA 6010 B Dec. 1996
5	Nickel (as Ni), Kg/HA	23.7	USEPA 6010 B Dec. 1996
6	Available Potassium (as K), Kg/HA	95.9	USEPA 6010 B Dec. 1996
7	Available Phosphorous as P, Kg/HA	70.1	USEPA 6010 B Dec. 1996
8	Copper (as Cu), Kg/HA	32.1	USEPA 6010 B Dec. 1996
9	Nitrogen as N, Kg/HA	220	ETL/SOP/SW/25
10	Zinc (as Zn), Kg/HA	67.4	USEPA 6010 B Dec. 1996
11	Cadmium, Kg/HA	ND	USEPA 6010 B Dec. 1996
12	Total Chromium, Kg/HA	ND	USEPA 6010 B Dec. 1996
13	Lead (as Pb), Kg/HA	ND	USEPA 6010 B Dec. 1996
14	Mercury Kg/HA	ND( DL- 1 Kg/HA)	APHA Method
15	Available Sodium (as Na). Kg/HA	25.6	IS 3025 (P-45) : 1993

Remarks: Parameters at Sr. No. 1, 2 & 4 on received basis, others are on dry basis

*Bilal*  
Verified By  
Bilal

\*\*\*\*\*End Report\*\*\*\*\*

Authorised By  
Neha Singh  
Date  
*Neha Singh*  
07-09-2024

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## TEST REPORT

Report No	ETL/ PNP/ 53456	Report Date	07.09.2024	Doc No.	ETL/QF/7.8/01
Issue to: M/s Haryana State Industrial & Infrastructure Development corporation Limited , Panchkula Village- Khanak, Tehsil-Tosham, Bhiwani		Party's Ref No: Nil Work Order No: 39458 Period of Testing: 04.09.2024-07.09.2024			

### SAMPLE PARTICULARS

1	Type of sample	:	SOIL
2	Point of Sample Collection	:	Petrol Pump
3	Date of sample collection/ received	:	02.09.2024
4	Purpose of analysis	:	Monitoring purpose
5	Sample collected/ supplied by	:	By Lab Representative
6	Quantity of Sample	:	1 Kg
7	Method of Sampling	:	As per standard

### TEST RESULTS

Sr. No.	Parameters	Results	Protocol used
1.	pH (Sludge/water 1:2)	8.49	ETL/SOP/SW01
2.	Moisture (%)	16.4	USEPA 6010 B Dec. 1996
3	Organic Matter (%age)	0.45	ETL/SOP/SW01
4	Specific Conductivity (1:2 Ratio) MS/cm	260	USEPA 6010 B Dec. 1996
5	Nickel (as Ni), Kg/HA	21.9	USEPA 6010 B Dec. 1996
6	Available Potassium (as K), Kg/HA	72.8	USEPA 6010 B Dec. 1996
7	Available Phosphorous as P, Kg/HA	61.9	USEPA 6010 B Dec. 1996
8	Copper (as Cu), Kg/HA	22.2	USEPA 6010 B Dec. 1996
9	Nitrogen as N, Kg/HA	205.4	ETL/SOP/SW/25
10	Zinc (as Zn), Kg/HA	55.2	USEPA 6010 B Dec. 1996
11	Cadmium, Kg/HA	ND	USEPA 6010 B Dec. 1996
12	Total Chromium, Kg/HA	ND	USEPA 6010 B Dec. 1996
13	Lead (as Pb), Kg/HA	ND	USEPA 6010 B Dec. 1996
14	Mercury Kg/HA	ND( DL- 1 Kg/HA)	APHA Method
15	AvailableSodium (as Na). Kg/HA	21.9	IS 3025 (P-45) : 1993

Remarks: Parameters at Sr. No. 1, 2 & 4 on received basis, others are on dry basis

Verified By  
Bilal

\*\*\*\*\*End Report\*\*\*\*\*

Authorised By  
Neha Singh  
07-09-2024  
PANIPAT

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## TEST REPORT

Report No	ETL/ PNP/ 53457	Report Date	07.09.2024	Doc No.	ETL/QF/7.8/01
Issue to: M/s Haryana State Industrial & Infrastructure Development corporation Limited , Panchkula Village- Khanak, Tehsil-Tosham, Bhiwani		Party's Ref No: Nil Work Order No: 39459 Period of Testing: 04.09.2024-07.09.2024			

### SAMPLE PARTICULARS

1	Type of sample	:	SOIL
2	Point of Sample Collection	:	Tosham Govt. School
3	Date of sample collection/ received	:	02.09.2024
4	Purpose of analysis	:	Monitoring purpose
5	Sample collected/ supplied by	:	By Lab Representative
6	Quantity of Sample	:	1 Kg
7	Method of Sampling	:	As per standard

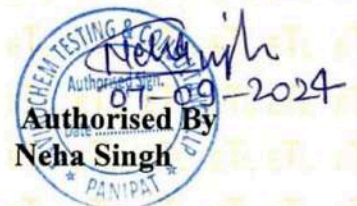
### TEST RESULTS

Sr. No.	Parameters	Results	Protocol used
1.	pH (Sludge/water 1:2)	8.45	ETL/SOP/SW01
2.	Moisture (%)	12.7	USEPA 6010 B Dec. 1996
3	Organic Matter (%age)	0.43	ETL/SOP/SW01
4	Specific Conductivity (1:2 Ratio) MS/cm	240	USEPA 6010 B Dec. 1996
5	Nickel (as Ni), Kg/HA	20	USEPA 6010 B Dec. 1996
6	Available Potassium (as K), Kg/HA	95	USEPA 6010 B Dec. 1996
7	Available Phosphorous as P, Kg/HA	72	USEPA 6010 B Dec. 1996
8	Copper (as Cu), Kg/HA	201	USEPA 6010 B Dec. 1996
9	Nitrogen as N, Kg/HA	185	ETL/SOP/SW/25
10	Zinc (as Zn), Kg/HA	61.9	USEPA 6010 B Dec. 1996
11	Cadmium, Kg/HA	ND	USEPA 6010 B Dec. 1996
12	Total Chromium, Kg/HA	ND	USEPA 6010 B Dec. 1996
13	Lead (as Pb), Kg/HA	ND	USEPA 6010 B Dec. 1996
14	Mercury Kg/HA	ND( DL- 1 Kg/HA)	APHA Method
15	Available Sodium (as Na). Kg/HA	24.4	IS 3025 (P-45) : 1993

Remarks: Parameters at Sr. No. 1, 2 & 4 on received basis, others are on dry basis

\*\*\*\*\*End Report\*\*\*\*\*

Verified By  
Bilal



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## TEST REPORT

<b>Report No</b>	ETL/ PNP/ 53458	<b>Report Date</b>	07.09.2024	<b>Doc No.</b>	ETL/QF/7.8/01
<b>Issue to:</b> M/s Haryana State Industrial & Infrastructure Development corporation Limited , Panchkula Village- Khanak, Tehsil-Tosham, Bhiwani		<b>Party's Ref No:</b> Nil <b>Work Order No:</b> 39460 <b>Date of Measurement:</b> 02.09.2024			
<b>SAMPLE PARTICULARS</b>					
1	Type of sample	:	Ambient Noise : Khanak Mine Site		
2	Date of sample measurement	:	02.09.2024		
3	Purpose of analysis	:	Monitoring purpose		
4	Sample collected/ supplied by	:	By Lab Representative		

### OBSERVATIONS

Sr. No.	Point of measurement	I	II	III	IV	V	VI
1.	Khanak Mine Site	65.2	67.7	70.5	71.5	67.9	71.7

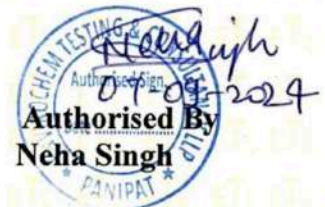
### TEST RESULTS

Sr. No.	Point of Measurement	Noise Level (dB)			Limit (dB)
		Min.	Max.	Average	
1.	Khanak Mine Site	65.2	71.7	69.0	75

Remarks: Analysed Parameter meet the Standards Limits.

\*\*\*\*\*End Report\*\*\*\*\*

*Bilal*  
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Bilal



*[Signature]*

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TC-6015

## TEST REPORT

<b>Report No</b>	ETL/ PNP/ 53459	<b>Report Date</b>	07.09.2024	<b>Doc No.</b>	ETL/QF/7.8/01
<b>Issue to:</b> M/s Haryana State Industrial & Infrastructure Development corporation Limited , Panchkula Village- Khanak, Tehsil-Tosham, Bhiwani		<b>Party's Ref No:</b> Nil <b>Work Order No:</b> 39461 <b>Date of Measurement:</b> 02.09.2024			

### SAMPLE PARTICULARS

1	Type of sample	:	Ambient Noise : HSIIDC Office
2	Date of sample measurement	:	02.09.2024
3	Purpose of analysis	:	Monitoring purpose
4	Sample collected/ supplied by	:	By Lab Representative

### OBSERVATIONS

Sr. No.	Point of measurement	I	II	III	IV	V	VI
1.	HSIIDC Office	69.7	66.8	71.8	72.5	67.6	66.7


### TEST RESULTS

Sr. No.	Point of Measurement	Noise Level (dB)			Limit (dB)
		Min.	Max.	Average	
1.	HSIIDC Office	66.7	72.5	69.1	75

Remarks: Analysed Parameter meet the Standards Limits.

\*\*\*\*\*End Report\*\*\*\*\*

Verified By  
Bilal

  
 Authorised Sign.  
 Date: 07-09-2024  
 Authorised By  
 Neha Singh\*

- N 1. Samples shall be disposed off after 15 days issue of test report unless specified.  
 O 2. Results listed above related to the tested samples, Endorsement of the same is neither inferred nor implemented.  
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Plot No. 165, 1st Floor, Sector-25, Part-II, HUDA, Panipat-132103, Hr.

M. : +91 90348 91129, 89501 75388

Email : envirochemtestinglab@gmail.com

Web. : www.etlrc.com



TC-6015

## TEST REPORT

Report No	ETL/ PNP/ 53460	Report Date	07.09.2024	Doc No.	ETL/QF/7.8/01
Issue to: M/s Haryana State Industrial & Infrastructure Development corporation Limited , Panchkula Village- Khanak, Tehsil-Tosham, Bhiwani		Party's Ref No: Nil Work Order No: 39462 Date of Measurement: 02.09.2024			

### SAMPLE PARTICULARS

1	Type of sample	:	Ambient Noise : Petrol Pump
2	Date of sample measurement	:	02.09.2024
3	Purpose of analysis	:	Monitoring purpose
4	Sample collected/ supplied by	:	By Lab Representative

### OBSERVATIONS

Sr. No.	Point of measurement	I	II	III	IV	V	VI
1.	Petrol Pump	69.2	71.4	72.6	69.5	65.8	71.7

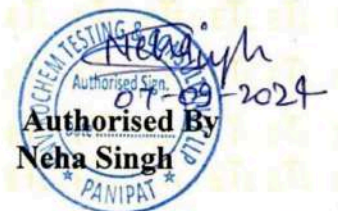
### TEST RESULTS

Sr. No.	Point of Measurement	Noise Level (dB)			Limit (dB)
		Min.	Max.	Average	
1.	Petrol Pump	65.8	72.6	70.0	75

Remarks: Analysed Parameter meet the Standards Limits.

\*\*\*\*\*End Report\*\*\*\*\*

Verified By  
Bilal



*[Handwritten Signature]*

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TC-6015

## TEST REPORT

Report No	ETL/ PNP/ 53461	Report Date	07.09.2024	Doc No.	ETL/QF/7.8/01
Issue to: M/s Haryana State Industrial & Infrastructure Development corporation Limited , Panchkula Village- Khanak, Tehsil-Tosham, Bhiwani		Party's Ref No: Nil Work Order No: 39463 Date of Measurement: 02.09.2024			

### SAMPLE PARTICULARS

1	Type of sample	:	Ambient Noise : Tosham Govt. School
2	Date of sample measurement	:	02.09.2024
3	Purpose of analysis	:	Monitoring purpose
4	Sample collected/ supplied by	:	By Lab Representative

### OBSERVATIONS

Sr. No.	Point of measurement	I	II	III	IV	V	VI
1.	Tosham Govt. School	67.7	68.5	71.2	72.5	67.5	71.9

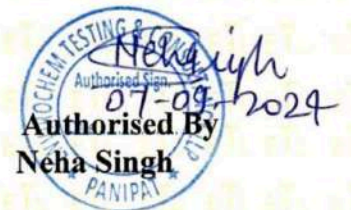
### TEST RESULTS

Sr. No.	Point of Measurement	Noise Level (dB)			Limit (dB)
		Min.	Max.	Average	
1.	Tosham Govt. School	67.5	72.5	69.8	75

Remarks: Analysed Parameter meet the Standards Limits.

Verified By  
Bilal

\*\*\*\*\*End Report\*\*\*\*\*



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TC-6015

## TEST REPORT

Report No	ETL/ PNP/ 53462	Report Date	07.09.2024	Doc No.	ETL/QF/7.8/01
Issue to: M/s Haryana State Industrial & Infrastructure Development corporation Limited , Panchkula Village- Khanak, Tehsil-Tosham, Bhiwani		Party's Ref No: Nil Work Order No: 39464 Period of Testing: 04.09.2024-07.09.2024			
SAMPLE PARTICULARS					
1	Name of the Unit	:	M/s Khanak Mines Stone		
2	Type of Sample	:	Ambient Air		
3	Sampling Point	:	Khanak Mine Site		
4	Date of Sampling	:	02.09.2024-03.09.2024		
5	Purpose of Analysis	:	Monitoring		
6.	Sample Collected by / Supplied by	:	By Lab Representative		
7.	Method of Sampling	:	IS 5182 (P – 5) 1975		
OBSERVATIONS					
1	Average flowrate for PM <sub>10</sub> (m <sup>3</sup> / min)	:	1.06		
2	Total volume of air sampled (m <sup>3</sup> )	:	1527.672		
3	Period of Sampling, (Hr.)	:	24.02		

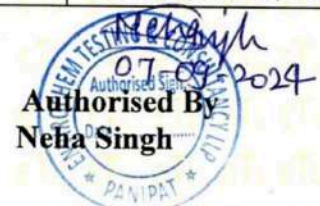
## TEST RESULTS

Sr. No.	Parameters	Results	Standard Limits	Protocol Used
1.	Particulate Matter PM <sub>10</sub> , (µg/m <sup>3</sup> )	81.6	100	IS 5182 (Part 23) 2006
2.	Particulate Matter PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	52.4	60	IS 5182 (Part 24) 2019
3.	Sulphur Dioxide (SO <sub>2</sub> ), (µg/m <sup>3</sup> )	12.7	80	IS 5182 (Part 2) 2001
4.	Oxides of Nitrogen (NO <sub>2</sub> ), (µg/m <sup>3</sup> )	28	80	IS 5182 (Part 6) 2006
5.	Ammonia (NH <sub>3</sub> ), (µg/m <sup>3</sup> )	38.7	400	IS 5182 (Part 25) 2018
6.	Carbon Monoxide (CO), (mg/m <sup>3</sup> )	<1.1	4	IS 5182 (Part 10) 1999
7.	Ozone (O <sub>3</sub> ), (µg/m <sup>3</sup> ) for 8 Hr	35.6	100	IS 5182 (Part -IX) : 1974
8.	Lead (Pb), (µg/m <sup>3</sup> )	BDL(<0.1)	1.0	IS 5182 (Part -22) : 2004
9.	Nickel (Ni), (ng/m <sup>3</sup> )	0.88	20	IS 5182 (Part 26) 2020
10.	Arsenic (As), (ng/m <sup>3</sup> )	BDL(<0.5)	6	APHA Method
11.	Benzene (C <sub>6</sub> H <sub>6</sub> ), (µg/m <sup>3</sup> )	BDL(<1)	5	IS 5182 (Part -11) : 2006
12.	Benzopyrine (BaP), (ng/m <sup>3</sup> )	BDL(<0.2)	1	IS 5182 (Part -12) : 2004

Remark: Analysed Parameters meet the Standards Limits. BDL-Below Detection Limit

\*\*\*\*\*End Report\*\*\*\*\*

Verified By  
Bilal



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TC-6015

## TEST REPORT

Report No	ETL/ PNP/ 53463	Report Date	07.09.2024	Doc No.	ETL/QF/7.8/01
Issue to:		Party's Ref No: Nil			
M/s Haryana State Industrial & Infrastructure Development corporation Limited, Panchkula		Work Order No: 39465			
Village- Khanak, Tehsil-Tosham, Bhiwani		Period of Testing: 04.09.2024-07.09.2024			

### SAMPLE PARTICULARS

1	Name of the Unit	:	M/s Khanak Mines Stone
2	Type of Sample	:	Ambient Air
3	Sampling Point	:	HSI IDC Office
4	Date of Sampling	:	02.09.2024-03.09.2024
5	Purpose of Analysis	:	Monitoring
6	Sample Collected by / Supplied by	:	By Lab Representative
7	Method of Sampling	:	IS 5182 (P - 5) 1975

### OBSERVATIONS

1	Average flowrate for PM <sub>10</sub> (m <sup>3</sup> / min)	:	1.02
2	Total volume of air sampled (m <sup>3</sup> )	:	1459.62
3	Period of Sampling, (Hr.)	:	23.85

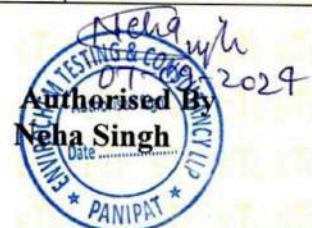
### TEST RESULTS

Sr. No.	Parameters	Results	Standard Limits	Protocol Used
1.	Particulate Matter PM <sub>10</sub> , (µg/m <sup>3</sup> )	85.6	100	IS 5182 (Part 23) 2006
2.	Particulate Matter PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	56.7	60	IS 5182 (Part 24) 2019
3.	Sulphur Dioxide (SO <sub>2</sub> ), (µg/m <sup>3</sup> )	14.2	80	IS 5182 (Part 2) 2001
4.	Oxides of Nitrogen (NO <sub>2</sub> ), (µg/m <sup>3</sup> )	32.4	80	IS 5182 (Part 6) 2006
5.	Ammonia (NH <sub>3</sub> ), (µg/m <sup>3</sup> )	28.5	400	IS 5182 (Part 25) 2018
6.	Carbon Monoxide (CO), (mg/m <sup>3</sup> )	<1.1	4	IS 5182 (Part 10) 1999
7.	Ozone (O <sub>3</sub> ), (µg/m <sup>3</sup> ) for 8 Hr	45.7	100	IS 5182 (Part -IX) : 1974
8.	Lead (Pb), (µg/m <sup>3</sup> )	BDL(<0.1)	1.0	IS 5182 (Part -22) : 2004
9.	Nickel (Ni), (ng/m <sup>3</sup> )	0.76	20	IS 5182 (Part 26) 2020
10.	Arsenic (As), (ng/m <sup>3</sup> )	BDL(<0.5)	6	APHA Method
11.	Benzene (C <sub>6</sub> H <sub>6</sub> ), (µg/m <sup>3</sup> )	BDL(<1)	5	IS 5182 (Part -11) : 2006
12.	Benzopyrine (BaP), (ng/m <sup>3</sup> )	BDL(<0.2)	1	IS 5182 (Part -12) : 2004

Remark: Analysed Parameters meet the Standards Limits. BDL-Below Detection Limit

\*\*\*\*\*End Report\*\*\*\*\*

Verified By  
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TC-6015

## TEST REPORT

Report No	ETL/ PNP/ 53464	Report Date	07.09.2024	Doc No.	ETL/QF/7.8/01
Issue to: M/s Haryana State Industrial & Infrastructure Development corporation Limited , Panchkula Village- Khanak, Tehsil-Tosham, Bhiwani		Party's Ref No: Nil Work Order No: 39466 Period of Testing: 04.09.2024-07.09.2024			

### SAMPLE PARTICULARS

1	Name of the Unit	:	M/s Khanak Mines Stone
2	Type of Sample	:	Ambient Air
3	Sampling Point	:	Petrol Pump
4	Date of Sampling	:	02.09.2024-03.09.2024
5	Purpose of Analysis	:	Monitoring
6	Sample Collected by / Supplied by	:	By Lab Representative
7	Method of Sampling	:	IS 5182 (P - 5) 1975

### OBSERVATIONS

1	Average flowrate for PM <sub>10</sub> (m <sup>3</sup> / min)	:	1.04
2	Total volume of air sampled (m <sup>3</sup> )	:	1501.344
3	Period of Sampling, (Hr.)	:	24.06

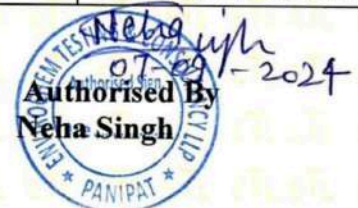
### TEST RESULTS

Sr. No.	Parameters	Results	Standard Limits	Protocol Used
1.	Particulate Matter PM <sub>10</sub> , (µg/m <sup>3</sup> )	88.7	100	IS 5182 (Part 23) 2006
2.	Particulate Matter PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	51.6	60	IS 5182 (Part 24) 2019
3.	Sulphur Dioxide (SO <sub>2</sub> ), (µg/m <sup>3</sup> )	9.4	80	IS 5182 (Part 2) 2001
4.	Oxides of Nitrogen (NO <sub>2</sub> ), (µg/m <sup>3</sup> )	32.6	80	IS 5182 (Part 6) 2006
5.	Ammonia (NH <sub>3</sub> ), (µg/m <sup>3</sup> )	37.3	400	IS 5182 (Part 25) 2018
6.	Carbon Monoxide (CO), (mg/m <sup>3</sup> )	<1.1	4	IS 5182 (Part 10) 1999
7.	Ozone (O <sub>3</sub> ), (µg/m <sup>3</sup> ) for 8 Hr	48.7	100	IS 5182 (Part -IX) : 1974
8.	Lead (Pb), (µg/m <sup>3</sup> )	BDL(<0.1)	1.0	IS 5182 (Part -22) : 2004
9.	Nickel (Ni), (ng/m <sup>3</sup> )	1.12	20	IS 5182 (Part 26) 2020
10.	Arsenic (As), (ng/m <sup>3</sup> )	BDL(<0.5)	6	APHA Method
11.	Benzene (C <sub>6</sub> H <sub>6</sub> ), (µg/m <sup>3</sup> )	BDL(<1)	5	IS 5182 (Part -11) : 2006
12.	Benzopyrine (BaP), (ng/m <sup>3</sup> )	BDL(<0.2)	1	IS 5182 (Part -12) : 2004

Remark: Analysed Parameters meet the Standards Limits. BDL-Below Detection Limit

\*\*\*\*\*End Report\*\*\*\*\*

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TC-6015

## TEST REPORT

Report No	ETL/ PNP/ 53465	Report Date	07.09.2024	Doc No.	ETL/QF/7.8/01
Issue to: M/s Haryana State Industrial & Infrastructure Development corporation Limited , Panchkula Village- Khanak, Tehsil-Tosham, Bhiwani		Party's Ref No: Nil Work Order No: 39467 Period of Testing: 04.09.2024-07.09.2024			
SAMPLE PARTICULARS					
1	Name of the Unit	:	M/s Khanak Mines Stone		
2	Type of Sample	:	Ambient Air		
3	Sampling Point	:	Tosham Govt. School		
4	Date of Sampling	:	02.09.2024-03.09.2024		
5	Purpose of Analysis	:	Monitoring		
6	Sample Collected by / Supplied by	:	By Lab Representative		
7	Method of Sampling	:	IS 5182 (P - 5) 1975		
OBSERVATIONS					
1	Average flowrate for PM <sub>10</sub> (m <sup>3</sup> / min)	:	1.03		
2	Total volume of air sampled (m <sup>3</sup> )	:	1485.054		
3	Period of Sampling, (Hr.)	:	24.03		

## TEST RESULTS

Sr. No.	Parameters	Results	Standard Limits	Protocol Used
1.	Particulate Matter PM <sub>10</sub> , (µg/m <sup>3</sup> )	91.7	100	IS 5182 (Part 23) 2006
2.	Particulate Matter PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	55.1	60	IS 5182 (Part 24) 2019
3.	Sulphur Dioxide (SO <sub>2</sub> ), (µg/m <sup>3</sup> )	12.6	80	IS 5182 (Part 2) 2001
4.	Oxides of Nitrogen (NO <sub>2</sub> ), (µg/m <sup>3</sup> )	23.9	80	IS 5182 (Part 6) 2006
5.	Ammonia (NH <sub>3</sub> ), (µg/m <sup>3</sup> )	30	400	IS 5182 (Part 25) 2018
6.	Carbon Monoxide (CO), (mg/m <sup>3</sup> )	<1.1	4	IS 5182 (Part 10) 1999
7.	Ozone (O <sub>3</sub> ), (µg/m <sup>3</sup> ) for 8 Hr	45.8	100	IS 5182 (Part -IX) : 1974
8.	Lead (Pb), (µg/m <sup>3</sup> )	BDL(<0.1)	1.0	IS 5182 (Part -22) : 2004
9.	Nickel (Ni), (ng/m <sup>3</sup> )	1.06	20	IS 5182 (Part 26) 2020
10.	Arsenic (As), (ng/m <sup>3</sup> )	BDL(<0.5)	6	APHA Method
11.	Benzene (C <sub>6</sub> H <sub>6</sub> ), (µg/m <sup>3</sup> )	BDL(<1)	5	IS 5182 (Part -11) : 2006
12.	Benzopyrine (BaP), (ng/m <sup>3</sup> )	BDL(<0.2)	1	IS 5182 (Part -12) : 2004

Remark: Analysed Parameters meet the Standards Limits. BDL-Below Detection Limit

\*\*\*\*\*End Report\*\*\*\*\*

Verified By  
Bilal

Authorised By  
Neha Singh  
07-09-2024

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# **ANNEXURE-IV**



130

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Indian Institute of Technology Patna  
कनपा रोड, बिहटा, पटना - 801106, भारत  
Kanpa Road, Bihta, Patna - 801106, India

REPORT ON  
Khanak Stone Mine

**STUDY OF SLOPE STABILITY OF MINE BENCHES AT HSIIDC,  
KHANAK STONE MINE**

Submitted  
to

**PROJECT OFFICER  
KHANAK STONES MINES,**

Submitted by



**Dr. Amit Kumar Verma**

**Department of Civil and Environmental Engineering,  
Indian Institute of Technology Patna  
Bihar, 801106**



Date: 19.09.2023

## STUDY OF SLOPE STABILITY OF MINE BENCHES AT HSIIDC, KHANAK STONE MINE

### 1. Introduction

In the overall interest of the state i.e., systematic and scientific operations, conservation of minor minerals, availability of construction material at reasonable rates to the consumer both in public and private sectors and to ensure proper market intervention to defeat any monopoly by private lessees, the state government in the department of mines and Geology had decided to operate the stone the stone Mine of village-Khanak, Tehsil-Tosham, District: Bhiwani through its public undertaking Haryana state Industrial Infrastructure Development Corporations (HSIIDC) vide memo No Gig/HY/HSIIDC/7535 dated 30.11.2013 issued by the Director, Mines and Geology, Government of Haryana.

### 2. Project profile

#### 2.1. Location and Communication

##### 2.1.1. Location

The area of study of the Khanak stone Mine located in Khanak village near Tosham Police station Bhiwani District, Haryana state. The latitude and longitude of all corner boundary point/pillar Fixed references point hence, Latitude:  $28^{\circ}53'36.51''N$  to  $28^{\circ}54'48.46''N$  and longitudes  $75^{\circ}50'39.39''E$  to  $75^{\circ}52'50.70''E$ .

#### 2.2. ACCESSIBILITY AND COMMUNICATION

The name of the mines Khanak Stone Mines located on Khanak village, Tosham-Tehsil, Police station-Tosham, District-Bhiwani, HSIIDC office complex, Khanak, State- Haryana, Pin code – 496001. The existing plan having 258.30 area in hectare of land and type of land is Gairmumkin-Pahar. The existing nearest state highway No. 65 is located at a distance of about 23km. Passing towards west direction of MDR and village roads around the area. Nearest Railway station is Bawani Kheda about 23.0 km from the area. It is noted that, there is no national park, Wild Life Sanctuary or Protected Forest near the existing plan.





### 2.3. CLIMATE AND RAINFALL DATA

The climate of Bhiwani district can be classified as tropical steppe, semi-arid and hot which is mainly dry with very hot summer and cold winter except during monsoon season when moist air of oceanic origin penetrates into the district. There are four seasons in a year. The hot weather season starts from mid-March to last week of the June followed by the south-west monsoon which lasts up to September. The transit ion period from September to October forms the post-monsoon season. The winter season starts late in November and remains up to first week of march. The normal annual rainfall of the district is 420 mm which is unevenly distributed over the area 22 days. The south west monsoon sets in form last week of June and withdraws in end of September, contributed about 85% of annual rainfall. July and August are the wettest months. Rest 15% rainfall is received during non-monsoon period in the wake of western disturbance and thunder storms. Generally, rainfall in the district increases from southwest to northeast.

### 2.4. TOPOGRAPHY WITH DRAINAGE PATTERN OF AREA

Open cast mining project requires effective arrangements for drainage and provision of adequate dewatering capacity in the pits under mining. In the area under mining water can reach the workings from surface drainage, rainwater and due to seepage through joints and fissures. Therefore, the problem can be solved by preventing drainage water from entering the pits on one hand pumping out the percolated and direct rain water from the pits on the other hand. The general water table around the lease area is at about 80 metres below the ground due to rocky terrain. The hill is mainly sloping both east and west direction. Initial mining shall be mainly above the general ground level with only one side of the pit having slope along hill and other side will remain open. Such situation does not warrant any water accumulation as natural drainage will be available from the other open side of the pit.

### 2.5. GEOLOGICAL AND MINING CONDITIONS

The area was surveyed geologically. In the Khanak area almost the entire outcrops of rock formation are occupied by the hard bedded granite and weathered disintegrated quartzite of Alwar series. The area covered by alluvium also represents either by hard bedded granite or weathered/ altered quartzite.

#### 2.5.1. Granite (Stone)

This type of formation covers the major part of the hills in the area. It is reddish, bluish and Gray in colour. Semi friable to hard and fine to coarse grained in nature. Granite occurs mostly as building stone extending over the entire length and width

of the lease area. Seven samples of granite stone collected from the lease area and got them tested for various parameters.

**2.5.2. Geo-mechanical Properties**

The engineering properties influence the slope stability analysis. Samples of rock (Granite), were collected from the mine were evaluated for different geo-mechanical properties. Table-1 shows the material properties used in the slope stability analysis for dumps and material properties used pit design.

**Table 1 Geo-mechanical properties of Khanak Stone Mine.**

Material	Cohesion (KPa)	Friction angle(degree)	Density (KN/m3))
Granite for Block A	200	25	26
Granite For Block B	200	25	26

**2.6. Specification of Block A and Block B**

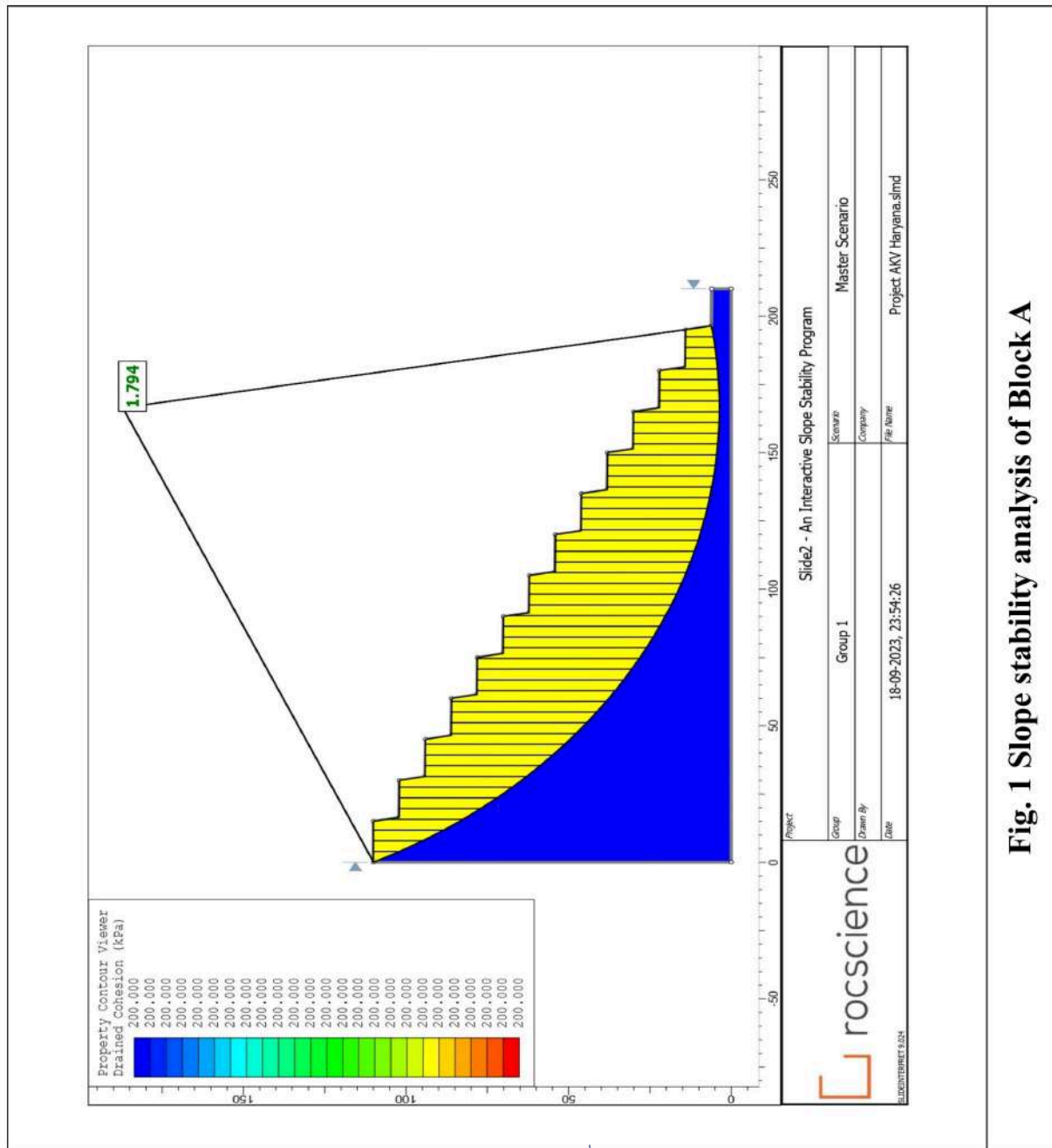
The RL of the top of Block A's slope is 370.269 m from MSL, and the RL of the bottom of Block A's slope is 262.502 m from MSL. The total height of the Block A slope is approximately 110 metres. Block A contains 14 benches, each with a height of 8 metres, an angle of 80 degrees, and a width of 15 metres.

The RL of the top of Block B slope is 302.75m from MSL, and the RL of the bottom of Block B slope is 270.594 m from MSL. The total height of the slope is approximately 33 meters. There are four benches in total, with the first three being 10 metres high from the top of the slope and the last being 3 metres high. The width of each bench is 15 metres.



### 3. Slope Stability Analysis

The Khanak Stone mine slope stability analysis was carried out using Limit equilibrium method of Block A and Block B in order to find out the Factor of safety. It is importantly noted that FOS has been evaluated using SLIDE2 software for both the slope and Mohr Coulomb criterion was considered. Fig. 1 shows the Slope stability analysis for Block A. However, contour plot has also been presented in Fig. 2. Fig. 3 and Fig. 4 represents the Slope Stability Analysis and contour plot of Block B, respectively.



**Fig. 1 Slope stability analysis of Block A**



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Indian Institute of Technology Patna  
कनपा रोड, बिहटा, पटना - 801106, भारत  
Kanpa Road, Bihta, Patna - 801106, India

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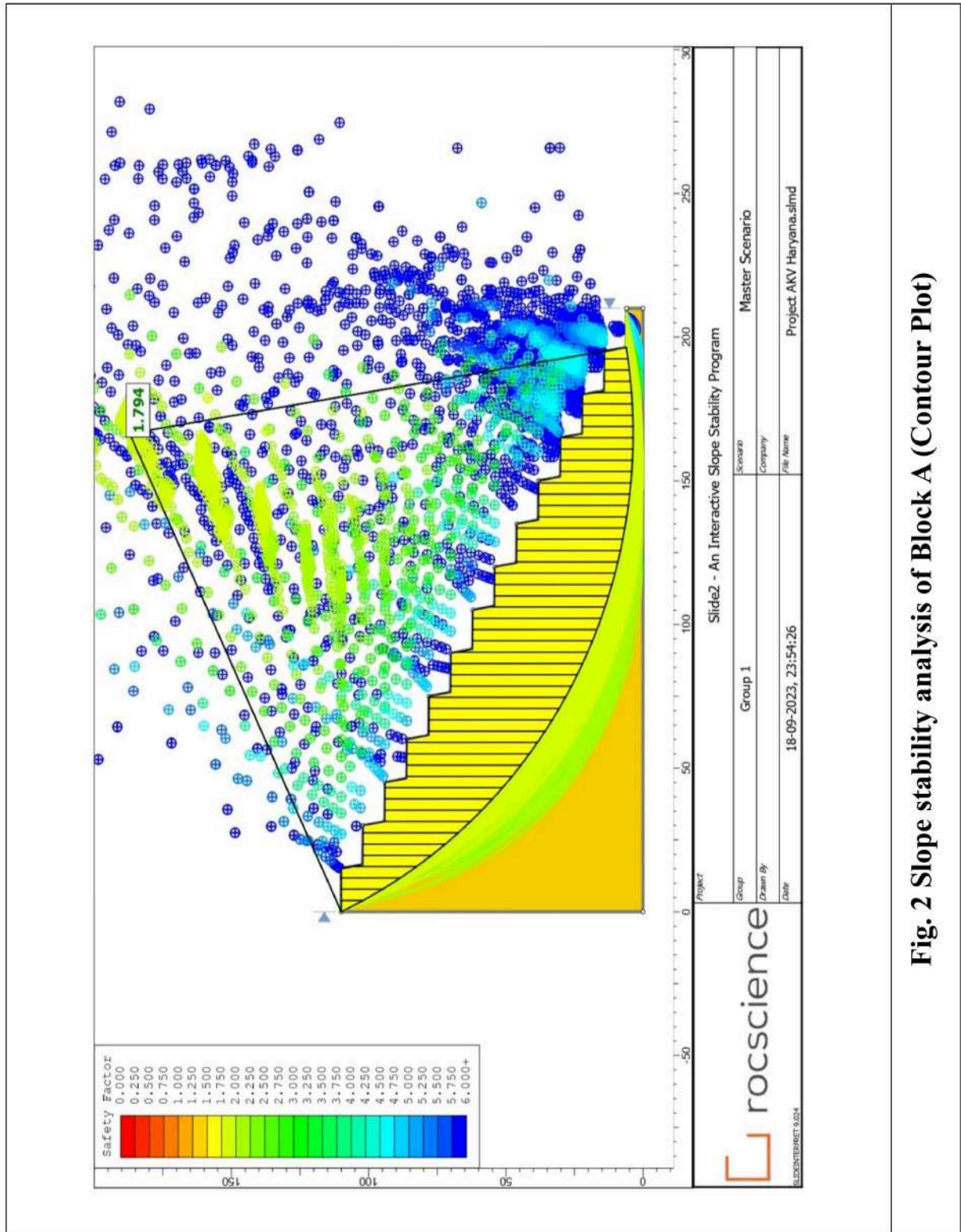


Fig. 2 Slope stability analysis of Block A (Contour Plot)

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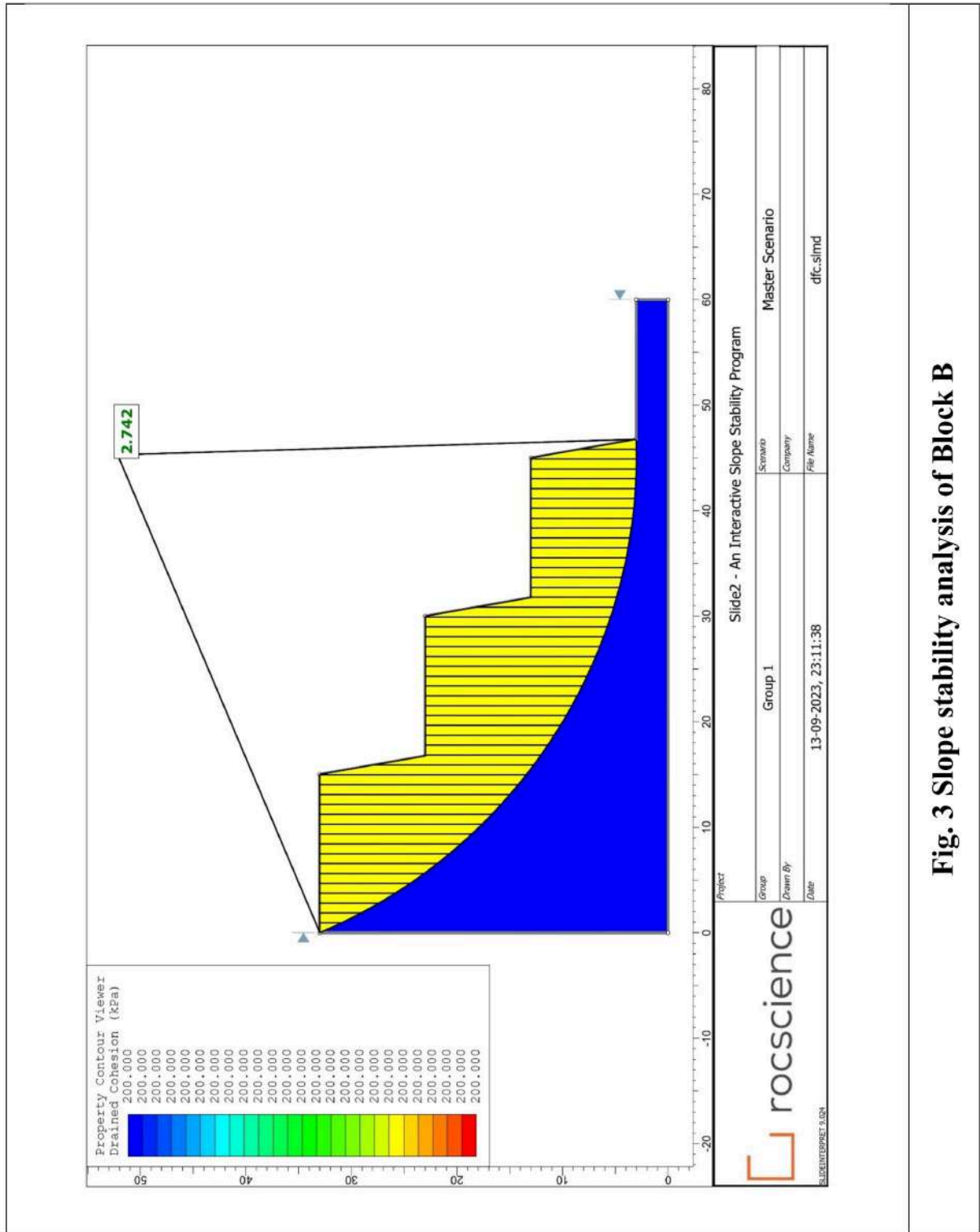


Fig. 3 Slope stability analysis of Block B

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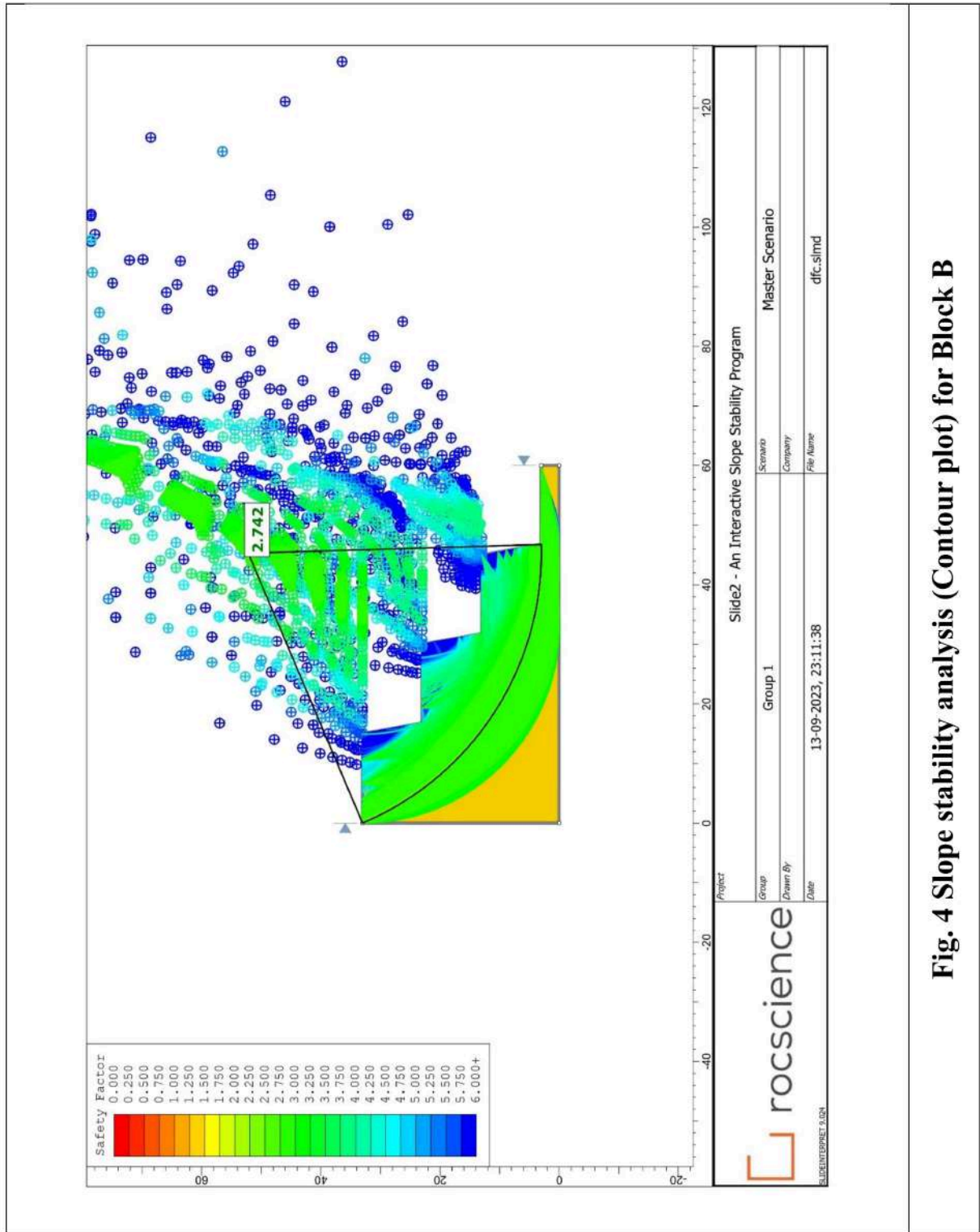


Fig. 4 Slope stability analysis (Contour plot) for Block B

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The outcomes of the analysis have been provided in the following tables. Table 2 shows the safety factor estimated from the analysis for Khanak Stone Mine of two slope i.e., Block A and Block B. A safety factor of 1.794 has been observed for the proposed Block A while safety factor of 2.742 for the Slope B. The outcomes of the analysis have been provided in Table 2 along with height and ultimate slope angle.

**Table 2 Outcomes of the analysis for proposed ultimate Mine slope**

S.No.	Slope	Safety Factor	Height	Ultimate Slope angle
1	Block A	1.794	110 m	80 <sup>0</sup> (Bench slope)
2	Block B	2.742	33m	80 <sup>0</sup>

#### 4. Conclusion and Recommendations

Mining plans and sections, geology, geotechnical properties have been analysed and slope stability analysis was done for slope design for Khanak rock mine to meet the minimum statutory requirement of factor of safety of 1.50.

Block A

- Factor of Safety : 1.794
- Maximum Height : 110 m
- Maximum bench height : 8 m
- Maximum bench width : 15 m
- Maximum bench angle : 80°






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Indian Institute of Technology Patna  
कनपा रोड, बिहटा, पटना - 801106, भारत  
Kanpa Road, Bihta, Patna - 801106, India

Block B

Factor of Safety	:	2.742
Maximum bench height	:	10 m
Maximum bench width	:	15 m
Last bench width	:	3.0 m
Maximum bench angle	:	80°





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