

SUMMARY of EIA/EMP

(As Per EIA Notification No. S.O. 1533(E) dated 14th September 2006 & amendments thereof)

of

ADEGAON DOLOMITE MINE OF GURU NANAK MINERALS

Village – Adegaon, Taluka – Zari Jamni, District - Yavatmal, State: Maharashtra
Lease Area – 17.78 Ha, Survey No. 395, 395/1/A, 395/1/B, 395/2, 395/3/A, 395/3/B, 395/4,
Production Capacity – 12,00,000 Tonnes/Annum (Peak) of Dolomite
(Project Category 'B') (Greenfield Project)

Baseline Data Collection & Analysis

by M/s Nilawar Laboratories, Nagpur
(NABL Accredited)

Period of Monitoring: March 2026 - May 2026

Submission for

Public Hearing

to

Maharashtra Pollution Control Board

Project Proponent

M/S. GURU NANAK MINERALS

Main Road Chandrapur

EIA Consultant



Srushti Seva Pvt. Ltd.

NABET Accredited EIA Consultant Organization
Certificate No. NABET/EIA/25-28/RA 0423 Valid till 12/05/2028

SEPTEMBER 2026

SUMMARY OF EIA/EMP

1.0 INTRODUCTION:

This summary presents brief information of the proposed Adegaon Dolomite Mine located in, Village – Adegaon, Taluka – Zari Jamni, District – Yavatmal, State – Maharashtra. The Adegaon Dolomite Mine, consisting of Private Non-Forest Land, is a Greenfield Dolomite Mining Project. The Project is being implemented by M/s Guru Nanak Minerals, Chandrapur, Maharashtra.

- The proposed project involves a Dolomite Mine (minor mineral) over an area of 17.78 Ha. As per the EIA Notification, 2006, the present project falls under Item 1(a) of the Schedule. According to MoEF&CC Notification No. S.O. 2731(E) dated 9th September 2013, all minor mineral mining projects with a mining lease area of less than 50 ha have been classified as Category “B1” projects. Subsequently, vide MoEF&CC O.M. dated 24th December 2013, projects with a mining lease area of less than 25 ha were further categorized as Category “B2”.
- Though the individual applied mining lease area of M/s Guru Nanak Minerals is 17.78 Ha, the area of other working and proposed mining leases located within a 500 m radius forms a cluster in accordance with the EIA Notification S.O. No. 141(E) dated 15.01.2016. Hence, the project falls under **Category B1** and accordingly the application was submitted for obtaining Terms of Reference (ToR). In the Dolomite belt area, other than applied mine there are other two Dolomite mines are existing in the nearby vicinity within 0.5 km area. Out of two mines, one mines belongs to Mr. Ashish Ramesh Belorkar, Survey no. 373. Having area of 11.64 ha and remaining one belongs to Mr. Ismail Zaveri, Survey no. 387/2, having an area of 6.03 ha.
- M/s Guru Nanak Minerals has proposed mining of Dolomite at a peak production capacity of 12,00,000 TPA. The mining shall be undertaken by Mechanized Opencast Mining Method with drilling and blasting. Average Mining depth will be 6 m during first 5 years. The Mining Plan for mining of Dolomite@ 12,00,000 Tonnes Per Annum as peak production has been approved by the Indian Bureau of Mines.
- The region has good deposits of Dolomite, which is an important mineral for steel, cement and glass manufacturing. distance of approximately 150 km from Yavatmal District Headquarters. The nearest village is Adegaon, situated at approximately 0.87 km towards south-east of the lease area. The lease area is accessible through an approach road from Adegaon village and is connected to the surrounding road network..
- Dolomite is a versatile mineral having applications in various industries. The Dolomite produced from the proposed mine can be utilized in steel production and glass manufacturing, where it serves as an important mineral raw material. Dolomite is also used in the cement industry as a flux material, helping to reduce energy consumption and emissions. Crushed Dolomite can be utilized as a base material for roads and highways.

- M/s Guru Nanak Minerals has initiated the necessary steps for obtaining Environmental Clearance for the proposed Adegaon Dolomite Mine. The auto-generated Terms of Reference has been granted by SEIAA, Maharashtra vide File No. SIA/MH/MIN/588146/2026 dated 25-08-2026, with ToR Identification No. TO26B0108MH5805823N.
- The proposed project will provide direct employment opportunities to 74 persons besides creating indirect employment opportunities. The local persons will be given preference in employment for the mine as per their eligibility. Necessary training will be provided to train the unemployed youths of the nearby villages.

2.0 PROJECT DETAILS:

- The proposed Adegaon Dolomite Mine has a mining lease area of 17.78 Ha with a proposed peak production capacity of 12,00,000 Tonnes/Annum of Dolomite. The total geological resources established in the mining lease area are 2,34,79,782 Tonnes, while the mineable reserves of Dolomite are estimated to be 1,38,20,544 Tonnes. The life of the mine is estimated to be 13 years at the proposed production rate.
- The Hon'ble Collector, Yavatmal, Government of Maharashtra, has issued the Letter of Intent (LOI) vide Letter No. Ashuni/Gounkhani/EP/Kavi/299/2026 dated 13.05.2026/June 2026 for grant of Mining Lease for the Adegaon Dolomite Mine, area of 17.78 Ha, in favour of Guru Nanak Minerals.
- The Mining Plan for the Adegaon Dolomite Mine has been approved by the Directorate Geology & Mining vide letter dated 07.08.2026. The mining lease will be executed after grant of Environmental Clearance by SEIAA, Maharashtra.
- The Terms of Reference (ToR) for the proposed Adegaon Dolomite Mine has been granted by SEIAA, Maharashtra vide File No. SIA/MH/MIN/588146/2026 dated 25-08-2026, with ToR Identification No. TO26B0108MH5805823N.

3.0 BASE LINE ENVIRONMENTAL STATUS:

- The baseline environmental quality data for various components of environment, viz. Air, Noise, Water, Land and Socio-economic were generated during March 2026 to May 2026 in the study area covering 10 km around the Adegaon Dolomite Mine. Other environmental data on flora and fauna, land-use pattern, forest, etc. were also generated through field surveys and also collected from different State Govt. Departments. The baseline environmental monitoring was carried out for one season (Summer 2026) for 13 weeks.

3.1 AIR QUALITY

Air quality monitoring was carried out at monitoring stations covering the Core Zone (Project Area of 17.78 ha) and Buffer Zone (10 Km radius around Core Zone). The monitored

air quality parameters included PM₁₀, PM_{2.5}, Sulphur dioxide (SO₂), Oxides of Nitrogen (NO_x), Ozone (O₃), Carbon Monoxide (CO), Ammonia (NH₃), Benzene (C₆H₆), Benzo α Pyrene (B- α -P), Lead (Pb), Arsenic (As) and Nickel (Ni), which were considered for representing the baseline status of ambient air quality within the study area.

Results & Discussion: On the basis of observations the parameter wise results of air quality monitoring carried out are discussed below and compared with National Ambient Air Quality Standards (Refer: GSR 826(E) dated 16th Nov. 2009).

- **Particulate Matter (PM₁₀):** The maximum PM₁₀ concentration covering all the air quality monitoring stations i.e. A-1 to A-9 were observed in the range of 51.5 to 69.1 $\mu\text{g}/\text{m}^3$. Almost all the stations have a PM₁₀ concentration which is within the permissible limit i.e. 100 $\mu\text{g}/\text{m}^3$ as prescribed by MoEF&CC for industrial, residential, rural and other area.
- **Particulate Matter (PM_{2.5}):** The maximum PM_{2.5} concentration covering all the air quality monitoring stations A-1 to A-9 were observed in the range of 18.4 to 26.6 $\mu\text{g}/\text{m}^3$ as against the NAAQ Standards of MoEF&CC prescribed limit of 60 $\mu\text{g}/\text{m}^3$ for industrial, residential, rural and other areas.
- **Sulphur Dioxide (SO₂):** The maximum SO₂ concentrations covering all sampling stations A-1 to A-9 were in the range of 13.8 to 22.4 $\mu\text{g}/\text{m}^3$. All monitored stations have SO₂ concentrations well within the stipulated (annual 24 hours) limit of 80 $\mu\text{g}/\text{m}^3$ as prescribed for industrial, residential, rural and other areas under revised NAAQ Standards of MoEF&CC.
- **Oxides of Nitrogen (NO_x):** The maximum NO_x concentrations covering all sampling stations A-1 to A-9 were observed in the range of 13.1 to 25.8 $\mu\text{g}/\text{m}^3$. All monitored stations have NO_x concentrations well within the stipulated (annual 24 hours) limit of 80 $\mu\text{g}/\text{m}^3$ as prescribed for industrial, residential, rural and other areas under NAAQ Standards of MoEF&CC.
- **Carbon Monoxide (CO):** Representative samples from all sampling stations were collected and analysed for CO. The concentrations of CO were observed below detectable limit at all the stations.
- **Ammonia (NH₃):** Representative samples from all sampling stations were collected and analysed for Ammonia. The concentrations of Ammonia were observed below detectable limit at all the stations.
- **Ozone (O₃):** Representative samples from all sampling stations were collected and analysed for Ozone. The concentrations of Ozone were observed below detectable limit at all the stations.

- **Heavy Metals:** Representative samples from all sampling stations were collected and analysed for heavy metals i.e. Lead, Arsenic & Nickel. The concentrations of heavy metals were observed below detectable limit at all the stations.
- **Free Silica:** A few samples of PM₁₀ were analysed for free silica which was found to be below 0.0001 percent.

In summary, the ambient air quality of the study area and its buffer zone showed that the concentrations of all monitored parameters were within the stipulated standards of MoEF&CC

3.2 NOISE QUALITY

- **Noise levels** have measured at hourly intervals at the 8 stations from the study area. Recorded Noise Levels in the Adegaon Dolomite mine are as under;
- **Daytime Noise levels:** The daytime Max. noise Levels in Core zone of Adegaon Dolomite Mine was observed as 52.1 dB(A) whereas in buffer zone noise levels were observed in the range of 55.4 to 63.6 dB (A).
- **Night time Noise levels:** The Night time Max. noise Levels in Core zone of Adegaon Dolomite Mine was observed in the range of as 47.7 dB(A) whereas in buffer zone noise levels were observed in the range of 42.1 to 52.1 dB (A).

3.3 WATER QUALITY

Water quality monitoring was carried out from 5 ground water and 5 surface water monitoring stations located in the study area. Overall quality of water samples are showing that the water sources of the area are not polluted except the surface water samples getting contamination from surface run-off. The Coliforms values are exception otherwise all the water samples are indicating its characteristics within limit as given in relevant Indian Standards.

Drainage Pattern: The drainage pattern of the area was studied in detail particularly for the area covered around 2.5 km radius and the details are provided in the report. Similarly, a systematic hydrogeological survey has been carried out in and around the mine area. The drainage pattern of the buffer-zone area is radial in nature. A seasonal stream is present at a distance of about 1 km towards east & west from the lease area. The Adegaon area has a gentle slope in all directions. The existing drainage pattern is governed by the natural topography, slopes and seasonal drainage features of the area.

3.4 SOIL QUALITY

Soil samples were collected at 4 selected locations in the study area to assess the existing soil conditions around the Adegaon Dolomite Mine. Characteristic of forest land soil has sufficient nutrients. Whereas, two agricultural land soils are moderately suitable for cultivation of climatic crops and have good fertility.

3.5 SOCIO-ECONOMIC STATUS:

As per Census 2011, demographic characteristics of the study area are represented by a number of criteria, namely population composition, sex ratio, family structure and age distribution

pattern. An attempt has been made to compare the demographic features based on the available Census data. The area selected for the study constitutes 49 inhabited villages.

- The floral and faunal assemblage in the study area is also provided in the report.
- There is no National Park, Wildlife sanctuary, defense installation or sensitive area located within 15 km radius of the mine.

4.0 ANTICIPATED IMPACTS:

- To predict the expected impacts of various activities on the different environmental parameters, a detailed survey of the factors are performed and identification of probable impacts are done by different techniques.
- In order to estimate the ground level concentrations due to the emission from the proposed increase in production, EPA approved Industrial Source Complex AERMOD View Model has been employed.
- Predicted 24 hourly maximum Ground Level Incremental Concentrations values found at project site of PM₁₀, PM_{2.5}, are 0.23 µg/m³, 0.0631 µg/m³ respectively.
- The mining operations may cause surface water pollution due to Wash off from dumps (reject dump, sub-grade dump) and Soil erosion (from mine and roads). Proper control measures are essential to prevent the flow of suspended matter from the mine and dump.
- The increase in production at Adegaon Dolomite Mine is achieved through opencast mine.
- The available road network is adequate to handle the additional transport load. Even considering 100% transport by road which works out to be 4000 tonnes per day due to proposed production, there will be movement of 200 dumpers of 20 tonnes capacity.
- The impact on socio economic of surrounding area will be positive, as mine will directly employ about 74 workers. There is a possibility of employment generation double this number in secondary and tertiary sectors. There is no displacement of any habitation or personnel and hence the rehabilitation and resettlement action plan is not required.
- There will be impacts on bio diversity of the area beyond what is already present due to traffic on the State Highway. This impact will be compensated by bi-tire avenue plantation on transport route of 2 km. It is also proposed to installed metal sheets along the sensitive part of the village on the transport route.

5.0 ENVIRONMENTAL MITIGATION MEASURES:

- Mitigation measures at the source level and an overall management plan at the study area level are elicited so as to improve the supportive capacity of the study area and also to preserve the assimilative capacity of the receiving bodies. The report provides detailed action plan for each pollutant viz. air, water, noise, socio economic, landuse and plantation activities.

5.1 Air Pollution Management:

- Transportation Roads will be frequently sprinkled with water for which truck mounted water tankers with atomized mist spray sprinkler arrangement will be deployed and will have plantation on both sides of this road.
- Trucks shall be covered by tarpaulins to prevent spread of dust from it during transportation.
- Regular maintenance of vehicles and machineries shall be carried out in order to control vehicular emissions.
- Green Belt Development shall be taken up at available places.
- The dust respirators shall be provided to all the workers.
- Good housekeeping and proper maintenance shall be practiced which shall help in controlling the pollution.
- Maintenance of the mineral transportation road will be regularly carried out.

5.2 Water Pollution Management:

To mitigate water pollution and manage drainage, the project will implement a multi-layered strategy focusing on erosion control and water conservation. Structural measures, including retaining walls at dump toes, garland drains, and settling pits with baffles, will prevent siltation and runoff from entering natural watercourses. Open pits will serve as rainwater harvesting structures, with collected water treated and reused for dust suppression and greenbelt development to minimize fresh water demand. Additionally, slopes will be stabilized with vegetation, domestic sewage will be processed via a portable STP, and groundwater levels will be strictly monitored to ensure environmental compliance and hydrological stability.

5.3 Noise & Vibration Management:

Noise is best abated at source by choosing machinery and equipment suitably, by proper mounting of equipment and by providing noise insulating enclosures or padding where practicable. Regular and proper maintenance of HEMM/ vehicles shall be done which will keep the noise level within limits. On both sides of the mineral transportation road, green belt of local trees with broad leaves shall be planted which will act as acoustic barriers.

5.4 Solid Waste Management:

Overburden will be generated during the mining operations. The removal of topsoil and loose overburden will not require blasting and will be carried out separately using suitable excavators and other earth-moving equipment. The removed material will be transported and stored at designated locations. The dump will be provided with suitable slopes and adequate stabilization measures to prevent slope failure, erosion and movement of loose material. Necessary drainage arrangements will also be provided around the dump, wherever required, to control storm water runoff.

5.5 Top Soil Preservation:

The topsoil encountered during excavation will be carefully stripped separately from the area proposed for mining during the Mining Plan period. The stripped topsoil will be temporarily stacked at designated locations in areas where mining is not immediately

proposed or where it can be suitably re-handled for subsequent reclamation and plantation activities.

5.6 Plantation:

It is proposed to plant 3825 trees in 1.53 ha during the first five years of mining operation. @2500 trees/ha. It will be ensured to have 90% survival rate. Monitoring of tree plantation will be carried out prior to monsoon and gap developed will be immediately replenished during forth coming monsoon. Local tree species including fruit trees will be planted and nourished in consultation with the forest department.

5.7 Monitoring and Implementation

The monitoring of various environmental parameters is necessary which is part and parcel of the environment protection measures. Monitoring is as important as that of control of pollution since the efficacy of control measures can only be determined by monitoring. A comprehensive monitoring programme is suggested in the report.

- M/s Guru Nanak Minerals will establish a full-fledged environmental cell to supervise and implement the environmental related issues. The Environmental Monitoring Cell has manpower on regular basis.
- The mitigation measures suggested above shall be implemented so as to reduce the impact on environment due to operations of proposed mining activities. In order to facilitate easy implementation, mitigation measures are phased as per the priority implementation. A separate budgetary allocation of the funds is made for the environmental protection measures. The monitoring of the pollution to know the effectiveness of the applied control measures will be carried out at regular interval.
- Capital Expenditure of **Rs. 35.25 lakhs** and Recurring Expenditure of **Rs. 3.52 lakhs** is envisaged for implementation of the suggested Environment Management Plan for the proposed production 1.2 MTPA.

5.8 Project Benefits

- Local population may be involved extensively in such development either by way of sub-contracting or by way of employment.
- The socio-economic conditions in the study area indicate the quality of life of the people. The important indicators which decide the quality of life and require to be improved for better living conditions are literacy levels, improved occupational structure, industrial development, infrastructural facilities, transportation, communication linkages, land development and improvement in cropping pattern.
- The following health facilities will be provided and adequate funds will be allocated for the maintenance of them. These include regular medical camps and aid to the existing medical facilities of the nearby villages.

- Educational include adult education facilities, sponsorship to vocational / professional training institution, computer education camps, vacation training for students and aid to existing/proposed schools and colleges.
- Civic Amenities include support to community toilets, drinking water facilities like public stand posts, borewell/ handpump for drinking water, playgrounds for children and recreation facilities for all age groups. In addition to this participation and support to government efforts in extending communication of the region.
- Employment is proposed to employ the local population wherever possible in the proposed project activities. The work of reclamation of the entire area that will be damaged in mining operations and afforestation through plantation of 2500 trees per ha with survival rate of 85% to 90% has been envisaged. In this, local people would be involved actively including employment and award of contracts for supply of materials and services.
- The Adegaon Dolomite Mine is a brownfield Project for assessment of the CER Cost. The estimated Project Capital Cost is **Rs. 774.48 Lakhs**.
- The of budget of **Rs. 7.74 Lakhs** including Capital Budget and recurring cost has been earmarked for various CSR activities for the first five years as per felt need.
- Besides various CSR activities M/s Guru Nanak Minerals also proposes to undertake CER activities as per the directives provided in Office Memorandum of MoEF&CC dated 01.05.2018. Separate budget for CER **Rs. 15.48 lakhs** of the capital investment will be earmarked and details of activities to be undertaken will be assessed through District Administration and shall be undertaken according.
- Water requirement of the project will be 68 m³/day. Majority of the water requirement shall be met by Pit Water (when available) and tanker supply.

6.0 RESETTLEMENT & REHABILITATION

As mentioned earlier, since no habitation is located within the Cluster Area hence no relocation of village is required. Private land falling in the mining lease areas is owned by corresponding lease owners.

7.0 OVERALL JUSTIFICATION FOR IMPLEMENTATION OF THE PROJECT

Due to various industrial uses, dolomite is considered as an important industrial raw material which aids in the growth of various industrial sectors in general and the Cement Sector in particular. Like Dolomite is also an important raw material for Iron and Steel, Ferro Alloys, Glass, Fertilizer and many more industries.

Apart from need for supply of Dolomite to the consumer Industry, mining in the Adegaon Area shall provide direct and indirect employment opportunities, infrastructure development, communication and development of socio-economic infrastructure. The important benefits from the project can be thus stated as boost to local and regional

economy and direct contribution to the state exchequer. Therefore, this Dolomite Mining Project is important to the Region.

APPEAL

In compliance with the environmental procedure the environmental clearance application is made. Necessary scientific studies have been undertaken as per the guidelines set by the Ministry of Environment, Forests & Climate Change (MoEF&CC). The suggestions/recommendations of all the experts, competent authorities, and government officials are being sought for the impacts of the proposed project. Views and guidance of the local residents, community based organizations, social organizations are extremely important in order to devise a full proof Environment Management Plan for the proposed mining project and also mitigate the damages caused due to the project. Allocation of necessary funds, manpower and machinery will be made to for the protection and conservation of all the components of environment. It is ensured that all mandatory clearances will be sought from respective competent authorities before operating the proposed mining of Adegaon Dolomite Mine. M/s. Guru Nanak Minerals is committed to implement the suggestions for the improvement of the environment and assure that every attempt will be made for the conservation and protection of the natural resources to the maximum extent.

