



स्टील ऑथोरिटी ऑफ इंडिया लिमिटेड
STEEL AUTHORITY OF INDIA LIMITED
बोकारो स्टील प्लांट
BOKARO STEEL PLANT
गुआ अयस्क खान
GUA ORE MINES

Ref. No. : GUA/E&L/Topailore-EC Compl._H2/2025-26/028

Date: 29.05.2025

To,
The Addl. PCCF (C)
Ministry of Environment, Forest and Climate Change
Regional Office (ECZ)
Bungalow No. A - 2, Shyamali Colony
Doranda, Ranchi - 834 002

Sub: Compliance Report of Environmental Clearance accorded by MoEF&CC to the Topailore Iron Ore Mining Project of Gua Ore Mines of SAIL, located in Ghatkuri Reserve Forest, Tehsil Gua, West Singhbhum Dist., Jharkhand

Ref.: 1. Ministry's Environment Clearance Letter No. EC/SEIAA/2015-16/694/2015/1291, dated 17.08.2015

2. EC amendment vide Letter No. J-11015/272/2011-IA. II(M) dated 19.05.2020

Sir,

As per the provisions of the condition no. (17) of above stated Environmental Clearance order granted to the Topailore Iron Ore Mining Project of Gua Ore Mines, the six monthly compliance report on the conditions stipulated in the Environmental Clearance for the period from **October, 2024 to March, 2025** is enclosed herewith for kind perusal please.

Thanking you.

For & on behalf of
SAIL-BSL, Gua Ore Mines


f General Manager (Mines) and E&L

Encl: As stated above

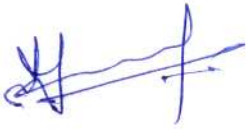
Copy to:

1. Director, IA, MoEF&CC, GOI, Indira Paryavaran Bhavan, Aliganj, Jor Bagh Road, New Delhi - 110 003.
2. Member Secretary, JSPCB, HEC, Dhurwa, Ranchi - 834 004.
3. In-charge, Eastern Zone, CPCB, Southern Conclave, Block 502, 5th & 6th Floors, 1582 Rajdanga Main Road, Kolkata - 700 107 (W. B.)
4. The Regional Office, JSPCB, Jamshedpur


General Manager (Mines) & E&L
SAIL-BSL, Gua Ore Mines



Compliances for conditions of Environmental Clearance (Vide Order no.EC/ SEIAA/2015-16 /694/2015/1291, dated 17.08.2015, EC Amendment Order No. J-11015/272/2011-IA.II (M) dated 19.05.2020 and EC/SEIAA/2022-23/2664/2022/299 dated 13.12.2022) of Topailore Iron Ore Mining Project of Gua Ore Mines of M/s. STEEL AUTHORITY OF INDIA LTD (Period: October, 2024 – March, 2025)

SL.	CONDITION	COMPLIANCES
A. <u>Specific Conditions:</u>		
1.	This Environment Clearance is valid subject to the following condition below – That this project has- a. Obtained all legal rights to operate at concerned place. b. Complied with all existing concerned laws of the land and c. Complied with the decisions of SEIAA on the issue of Environment Clearance till date.	Agreed to. Topailore Iron Ore Mining Project has valid mining lease, approved Forest Clearance from MoEF&CC and approved CTE & CTO from JSPCB. Topailore Lease is presently non-operational. Mining operations in Topailore Lease will be commenced only after obtaining all other required clearance/approvals from the statutory bodies.
2.	The Environment Clearance is subject to renewal of mining lease as per Rule 24 A of mineral concession Rule 1960 and all other Statutory Conditions as imposed by various agencies / District Authorities are complied with.	Agreed to. The lease has been extended & executed upto 08.03.2040 as per MCR, 2021/MMGC Rule, 2015.
3.	At the time of obtaining Consent to establish/ Consent to Operate, PP should submit sitemap duly signed by PP and DMO to JSPCB & SEIAA. 	Amendment in Environmental Clearance (EC) for both captive use and sale of fines has been granted by SEIAA, Jharkhand, vide letter ref. no. EC/SEIAA/2022-23/2664/2022/299 dated 13.12.2022. Accordingly, Consent to Establish (CTE) and Consent to Operate (CTO) as per amended EC has been granted by JSPCB under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 vide Ref No.: JSPCB/HO/RNC/CTE-14995189/2023/4 dated 05.01.2023 and vide reference no. JSPCB/HO/RNC/CTO-17134844/2024/73 dated 17.01.2024 respectively. CTO is valid till 31.12.2025. Sitemap was submitted to JSPCB along with application for Consent to establish (CTE).



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4.	At the time of obtaining consent to operate, PP will erect boundary pillars to demarcate boundary of lease. GPS reading, backward – forward bearing & pillar to pillar distance is to be written on each pillar. Pillar wise list will be submitted to SEIAA and JSPCB before issue of Consent to Establish/Consent to Operate.	The demarcation of boundary of diverted forest land which itself is the total mining lease area (14.15 ha) and safety zone (7.5-meter strip within the boundary of the mining lease area), and its protection by erecting adequate number of 4 feet high RCC boundary pillars inscribed with DGPS coordinates was completed. Copy of the survey map including DGPS co-ordinates has been submitted to concerned statutory bodies before issue of Consent to Establish/Consent to Operate.
5.	All the conditions stipulated by the State Pollution Control Board in their NOC shall be effectively implemented.	Agreed. All the conditions stipulated by the State Pollution Control Board in the NOC will be effectively implemented once the mining operation starts.
6.	Environment Clearance is subject to obtaining clearance under Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna.	The condition is not applicable as there is no designated wildlife protected area/wildlife sanctuary within 10 Km radius to the project site.
7.	Necessary permission from the Forest Department for transportation of minerals through the forest road shall be revalidated before restarting the mining operations.	Topailore Lease is presently non-operational. This condition is noted and shall be complied before restarting the mining operations.
8.	The mining operations shall be restricted to above ground water table and it should not intersect the groundwater table. In case of working below the ground water table, prior approval of the Ground Water Directorate, Government of Jharkhand / Central Ground Water Board shall be obtained. Benches height and slope shall be maintained as per approved mining plan. 	Topailore Mine Lease does not have any geological reserves of iron ore. The iron ore deposited in Topailore lease are those which have been washed down from the fines dump of contiguous Duarguiburu Lease and dumped on flat ground. The mine will be worked by means of opencast mechanized method of mining using pay-loader, dozer and dumper. No drilling and blasting will be required. The Ground Water Table in the Lease area occurs at 400 m AMSL



SL.	CONDITION	COMPLIANCES
		whereas ultimate pit limit will be the original ground level i.e. 470 m AMSL whereas the current depth of the pit is 515 m AMSL. So there will be no intersecting of ground water table during mining operations at the mine.
9.	The project proponent shall ensure that no natural watercourse shall be obstructed due to any mining operations. Adequate measures shall be taken for conservation and protection of first order and second order streams, if any emanating / passing through the mine lease area during the course of mining operation.	There is no natural watercourse in the mining lease area, however, adequate measures will be taken for conservation and protection of first order and second order streams present in nearby area of mine lease during the course of mining operation
10.	The top soil shall temporarily be stored at earmarked site(s) only with adequate measures and should be used for reclamation and rehabilitation of mined out areas.	Topailore Mine Lease does not have any geological deposit of iron ore. The iron ore deposited in Topailore lease are those which have been washed down from the processed fines dump of contiguous Duarguiburu Lease and dumped on flat ground. The mine will be worked by means of opencast mechanized method of mining using pay-loader, dozer and dumper. No drilling and blasting will be required. Therefore, there will be no instance of encountering top soil.
11.	The entire waste generated shall be backfilled and there shall be no external overburden dump left at the end of mine life. The entire backfilled area shall be reclaimed by plantation. The back filling should be carried out in such a manner that it is restored to the normal ground level. Monitoring and management of rehabilitated areas should continue until the vegetation become self- sustaining. Compliance status should be submitted to Jharkhand state Pollution Control Board, Ranchi and its nearest Regional Office on six monthly basis.	<p>Noted for compliance.</p> <p>The iron ore deposited in Topailore lease are those which have been washed down from the processed fines dump of contiguous Duarguiburu Lease and dumped on flat ground. Therefore no waste will be generated in Topailore lease.</p> <p>Since Topailore ML is located entirely within forest land, after the deposited iron ore fines are excavated to the maximum possible extent, progressive reclamation and rehabilitation will be carried out as per IBM approved Progressive Mine Closure Plan.</p>
12.	Catch drains and siltation ponds of appropriate size should be constructed	As practiced in the adjacent lease (i.e. Duarguiburu which is main



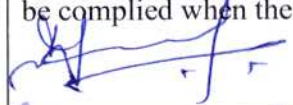
SL.	CONDITION	COMPLIANCES
	for the working pit, temporary OB dumps, If any and mineral dump to arrest flow of silt and sediment. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The Drains should be regularly desilted, particularly after monsoon, and maintained properly.	mining lease under Gua Ore Mine) of the said project, all mining pits, the storm water in the rainy season is being drained & collected in mining pits, which has almost totally eliminated the discharge of storm water from mining pit. A detailed study has been conducted by IIT Kharagpur for identifying places vulnerable to erosion, surface runoff control and suggesting mitigative measures. Based on the recommendations of IIT KGP, as practice is being followed in adjacent lease, the protective measures viz. garland drains, settling tanks and check dams of appropriate size will be constructed during the period of operation in addition to existing control measures as per requirement. Actions are being taken for utilizing stored water for watering the mine area, roads, greenbelt development etc. Existing drains and sedimentation pits are regularly desilted, after monsoon, and maintained properly.
13.	Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and temporary dumps and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and desilted at regular intervals.	Garland drain of appropriate size, gradient and length are constructed for mine pit and temporary sump capacity will also be designed keeping 50% safety margin over and above peak sudden rainfall and maximum discharge in the area adjoining the mine site. As done in past within the adjacent lease of Gua, sedimentation pits will be constructed at the corners of the garland drains and the same will be desilted at regular intervals. These measures will be taken as when required depending upon the topography and field condition of the site. Presently, garland drains, trenches, earthen dams, sedimentation pits & check dams have been constructed at bottom slope of dumped fines area and the same are being de-silted at regular intervals.
14.	Dimension of the retaining wall at the toe of the temporary dumps and OB benches within the mine to check run-off and siltation should be	No overburden dump will be created in the mining period because this project is only for excavation of existing dump fines within



SL.	CONDITION	COMPLIANCES
	based on the rain fall data	the lease hold area.
14 (1).	Plantation shall be raised in the 7.5 m wide green belt in the safety zone around the mining lease by planting native species around ML area, backfilled and reclaimed area, around water body, roads etc. in consultation with local DFO/ Agriculture Department. Greenbelt shall be developed all along the mine lease area and haul roads. The project proponent shall do tree plantation in at least 33% of the space preferably along the periphery and in vacant species. Fast growing and local species will be planted. In case land is not available within the lease area or it is not possible to plant tree due to nature of land then PP will do necessary afforestation at other place/land.	<p>Agreed.</p> <p>It is pertinent to mention that entire lease area of 14.15 Ha is broken prior to 1980. Therefore, the leasehold area does not have any trees. Topailore Mine Lease does not have any geological reserves of iron ore. However, the iron ore present in the entire Topailore Lease are those which have been washed down from the fines dump of adjacent Durgaburu Lease and deposited on flat ground in the past. Since the complete area is filled with washed Iron Ore, plantation activity is carried out at the adjacent Duarguiburu Mining Lease and Surface Lease area.</p> <p>The green belt has been developed all around the adjacent mine lease and surface lease area. This has not only improved green cover but also resulted in reducing dust levels and attenuating noise & erosion.</p> <p>However, efforts are being made to cover all the remaining patches with native sapling.</p>
15.	Regular water sprinkling shall be carried out in critical areas prone to air pollution & having high levels of SPM and RSPM such as haul road, loading and unloading point and transfer points. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control board in this regard.	In contiguous Duarguiburu Lease, High pressure Water Sprinklers (28 KL) have been deployed for regular water sprinkling on Haul Roads and other dust prone areas. In addition to this, permanent sprinklers installed near OHP area and at railway siding. All these dust control measures installed at Duarguiburu mines and other areas have significantly controlled fugitive dust generation and helped in maintaining the air quality in and around the mines. The same arrangement will be made for Topailore mining lease of Gua Ore Mines whenever it will be operational.
16.	The project authority should implement suitable conservation measures	Suitable conservation measures to augment the ground water

General Manager (Mines) & E&L
SAIL-BSL, Gua Ore Mines



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	to augment the ground water resource in the area in consultation with Ground Water Directorate, Government of Jharkhand / Central Ground Water Board / Authority.	resource in the area in consultation with Ground Water Directorate, Government of Jharkhand are under implementation. Water conservation through construction of sedimentation cum rain water harvesting pits and Gully plugging etc. has already been implemented. Additionally, rooftop rainwater harvesting system is also implemented in Gua township. The construction of rooftop rainwater harvesting system for ground water recharge through recharge pit cum shaft at Director Bungalow and Guest House buildings of Gua Township has been completed.
17.	The Project authority should obtain prior approval of the competent authority for drawl of water required for the project.	Permission for drawl of required water has already been taken from Water Resource Department, Govt. of Jharkhand. Agreement for water withdrawal has been renewed for the period from July' 2023 to June' 2028.
18.	Suitable rainwater harvesting measures shall be planned and implemented in consultation with Ground Water Directorate, Government of Jharkhand/ Central Ground Water Board / Authority.	Suitable conservation measures to augment the ground water resource in the area in consultation with Ground Water Directorate, Government of Jharkhand are under implementation. Water conservation through construction of sedimentation cum rain water harvesting pits and Gully plugging etc. has already been implemented. Additionally, rooftop rainwater harvesting system is also implemented in Gua township. The construction of rooftop rainwater harvesting system for ground water recharge through recharge pit cum shaft at Director Bungalow and Guest House buildings of Gua Township is completed. The photographs of rooftop rainwater harvesting are enclosed as Annexure-1 .
19.	Vehicular emission shall be kept under control & regularly monitored. Measures shall be taken for maintenance of vehicle used in mining operation & in transportation of Minerals. The vehicle shall be covered with a tarpaulin & shall not be overloaded.	Topailore Lease is presently non-operational. This condition shall be complied when the lease is operational. 



SL.	CONDITION	COMPLIANCES
20.	Blasting operation should be carried out during the daytime. Control Blasting should be practiced. The mitigative measures for control of ground vibration & to arrest fly rocks and boulders should be implemented	The mine will be worked by means of opencast mechanized method of mining using pay-loader, dozer and dumper. No drilling and blasting will be required.
21.	Drills shall either be operated with dust extractors or equipped with water injection system.	The mine will be worked by means of opencast mechanized method of mining using pay-loader, dozer and dumper. No drilling and blasting will be required.
22.	Effective safeguard measures should be taken to control the fugitive emissions so as to ensure that RSPM (PM10 and PM 2.5) levels are within prescribed limits.	During operations effective safeguard measures will be taken to control the fugitive emission upon start of mining operation of Topailore lease.
23.	Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained.	Pre-placement medical examination and periodical medical examination of the workers engaged in the project are carried out and records maintained for Duarguiburu Mining Lease of Gua Ore Mines. The same practice will be followed for Topailore Mining lease of Gua Ore Mines.
24.	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, septic tanks, safe drinking water, medical health care etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	In Gua Ore Mines most of the construction labour are hired from the local villages and only few are being hired from outside, for which housing facilities along with necessary infrastructure are being provided at the existing colony of the mines.
25.	Proper Safety measures as per statutory requirement are to be implemented around the mined out pit prior to closure of site.	Proper Safety measures as per statutory requirement will be implemented around the mined out pit prior to closure of site.
26.	A final mine closure plan along with corpus fund duly approved by Competent Authority shall be submitted to the Jharkhand state Pollution Control Board, Ranchi and the concerned DMO in advance to the final closure for approval.	Indian Bureau of Mines (IBM), Ranchi has approved the Modification of Review of Mining Plan & Progressive Mine Closure Plan (PMCP) for period from 2023-24 to 2026-2027 vide letter No. RAN/WESTSINGHBHUM/Fe/MMP-5/2023-24 dated



SL.	CONDITION	COMPLIANCES
		05.09.2023. After complete exhaustion of mineral from the lease, Final Mine Closure Plan (FMCP) will be prepared and get it approved from the Competent Authority i.e. Indian Bureau Of Mines. Further the measures approved in the FMCP will be implemented at the cost of SAIL.
27.	Consent to Operate should be obtained from JSPCB before starting production from the Mine.	Consent to Establish (CTE) and Consent to Operate was granted by JSPCB under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981, vide Ref No.: JSPCB/HO/RNC/CTE-14995189/2023/4 dated 05.01.2023 and vide reference no. JSPCB/HO/RNC/CTO-17134844/2024/73 dated 17.01.2024 respectively. CTO is valid till 31.12.2025.
<u>B. General Conditions:</u>		
1.	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.	Agreed. There will be no change in mining technology and scope of working without prior approval of the Ministry of Environment & Forest. The Amendments made in Environmental Clearance (EC) Order No. J-11015/272/2011-IA.II (M) dated 19.05.2020 and Order No. EC/SEIAA/2022-23/2664/2022/299 dated 13.12.2022 of Topailore Iron Ore Mining Project of Gua Ore Mines which will be strictly followed by Gua Ore Mines.
2.	No change in the calendar plan including excavation, quantum of mineral iron ore and waste should be made.	No change in the calendar plan including excavation, quantum of mineral iron ore and waste will be made. ROM production will be kept within permitted capacity in the EC/ approved Review of Mining Plan & PMCP.
3.	The project proponent shall maintain register for production and dispatch and submit return to the Board.	Register for production and dispatch will be maintained once the production starts from the mines also periodic return will be



SL.	CONDITION	COMPLIANCES
		submitted to the Board.
4.	The project proponent shall not cut trees/ carry out tree felling in leased out area without the permission of competent authority.	Permission from competent authority will be taken for tree cutting / tree felling as and when required.
5.	Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10 microns i.e. PM10 and NOx monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.	Since Topailore mining lease is one of the four mining lease of Gua Ore Mines, ambient locations will be same as for the Duarguiburu Mining lease. Ambient Air quality monitoring at four locations is being carried out regularly and reports are being submitted to Jharkhand State Pollution Control Board. The latest air quality monitoring reports are enclosed as Annexure-2 .
6.	Regular monitoring of ground water level & quality should be carried out in & around the mine lease by establishing a network of existing wells and constructing new piezometers during the operation. The monitoring should be carried out four times in a year i.e. January, April-May, August, November and the data thus collected may be sent regularly to Jharkhand State Pollution Control Board, Ranchi and its nearest Regional Office / Ground Water Directorate, Government of Jharkhand / Central Ground Water Board / Authority.	<ul style="list-style-type: none"> A structured monitoring network has been developed in and around the Gua Ore Mines (core and buffer zone), comprising a combination of existing open wells and newly installed piezometers to ensure spatial coverage and seasonal data collection. The network includes, Four (04) existing open wells located in Buffer Zone area at: <ol style="list-style-type: none"> Guasai – Forest Bungalow Ghatkuri Village Chhota Nagra / Baihatu Village Baraiburu (Near Pool) These have been selected to provide representative data from all directions around the lease boundary. In addition to the above, three (03) piezometers with real-time groundwater level monitoring capability have been installed



SL.	CONDITION	COMPLIANCES
		<p>and commissioned at strategic locations in Core Zone area, namely:</p> <ol style="list-style-type: none"> 1. Forest Bungalow, Gua 2. DB Building, Gua Ore Mines 3. DB Annexe Building, Gua Ore Mines <ul style="list-style-type: none"> • These locations were selected in consultation with the SPCB to ensure coverage of key operational and hydro geologically sensitive zones within the mining lease area. • Groundwater level and quality monitoring is being carried out and data of the same is being maintained.
7.	The project proponent shall make all internal roads pucca and shall maintain a good housekeeping by regular cleaning and wetting of the haul roads and the premises. Fugitive dust emission from all sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.	Most of the internal roads are made pucca. Good housekeeping is being maintained by regular cleaning and wetting of the haul roads and the premises. Effective measures have been taken to control fugitive dust within the prescribed standards. Water spraying arrangement on haul roads and other strategic points will be provided and the same will be properly maintained.
8.	Measures should be taken for control of noise levels below 85 dB (A) in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs	Measures for control of noise levels are being taken regularly to maintain the noise levels below 85 dB(A). Workers engaged in operations of HEMM, Ore Crushing & Screening areas, are being provided with ear plugs / muffs and are motivated time to time to use the safety equipments for the whole period of their engagement in work.
9.	Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as	Necessary provisions for treatment & recycling of effluents from the proposed beneficiation plant will be taken during the commissioning of Beneficiation Plant. Installation of oil and

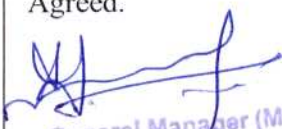


SL.	CONDITION	COMPLIANCES
	amended from time to time. Oil and grease trap should be installed before discharge of effluent from workshop.	grease trap along with vehicle washing ramp, maintenance bay and covered storage yard for proper handling of hazardous waste for the workshop effluents will be practiced when mine becomes operational.
10.	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. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Personal Protective Equipment (PPE) i.e. dust masks are being provided to all the workers engaged in the dust prone areas i.e. excavation & loading areas, ore handling plants, stacking & loading areas etc. Suitable training on safety and health aspects is being given on regular basis. Occupational health surveillance program are being conducted regularly.
11.	Occupational health surveillance programme of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed. Dispensary facilities for First Aid shall be provided at site.	Personal Protective Equipment (PPE) i.e. dust masks are being provided to all the workers engaged in the dust prone areas i.e. excavation & loading areas, ore handling plants, stacking & loading areas etc. Suitable training on safety and health aspects is being given on regular basis. Occupational health surveillance programs are being conducted periodically to observe any contractions due to exposure to dust so that corrective measures will be taken, if needed. Dispensary facilities for First Aid will be provided at site.
12.	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization	Environmental Management Cell (including laboratory) having qualified personnel has already been established at the Gua Ore Mine. This cell is headed by a General Manager who reports directly to head of Gua Ore Mines i.e. Chief General Manager (Mines).
13.	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Jharkhand state Pollution	Agreed to. Funds earmarked for environmental protection measures at the mine are booked separately and not being diverted for other




SL.	CONDITION	COMPLIANCES
	Control Board, Ranchi. PP shall carry out CSR activities as per Government Guidelines. (% of profit/turnover).	purpose.
14.	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry of Environment and Forests and its Regional Office located at Bhubaneswar	Funds earmarked for environmental protection measures at the mine are booked separately and not being diverted for other purpose. Year wise expenditure is being reported to the Ministry of Environment and Forests and its Regional Office located at Ranchi.
15.	The Jharkhand State Pollution Control Board, Ranchi directly or through its Regional Office, shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) by furnishing the requisite data / information/ monitoring reports.	Agreed. Full cooperation will be provided to the JSPCB officer(s) by furnishing the requisite data / information/ monitoring reports.
16.	The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by email) to the Jharkhand state Pollution Control Board, Ranchi and to its concerned Regional Office.	Agreed. Six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by email) are being submitted to the Jharkhand State Pollution Control Board, Ranchi and to its concerned Regional Office.
17.	The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Jharkhand state Pollution Control Board, Ranchi and to its concerned Regional Office. The criteria pollutant levels namely; SPM, RSPM, SO ₂ , NO _x (ambient levels) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the company in the public domain.	Six monthly compliance reports on the status of implementation of environmental safeguards are being submitted timely to MoEF&CC, New Delhi, Regional Office – MoEF&CC, Ranchi, Central Pollution Control Board and State Pollution Control Board. Copy of the compliance report including environmental quality data will be uploaded to the SAIL web site i.e. www.sail.co.in .
18.	A copy of the clearance letter shall be sent by the proponent to concerned	Copies of the Environmental Clearance have been sent to local



SL.	CONDITION	COMPLIANCES
	Panchayat, ZilaParisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent. JSPCB should display a copy of the clearance letter at the Regional Office, District Industry Centre and DC's, Circle Officer's Office for 30 days. The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the Jharkhand State Pollution Control Board.	Member of Panchayat & Zila Parisad. The clearance letter has been put on the Company website i.e. www.sail.co.in . Advertisement werepublished in two (2) daily newspapers (Dainik Jagran Daily, Jamshedpur Edition on 30.07.2015 and The Telegraph Daily, Ranchi & Jamshedpur Edition on 01.09.2015). Also intimated to Local Zilla Parishad Members, Gram Panchayat Members, Mainky & Mundas etc. In addition to that, EC Amendment Order No. J-11015/272/2011-IA.II (M) dated 19.05.2020 of MoEFCC, New Delhi has been published for advertisement on Times of India Newspaper, Jharkhand edition and Prabhat Khabar (Hindi) in Jamshedpur and Ranchi edition on 13.06.2020. The clearance letter has been put on the Company website i.e. www.sail.co.in
19.	The environmental statement for each financial year ending 31st October in Form V as is mandated to be submitted by the project proponent to the Jharkhand State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along the status of compliance of EC conditions and shall also to the concerned Regional Office of JSPCB by e- mail.	Agreed. Once, the mining operation starts, the environmental statement for each financial year ending 31st March in Form V are being submitted to the Jharkhand State Pollution Control Board. The same will be put on the website of the company along the status of compliance of EC conditions and we will also send the copy to concerned Regional Office of JSPCB by e- mail.
20.	All statutory clearance shall be obtained before start of mining operations.	Agreed. All statutory clearance will be obtained before start of mining operations.
C. Other Points		
1.	The Authority reserve the right to add any new condition or modify the above conditions or to revoke the clearance if conditions stipulated above are not implemented to the satisfaction of Authority of for that matter for any other Administrative reason.	Agreed.  General Manager (Mines) & E&L SAIL-BSL, Gua Ore Mines





SL.	CONDITION	COMPLIANCES
2.	Failure to comply any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Agreed.
3.	The Environmental Clearance accorded shall be valid for the period of renewal of lease (generally 20 years) for life of mine or for 30 years whichever is less. The PP shall not increase production rate and alter lease area during the validity of Environmental Clearance.	Agreed. Production rate will be maintained as per the approved Environmental Clearance / EC amendment order.
4.	In case of any deviation or alteration in the project proposed from those submitted to SEIAA, Jharkhand for clearance, a fresh reference should be made to SEIAA to assess the adequacy of the conditions imposed and to incorporate any new conditions if required.	Agreed.
5.	The above stipulations would be enforced among others under the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Trans boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court of Jharkhand and any other Court of Law relating to the subject matter.	Agreed.
6.	Any Appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as	Agreed. 



SL.	CONDITION	COMPLIANCES
	prescribed under Section 16 of the National Green Tribunal Act, 2010	

Note: - The Amendments made in Environmental Clearance (EC) of Topailore Iron Ore Mining Project of Gua Ore Mines vide Order No. J-11015/272/2011-IA.II (M) dated 19.05.2020 and Order No. EC/SEIAA/2022-23/2664/2022/299 dated 13.12.2022 will be strictly followed by Gua Ore Mines.


GENERAL MANAGER (MINES) AND E&L
GUA ORE MINES
BOKARO STEEL PLANT
STEEL AUTHORITY OF INDIA LIMITED (SAIL)

General Manager (Mines) & E&L
SAIL-BSL, Gua Ore Mines

Photographs showing 03 nos. rooftop rainwater harvesting through recharge pit cum shaft installed with realtime groundwater level monitoring system at Director Bungalow and DB annexe buildings of Gua Ore Mines.

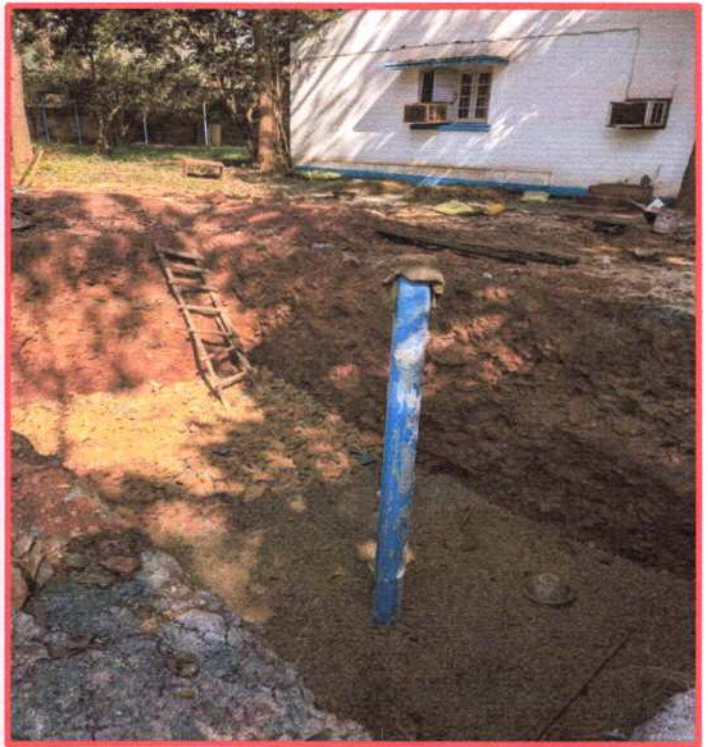


[Handwritten signature]

General Manager (Mines) & E&L
SAIL-BSL, Gua Ore Mines



General Manager (Mines) & E&L
 SAIL-BSL, Gua Ore Mines



Photos: Photos of recharge pit cum shaft during construction period


General Manager (Mines) & E&S
SAIL-BSL, Gua Ore Mines

Environmental Quality Report

Quarter-3

GOM, SAIL

[Oct, 2024 to Dec., 2024]

Gua Ore Mines, BSL, SAIL
(Environment & Lease Department)

Ambient Air Quality Monitoring Report

PM ₁₀ (µg/m ³)						
Location	Oct, 24	Nov, 24	Dec, 24	Min	Max	Average
Near Hospital	44.2	43.4	44.7	43.4	44.7	44.1
Near Environment & QC Lab	57.6	58.4	56.8	56.8	58.4	57.6
Near GuaClub	45.8	46.9	44.2	44.2	46.9	45.6
Near Time Office	69.5	70.1	72.2	69.5	72.2	70.6
PM _{2.5} (µg/m ³)						
Location	Oct, 24	Nov, 24	Dec, 24	Min	Max	Average
Near Hospital	18.4	17.6	16.2	16.2	18.4	17.4
Near Environment & QC Lab	25.8	24.6	31.5	24.6	25.8	25.3
Near Gua Club	18.3	19.8	19.8	15.8	19.8	18.0
Near Time Office	37.8	38.7	43.6	37.8	39.6	38.7
SO ₂ (µg/m ³)						
Location	Oct, 24	Nov, 24	Dec, 24	Min	Max	Average
Near Hospital	8.4	8.9	9.1	8.4	9.1	8.8
Near Environment & QC Lab	9.9	10.2	9.5	9.5	10.2	9.9
Near Gua Club	8.9	9.6	9.4	8.9	9.6	9.3
Near Time Office	11.8	12.1	13.5	11.8	13.5	12.5
NOx (µg/m ³)						
Location	Oct, 24	Nov, 24	Dec, 24	Min	Max	Average
Near Hospital	7.6	8.1	8.8	7.6	8.8	8.2
Near Environment & QC Lab	8.9	9.6	10.9	8.9	10.9	9.8
Near Gua Club	7.4	9.8	9.9	7.4	9.9	9.0
Near Time Office	10.6	12.8	13.1	10.6	13.1	12.2

Alok Kumar Yadav
Sr. Manager (F&E)

Alok Kumar Yadav
Sr. Manager (Forest & Env.)

SAIL - Bokaro Steel Plant

Gua Ore Mines / GUA ORE MINES

पो. : गुआ-833213 / P.O. : Gua-833213

जिला : सिंगभूम (ए) झारखण्ड / Dist : Singhbhum (W) Jharkhand

Dharmendra Sethia

Dy. Manager (E&L)

SAIL - Bokaro Steel Plant

Gua Ore Mines / GUA ORE MINES

पो. : गुआ-833213 / P.O. : Gua-833213

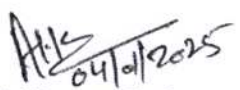
जिला : सिंगभूम (ए) झारखण्ड / Dist : Singhbhum (W) Jharkhand

General Manager (Mines) & E
SAIL-BSL, Gua Ore Mines

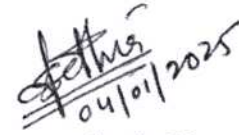
Gua Ore Mines, BSL, SAIL
(Environment & Lease Department)

Noise Quality Analysis Report

Sl. No.	Location	Observed Noise Level dB(A)			Prescribed Day Limit dB (A)
		Oct, 24	Nov, 24	Dec, 24	
1.	Near Hospital	43.4	43.9	42.5	75
2.	Near Environment & QC Lab	65.2	64.8	66.4	
3.	Near General Office	50.2	49.6	50.3	
4.	Near Time Office	65.5	64.9	63.4	
5.	Near workshop (EME)	71.2	72.6	69.4	
6.	Near Mines canteen	60.3	59.8	58.7	


Alok Kumar Yadav
Sr. Manager (F&E)

आलोक कुमार यादव
ALOK KUMAR YADAV
व. प्रबंधक (वन एवं पर्यावरण) / Sr. Manager (Forest & Env.)
सेल, बोकारो इस्पात संयंत्र / SAIL - Bokaro Steel Plant
गुआ अयस्क खान / GUA ORE MINES
पो. - गुआ-833213 / PO. - GUA 833213
जिला : सिन्धुगढ़ (प.) झारखंड / Dist. Singhbhum (W) Jharkhand


Dharmendra Sethia
Dy. Manager (E&L)

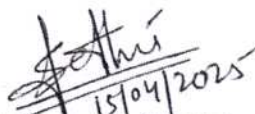
धर्मेन्द्र सेठिया
Dharmendra Sethia
उप-प्रबंधक (पर्यावरण एवं वन) / Dy. Manager (Env.)
सेल, बोकारो इस्पात संयंत्र / SAIL BSL JGOM
गुआ अयस्क खान / GUA ORE MINES



General Manager (Mines) & E&L
SAIL-BSL, Gua Ore Mines


Gua Ore Mines, BSL, SAIL
(Environment & Lease Department)

Ambient Air Quality Monitoring Report

PM ₁₀ (µg/m ³)						
Location	Jan, 25	Feb, 25	Mar, 25	Min	Max	Average
Near Hospital	47.8	49.2	52.4	47.8	52.4	49.80
Near Environment & QC Lab	60.2	63.3	59.9	59.9	63.3	61.13
Near Gua Club	46.4	49.8	43.7	43.7	49.8	46.63
Near Time Office	74.3	75.4	72.2	72.2	75.4	73.97
PM _{2.5} (µg/m ³)						
Location	Jan, 25	Feb, 25	Mar, 25	Min	Max	Average
Near Hospital	18.7	19.8	20.1	18.7	20.1	19.53
Near Environment & QC Lab	30.2	33.6	29.8	29.8	33.6	31.20
Near Gua Club	18.3	19.4	20.3	18.3	20.3	19.33
Near Time Office	39.8	45.6	48.2	39.8	48.2	44.53
SO ₂ (µg/m ³)						
Location	Jan, 25	Feb, 25	Mar, 25	Min	Max	Average
Near Hospital	9.4	9.1	9.7	9.1	9.7	9.40
Near Environment & QC Lab	9.6	10.2	8.5	8.5	10.2	9.43
Near Gua Club	9.8	9.5	9.1	9.1	9.8	9.47
Near Time Office	13.5	12.9	13.7	12.9	13.7	13.37
NO _x (µg/m ³)						
Location	Jan, 25	Feb, 25	Mar, 25	Min	Max	Average
Near Hospital	9.2	9.1	9.6	9.1	9.6	9.30
Near Environment & QC Lab	11.6	10.8	10.4	10.4	11.6	10.93
Near Gua Club	10.2	9.7	9.4	9.4	10.2	9.77
Near Time Office	13.8	12.9	12.6	12.6	13.8	13.10


(Dharmendra Sethia)
Dy. Manager (E&L)

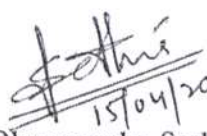

General Manager (Mines) & E&L
SAIL-BSL, Gua Ore Mines

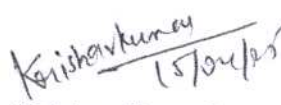

(Krishav Kumar)
Asst. Manager (E&L)

Gua Ore Mines, BSL, SAIL
(Environment & Lease Department)

Noise Quality Analysis Report

Sl. No.	Location	Observed Noise Level dB(A)			Prescribed Day Limit dB (A)
		Jan, 25	Feb, 25	Mar, 25	
1.	Near Hospital	42.8	42.9	43.6	75
2.	Near Environment & QC Lab	65.8	66.8	65.2	
3.	Near General Office	51.2	51.6	50.8	
4.	Near Time Office	64.5	63.5	64.2	
5.	Near workshop	72.2	70.1	70.4	
6.	Near Mines canteen	59.3	59.7	59.1	


15/04/2025
(Dharmendra Sethia)
Dy. Manager (E&L)


15/04/25
(Krishav Kumar)
Asst. Manager (E&L)


General Manager (Mines) & E&L
SAIL-BSL, Gua Ore Mines



BIOCRAT ENVIRONMENTAL SERVICES

(BIOCRAT ENVIRONMENTAL LAB)



Annexure-2

TEST REPORT

Format No: 7.8F-04

AMBIENT AIR QUALITY

Unique Lab Report No : TC1203923000002966F	Report Issue Date : 31/12/2024
Job Card No : BES/0004241	Discipline : Chemical
Field Data Sheet Code: BES/JSPCB/AAQ/20774139/01	Group : Atmospheric Pollution
Type of Industry / Plant : Iron Ore Mines	Product / Material of Test : Ambient Air
Application No : 20774139	Application Date & Time : 10/12/2024 at 06:02

Client Name & Address: Duarguiburu Iron Ore Mining Lease,
M/s. SAIL Gua Ore Mines, SAIL, Post - Gua, Dist- West Singhbhum (Jharkhand).

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0549	
Sampling Guidelines: IS 5182 (Part 14):Reaf. 2019 & IS 5182 (Part 5): 2020			
Sampling Date : 24/12/2024 to 25/12/2024		Sample Receiving & Registration Date : 26/12/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Mines Activities, Movement of Vehicles & Surrounding Activities	
Site Metrological Information	Avg Temp: 22 °C	Avg R. Humidity : 60 %	Barometric Pressure: 702 mmHg
Predominant Wind Direction: From ESE to WNW		Customer Representative Name: Kamal Bhasker	

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25±2 °C
Test Start Date : 26/12/2024	Test End Date : 30/12/2024
Sampling Location : Near Main Canteen (Lat - 22°12'54.85"N Long - 85°21'31.49"E)	

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 (Part 2 /Sec 1): 2023	80	06.35
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 (Part 6) : Reaf.2017	80	42.57
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 (Part 23): Reaf.2022	100	91.62
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 (Part 24) : 2019	60	38.63

---END OF REPORT---

Remarks:

All parameters in this report conforms to the specific standard.

Note: -

- Sampling has been carried out as per applied test methods.
- Reported results are related only to the item tested.
- This report should not be reproduced except in full, without approval of laboratory.
- Items tested are as per the standard requirements.

Reviewed by



Authorized by
Technical Manager
(Sunil Kumar Singh)

Add: - Sarveshwari Nagar, Itki Road, Bajra, P.O - Hehal, Dist - Ranchi, Jharkhand - 834005
Email Id :- biocratenv@gmail.com Mobile No - 7369019812, 8340466751, 9608708172



BIOCRAT ENVIRONMENTAL SERVICES
(BIOCRAT ENVIRONMENTAL LAB)



TEST REPORT

Format No: 7.8F-04

AMBIENT AIR QUALITY

Unique Lab Report No : TC1203923000002967F	Report Issue Date : 31/12/2024
Job Card No : BES/0004242	Discipline : Chemical
Field Data Sheet Code: BES/JSPCB/AAQ/20774139/02	Group : Atmospheric Pollution
Type of Industry / Plant : Iron Ore Mines	Product / Material of Test : Ambient Air
Application No : 20774139	Application Date & Time : 10/12/2024 at 06:02

Client Name & Address: Duarguiburu Iron Ore Mining Lease,
M/s. SAIL Gua Ore Mines, SAIL, Post – Gua, Distt: West Singhbhum (Jharkhand).

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0549
Sampling Guidelines: IS 5182 (Part 14):Reaf. 2019 & IS 5182 (Part 5): 2020	
Sampling Date : 24/12/2024 to 25/12/2024	Sample Receiving & Registration Date : 26/12/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to: Mines Activities, Movement of Vehicles & Surrounding Activities
Site Metrological Information	Avg Temp: 22 °C
	Avg R. Humidity : 60 %
	Barometric Pressure: 702 mmHg
Predominant Wind Direction: From ESE to WNW	Customer Representative Name: Kamal Bhasker

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25±2 °C
Test Start Date : 26/12/2024	Test End Date : 30/12/2024
Sampling Location : Near Environmental Lab (Lat - 22°12'49.43"N Long - 85°22'38.00"E)	

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 (Part 2 /Sec 1): 2023	80	05.22
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 (Part 6) : Reaf.2017	80	43.53
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 (Part 23): Reaf.2022	100	77.33
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 (Part 24) : 2019	60	33.75

—END OF REPORT—

Remarks:

All parameters in this report conforms to the specific standard.

Note:-

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- This report should not be reproduced except in full, without approval of laboratory.
- Items tested are as per the standard requirements.

Reviewed by



Authorized by
Technical Manager
(Sunil Kumar Singh)

General Manager (Mines) & E&I
SAIL-BSL, Gua Ore Mines

Add: - Sarveshwari Nagar, Itki Road, Bajra, P.O – Hehal, Dist – Ranchi, Jharkhand Pin -834005

Email Id :- biocratenv@gmail.com Mobile No – 7369019812, 8340466751, 9608708172



BIOCRAT ENVIRONMENTAL SERVICES
(BIOCRAT ENVIRONMENTAL LAB)



TEST REPORT

Format No: 7.8F-04

AMBIENT AIR QUALITY

Unique Lab Report No : TC1203923000002968F	Report Issue Date : 31/12/2024
Job Card No : BES/0004243	Discipline : Chemical
Field Data Sheet Code: BES/JSPCB/AAQ/20774139/03	Group : Atmospheric Pollution
Type of Industry / Plant : Iron Ore Mines	Product / Material of Test : Ambient Air
Application No : 20774139	Application Date & Time : 10/12/2024 at 06:02

Client Name & Address: Duarguiburu Iron Ore Mining Lease,
M/s. SAIL Gua Ore Mines, SAIL, Post – Gua, Dist- West Singhbhum (Jharkhand).

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0549
Sampling Guidelines: IS 5182 (Part 14):Reaf. 2019 & IS 5182 (Part 5): 2020	
Sampling Date : 24/12/2024 to 25/12/2024	Sample Receiving & Registration Date : 26/12/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to: Mines Activities, Movement of Vehicles & Surrounding Activities
Site Metrological Information	Avg Temp: 22 °C
Avg R. Humidity : 60 %	Barometric Pressure: 702 mmHg
Predominant Wind Direction: From ESE to WNW	Customer Representative Name: Kamal Bhasker

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25±2 °C
Test Start Date : 26/12/2024	Test End Date : 30/12/2024
Sampling Location : Near Gua Club (Lat - 22°12'42.28"N Long - 85°22'54.07"E)	

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 (Part 2 /Sec 1): 2023	80	< 5.0
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 (Part 6) : Reaf.2017	80	41.02
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 (Part 23): Reaf.2022	100	68.50
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 (Part 24) : 2019	60	27.53

---END OF REPORT---

Remarks:

All parameters in this report conforms to the specific standard.

Note:-

- Sampling has been carried out as per applied test methods.
- Reported results are related only to the item tested.
- This report should not be reproduced except in full, without approval of laboratory.
- Items tested are as per the standard requirements.

Reviewed by



General Manager (Mines) &
SAIL-BSL, Gua Ore Mines

Authorized by
Technical Manager
(Sunil Kumar Singh)

Add: - Sarveshwari Nagar, Itki Road, Bajra, P.O – Hehal, Dist – Ranchi, Jharkhand. Pin -834005
Email Id :- biocratenv@gmail.com. Mobile No – 7369019812, 8340466751, 9608708172



BIOCRAT ENVIRONMENTAL SERVICES
(BIOCRAT ENVIRONMENTAL LAB)



TEST REPORT

Format No: 7.8F-04

AMBIENT AIR QUALITY

Unique Lab Report No : TC1203923000002969F	Report Issue Date : 31/12/2024
Job Card No : BES/0004244	Discipline : Chemical
Field Data Sheet Code: BES/JSPCB/AAQ/20774139/04	Group : Atmospheric Pollution
Type of Industry / Plant : Iron Ore Mines	Product / Material of Test : Ambient Air
Application No : 20774139	Application Date & Time : 10/12/2024 at 06:02

Client Name & Address: Duarguiburu Iron Ore Mining Lease,
M/s. SAIL Gua Ore Mines, SAIL, Post - Gua, Dist- West Singhbhum (Jharkhand).

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0549	
Sampling Guidelines: IS 5182 (Part 14):Reaf. 2019 & IS 5182 (Part 5): 2020			
Sampling Date : 25/12/2024 to 26/12/2024		Sample Receiving & Registration Date : 26/12/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Mines Activities, Movement of Vehicles & Surrounding Activities	
Site Metrological Information	Avg Temp: 21 °C	Avg R. Humidity : 63 %	Barometric Pressure: 704 mmHg
Predominant Wind Direction: From ESE to WNW		Customer Representative Name: Kamal Bhasker	

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25±2 °C
Test Start Date : 26/12/2024	Test End Date : 30/12/2024
Sampling Location : Near WTP Area (Lat - 22°12'13.36"N Long - 85°22'39.48"E)	

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 (Part 2 /Sec 1): 2023	80	< 5.0
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 (Part 6) : Reaf.2017	80	31.51
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 (Part 23): Reaf.2022	100	56.71
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 (Part 24) : 2019	60	24.35

---END OF REPORT---

Remarks:

All parameters in this report conforms to the specific standard.

Note:-

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- Reported results are related only to the item tested.
- This report should not be reproduced except in full, without approval of laboratory.
- Items tested are as per the standard requirements.

Reviewed by

Signature of Reviewer



Authorized by
Technical Manager
(Sunil Kumar Singh)



BIOCRAT ENVIRONMENTAL SERVICES (BIOCRAT ENVIRONMENTAL LAB)



TEST REPORT

Format No: 7.8F-04

AMBIENT AIR QUALITY

Unique Lab Report No : TC1203923000002970F	Report Issue Date : 31/12/2024
Job Card No : BES/0004245	Discipline : Chemical
Field Data Sheet Code: BES/JSPCB/AAQ/20774139/05	Group : Atmospheric Pollution
Type of Industry / Plant : Iron Ore Mines	Product / Material of Test : Ambient Air
Application No : 20774139	Application Date & Time : 10/12/2024 at 06:02

Client Name & Address: Duarguiburu Iron Ore Mining Lease,
M/s. SAIL Gua Ore Mines, SAIL, Post – Gua, Dist- West Singhbhum (Jharkhand).

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0549
Sampling Guidelines: IS 5182 (Part 14):Reaf. 2019 & IS 5182 (Part 5): 2020	
Sampling Date : 25/12/2024 to 26/12/2024	Sample Receiving & Registration Date : 26/12/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to: Mines Activities, Movement of Vehicles & Surrounding Activities
Site Metrological Information	Avg Temp: 21 °C
Avg R. Humidity : 63 %	Barometric Pressure: 704 mmHg
Predominant Wind Direction: From ESE to WNW	Customer Representative Name: Kamal Bhasker

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25±2 °C
Test Start Date : 26/12/2024	Test End Date : 30/12/2024
Sampling Location : Near DG Area (Lat - 22°12'47.11"N Long - 85°22'36.04"E)	

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 (Part 2 /Sec 1): 2023	80	05.53
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 (Part 6) : Reaf.2017	80	46.29
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 (Part 23): Reaf.2022	100	79.55
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 (Part 24) : 2019	60	35.29

---END OF REPORT---

Remarks:

All parameters in this report conforms to the specific standard.

Note:-

- Sampling has been carried out as per applied test methods.
- Reported results are related only to the item tested.
- This report should not be reproduced except in full, without approval of laboratory.
- Items tested are as per the standard requirements.

Reviewed by



Authorized by
Technical Manager
(Sunil Kumar Singh)

Add: - Sarveshwar Nagar, Iktl Road, Bajra, P.O – Hehal, Dist – Ranchi, Jharkhand. Pin -834005
Email Id :- biocratenv@gmail.com Mobile No – 7369019812, 8340466751, 9608708172



BIOCRAT ENVIRONMENTAL SERVICES
(BIOCRAT ENVIRONMENTAL LAB)



TEST REPORT

Format No: 7.8F-04

AMBIENT AIR QUALITY

Unique Lab Report No : TC1203923000002971F	Report Issue Date : 31/12/2024
Job Card No : BES/0004246	Discipline : Chemical
Field Data Sheet Code: BES/JSPCB/AAQ/20774139/06	Group : Atmospheric Pollution
Type of Industry / Plant : Iron Ore Mines	Product / Material of Test : Ambient Air
Application No : 20774139	Application Date & Time : 10/12/2024 at 06:02

Client Name & Address: Duarguiburu Iron Ore Mining Lease,
M/s. SAIL Gua Ore Mines, SAIL, Post – Gua, Dist- West Singhbhum (Jharkhand).

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0549	
Sampling Guidelines: IS 5182 (Part 14):Reaf. 2019 & IS 5182 (Part 5): 2020			
Sampling Date : 25/12/2024 to 26/12/2024		Sample Receiving & Registration Date : 26/12/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Mines Activities, Movement of Vehicles & Surrounding Activities	
Site Metrological Information	Avg Temp: 21 °C	Avg R. Humidity : 63 %	Barometric Pressure: 704 mmHg
Predominant Wind Direction: From ESE to WNW		Customer Representative Name: Kamal Bhasker	

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25±2 °C
Test Start Date : 26/12/2024	Test End Date : 30/12/2024
Sampling Location : Near Hirzi Hutting (Lat - 22°11'34.57"N Long - 85°22'55.07"E)	

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 (Part 2 /Sec 1): 2023	80	<5.0
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 (Part 6) : Reaf.2017	80	23.75
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 (Part 23): Reaf.2022	100	63.25
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 (Part 24) : 2019	60	26.17

---END OF REPORT---

Remarks:

All parameters in this report conforms to the specific standard.

Note:-

- Sampling has been carried out as per applied test methods.
- Reported results are related only to the item tested.
- This report should not be reproduced except in full, without approval of laboratory.
- Items tested are as per the standard requirements.

Reviewed by



General Manager (Mines) & E&L
SAIL-BSL, Gua Ore Mines

Authorized by
Technical Manager
(Sunil Kumar Singh)

Add: - Sarveshwari Nagar, Iki Road, Bajra, P.O – Hchut, Dist – Ranchi, Jharkhand. Pin -834005

Email Id :- biocratenv@gmail.com Mobile No – 7369019812, 8340466751, 9608708172



BIOCRAT ENVIRONMENTAL SERVICES
(BIOCRAT ENVIRONMENTAL LAB)



TEST REPORT

Format No: 7.8F-05

AMBIENT NOISE LEVELS

Unique Lab Report No : TC1203923000002972F	Report Issue Date : 31/12/2024
Job Card No : BES/0004247	Discipline : Chemical
Field Data Sheet Code: BES/JSPCB/NOISE/20774139/01	Group : Atmospheric Pollution
Type of Industry / Plant : Iron Ore Mines	Product / Material of Test : Ambient Noise Levels (Excluding Vibration)
Application No : 20774139	Application Date & Time : 10/12/2024 at 06:02

Client Name & Address: Duarguiburu Iron Ore Mining Lease,
M/s. SAIL Gua Ore Mines, SAIL, Post – Gua, Dist- West Singhbhum (Jharkhand).

General Information

Protocol : Ambient Noise	Type of Sample: Ambient Noise
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0549
Sampling Method : IS 9989:1981 Reaf.2020	Monitoring Data : Appropriate
Monitoring Date : 24/12/2024 to 25/12/2024	Data Receiving & Registration Date : 26/12/2024
Noise Due to: Mines Activities, Movement of Vehicles & Nearby Activities	
Site Metrological Information	Avg Temp: 22 °C Avg R. Humidity : 60 % Barometric Pressure: 702 mmHg
Predominant Wind Direction: From ESE to WNW	Customer Representative Name: Kamal Bhasker

Sample Description

Data Analysis Start Date : 27/12/2024	Data Analysis End Date : 27/12/2024
Sampling Location : Near Main Canteen (Lat - 22°12'54.75"N Long - 85°21'29.58"E)	

Noise Monitoring Result

Sampling Duration	Day Time (06 AM - 10 PM)	Night Time (10 PM - 06 AM)	CPCB Limit in dB(A) Leq (As per Pollution Control Law Series: PCLS/06/2000-01)	
			Day Time	Night Time
Minimum in dB(A)	50.6	42.3		
Maximum in dB(A)	69.1	51.5		
Equivalent Sound Levels (Leq in dB(A))	57.8	44.3	75	70

---END OF REPORT---

Note: - "dB(A)Leq" denotes the time weighted average of sound in decibels on scale A which is reliable to human hearing.

Remarks:

All parameters in this report conforms to the specific standard.

Note: -

- Reported results are related only to the item tested.
- This report should not be reproduced except in full, without approval of laboratory.
- Items tested are as per the standard requirements

Manish Kr. Singh
Reviewed By



[Signature]
General Manager (Mines) & E&L
SAIL-BSL, Gua Ore Mines

[Signature]
Authorized by
Technical Manager
(Sunil Kumar Singh)

Add: - Sarveshwari Nagar, Iki Road, Bajra, P.O – Hehal, Dist – Ranchi, Jharkhand. Pin -834005

Email Id :- biocratenv@gmail.com. Mobile No – 7369019812, 8340466751, 9608708172



BIOCRAT ENVIRONMENTAL SERVICES
(BIOCRAT ENVIRONMENTAL LAB)



TEST REPORT

Format No: 7.8F-05

AMBIENT NOISE LEVELS

Unique Lab Report No : TC1203923000002973F	Report Issue Date : 31/12/2024
Job Card No : BES/0004248	Discipline : Chemical
Field Data Sheet Code: BES/JSPCB/NOISE/20774139/02	Group : Atmospheric Pollution
Type of Industry / Plant : Iron Ore Mines	Product / Material of Test : Ambient Noise Levels (Excluding Vibration)
Application No : 20774139	Application Date & Time : 10/12/2024 at 06:02

Client Name & Address: Duarguiburu Iron Ore Mining Lease,
M/s. SAIL Gua Ore Mines, SAIL, Post – Gua, Dist- West Singhbhum (Jharkhand).

General Information

Protocol : Ambient Noise	Type of Sample: Ambient Noise
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0549
Sampling Method : IS 9989:1981 Reaf.2020	Monitoring Data : Appropriate
Monitoring Date : 24/12/2024 to 25/12/2024	Data Receiving & Registration Date : 26/12/2024
Noise Due to: Mines Activities, Movement of Vehicles & Nearby Activities	
Site Metrological Information	Avg Temp: 22 °C Avg R. Humidity : 60 % Barometric Pressure: 702 mmHg
Predominant Wind Direction: From ESE to WNW	Customer Representative Name: Kamal Bhasker

Sample Description

Data Analysis Start Date : 27/12/2024	Data Analysis End Date : 27/12/2024
Sampling Location : Near Environmental Lab (Lat - 22°12'49.19"N Long - 85°22'38.45"E)	

Noise Monitoring Result

Sampling Duration	Day Time (06 AM - 10 PM)	Night Time (10 PM - 06 AM)	CPCB Limit in dB(A) Leq (As per Pollution Control Law Series: PCLS/06/2000-01)	
			Day Time	Night Time
Minimum in dB(A)	52.2	44.6		
Maximum in dB(A)	71.8	57.3		
Equivalent Sound Levels (Leq in dB(A))	68.2	52.7	75	70

---END OF REPORT---

Note: - "dB(A)Leq" denotes the time weighted average of sound in decibels on scale A which is reliable to human hearing.

Remarks:

All parameters in this report conforms to the specific standard.

Note:-

- Reported results are related only to the item tested.
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- Items tested are as per the standard requirements

Manish Kr. Singh
Reviewed By



Sunil Kumar Singh
Authorized by
Technical Manager
(Sunil Kumar Singh)

Manish Kr. Singh
General Manager (Mines) & E&L
SAIL-RSL-Gua Ore Mines

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BIOCRAT ENVIRONMENTAL SERVICES
(BIOCRAT ENVIRONMENTAL LAB)



TEST REPORT

Format No: 7.8F-05

AMBIENT NOISE LEVELS

Unique Lab Report No : TC1203923000002974F	Report Issue Date : 31/12/2024
Job Card No : BES/0004249	Discipline : Chemical
Field Data Sheet Code: BES/JSPCB/NOISE/20774139/03	Group : Atmospheric Pollution
Type of Industry / Plant : Iron Ore Mines	Product / Material of Test : Ambient Noise Levels (Excluding Vibration)
Application No : 20774139	Application Date & Time : 10/12/2024 at 06:02

Client Name & Address: Duarguiburu Iron Ore Mining Lease,
M/s. SAIL Gua Ore Mines, SAIL, Post - Gua, Dist- West Singhbhum (Jharkhand).

General Information			
Protocol : Ambient Noise		Type of Sample: Ambient Noise	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0549	
Sampling Method : IS 9989:1981 Reaf.2020		Monitoring Data : Appropriate	
Monitoring Date : 25/12/2024 to 26/12/2024		Data Receiving & Registration Date : 26/12/2024	
Noise Due to: Mines Activities, Movement of Vehicles & Nearby Activities			
Site Metrological Information	Avg Temp: 21 °C	Avg R. Humidity : 63 %	Barometric Pressure: 704 mmHg
Predominant Wind Direction: From ESE to WNW		Customer Representative Name: Kamal Bhasker	

Sample Description	
Data Analysis Start Date : 27/12/2024	Data Analysis End Date : 27/12/2024
Sampling Location : Near Gua Club (Lat - 22°12'42.57"N Long - 85°22'53.40"E)	

Noise Monitoring Result				
Sampling Duration	Day Time (06 AM - 10 PM)	Night Time (10 PM - 06 AM)	CPCB Limit in dB(A) Leq (As per Pollution Control Law Series: PCLS/06/2000-01)	
			Day Time	Night Time
Minimum in dB(A)	49.4	40.2		
Maximum in dB(A)	65.9	54.7		
Equivalent Sound Levels (Leq in dB(A))	53.6	42.5	75	70

---END OF REPORT---

Note: - "dB(A)Leq" denotes the time weighted average of sound in decibels on scale A which is reliable to human hearing.

Remarks:

All parameters in this report conforms to the specific standard.

Note: -

- Reported results are related only to the item tested.
- This report should not be reproduced except in full, without approval of laboratory.
- Items tested are as per the standard requirements

[Signature]
Reviewed By



[Signature]
General Manager (Mines) & E&L
SAIL-BSL, Gua Ore Mines

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(Sunil Kumar Singh)

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BIOCRAT ENVIRONMENTAL SERVICES
(BIOCRAT ENVIRONMENTAL LAB)



TEST REPORT

Format No: 7.8F-05

AMBIENT NOISE LEVELS

Unique Lab Report No : TC1203923000002975F	Report Issue Date : 31/12/2024
Job Card No : BES/0004250	Discipline : Chemical
Field Data Sheet Code: BES/JSPCB/NOISE/20774139/04	Group : Atmospheric Pollution
Type of Industry / Plant : Iron Ore Mines	Product / Material of Test : Ambient Noise Levels (Excluding Vibration)
Application No : 20774139	Application Date & Time : 10/12/2024 at 06:02

Client Name & Address: Duarguiburu Iron Ore Mining Lease,
M/s. SAIL Gua Ore Mines, SAIL, Post – Gua, Dist- West Singhbhum (Jharkhand).

General Information

Protocol : Ambient Noise	Type of Sample: Ambient Noise
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0549
Sampling Method : IS 9989:1981 Reaf.2020	Monitoring Data : Appropriate
Monitoring Date : 25/12/2024 to 26/12/2024	Data Receiving & Registration Date : 26/12/2024
Noise Due to: Mines Activities, Movement of Vehicles & Nearby Activities	
Site Metrological Information	Avg Temp: 21 °C
	Avg R. Humidity : 63 %
	Barometric Pressure: 704 mmHg
Predominant Wind Direction: From ESE to WNW	Customer Representative Name: Kamal Bhasker

Sample Description

Data Analysis Start Date : 27/12/2024	Data Analysis End Date : 27/12/2024
Sampling Location : Near Gua Hospital (Lat - 22°12'39.66"N Long - 85°22'53.52"E)	

Noise Monitoring Result

Sampling Duration	Day Time (06 AM - 10 PM)	Night Time (10 PM - 06 AM)	CPCB Limit in dB(A) Leq (As per Pollution Control Law Series: PCL5/06/2000-01)	
			Day Time	Night Time
Minimum in dB(A)	41.5	39.7		
Maximum in dB(A)	56.2	45.4		
Equivalent Sound Levels (Leq in dB(A))	49.3	38.8	50	40

---END OF REPORT---

Note: - "dB(A)Leq" denotes the time weighted average of sound in decibels on scale A which is reliable to human hearing.

Remarks:

All parameters in this report conforms to the specific standard.

Note:-

- Reported results are related only to the item tested.
- This report should not be reproduced except in full, without approval of laboratory.
- Items tested are as per the standard requirements

Manish Kr. Singh
Reviewed By



Sunil Kumar Singh
Authorized by
Technical Manager
(Sunil Kumar Singh)

Add: - Sarveshwari Nagar, Itki Road, Bajra, P.O. H. SAIL, Gua, Dist- West Singhbhum, Jharkhand. Pin - 834005
Email Id :- biocratenv@gmail.com, Mobile No - 7369019812, 8340466751, 9608708172



GEMS PROJECTS PVT. LTD.

(ENVIRONMENTAL LABORATORY DIVISION)

NABL ACCREDITED | ISO9001 & OHSAS 18001 CERTIFIED | JSPCB RECOGNISED



Certificate No.-TC-11067

TEST REPORT

ULR Number	TC	1	1	0	6	7	2	5	0	0	0	0	0	0	2	5	0	F
Sample Description	Ambient Air Quality																	
Job Registration ID	G/JRN/250324/AR-01																	
Test Report No.	G/TRN/250328-01																	
Work Order No.	JSPCB-21807956																	
Report Release Date	28-03-2025																	
Customer Details & Address	M/s Duarguiburu Iron Ore Mining Lease, M/s. Sail Gua Ore Mines, Sail, Post- Gua Dist- West Singhbhum (Jharkhand)																	
Type of Industries	Iron Ore Mines																	
Company Status	Operating																	
Sampling Location	(A) Near WTP Area (B) Near DG Area (C) Near Hirzi Hutting																	
Latitude & Longitude	(22°12'13.36"N) & (85°22'39.48"E) (22°12'47.11"N) & (85°22'36.04"E) (22°11'34.57"N) (85°22'55.07"E)																	
Sampling Time	03:00 Pm - 03:00 Pm 03:30 Pm - 03:30 Pm 03:50 Pm - 03:50 Pm																	
Test Results																		
Parameters	Units	Sampling Location															Permissible Limit	
		Site A Site B Site C															(as per NAAQ-2009)	
Particulate Matter (PM 10)	µg/m³	69.26 88.34 68.48															100	
Test Method - IS 5182 (Part-23)																		
Particulate Matter (PM 2.5)	µg/m³	31.78 34.58 30.29															60	
Test Method - IS 5182 (Part-24)																		
Sulphur Dioxide (SO₂)	µg/m³	30.64 32.11 29.66															80	
Test Method - IS 5182 (Part-2)																		
Nitrogen Dioxide (NO₂)	µg/m³	39.25 33.18 37.33															80	
Test Method - IS 5182 (Part-6)																		

- Remarks**
- 1) Test values are found within the prescribed limit of National Ambient Air Quality (NAAQ 2009).
 - 2) Results relate only to the items sampled and tested.
 - 3) The Test report shall not be reproduced except in full without approval of the laboratory.
 - 4) Sample will be disposed after 30 days from the issue date of the report.
 5. Any dispute is subject to Ranchi Jurisdiction Only.

Karishma
Karishma Kujur
Tested By (Analyst)



Ku. Soni Mehta
Kumari Soni Mehta
Authorized Signatory
Authorized Signatory
Gems Project Pvt. Ltd.

***** End of Report ***** (Environmental Laboratory Division) Page 1 of 1

[Signature]
General Manager (Mines) & E&L

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GEMS PROJECTS PVT. LTD.

(ENVIRONMENTAL LABORATORY DIVISION)

NABL ACCREDITED | ISO9001 & OHSAS 18001 CERTIFIED | JSPCB RECOGNISED



Certificate No. -TC-11067

TEST REPORT

ULR Number	TC	1	1	0	6	7	2	5	0	0	0	0	0	2	5	0	F	
Sample Description	Ambient Air Quality		Sampling Details															
Job Registration ID	G/JRN/250324/AR-01		Sampling Date		21st-22nd March.2025													
Test Report No.	G/TRN/250328-01		Sample Collected by		Vishwajit & Team													
Work Order No.	JSPCB-21807956		Sample Receiving Date		24-03-2025													
Report Release Date	28-03-2025		Test Starting Date		24-03-2025													
Customer Details & Address			Test Completion Date		26-03-2025													
M/s Duarguiburu Iron Ore Mining Lease, M/s. Sail Gua Ore Mines, Sail, Post- Gua Dist- West Singhbhum (Jharkhand)			Sampling Protocol		IS 5182 (Part-23,24,2,6)													
			Meteorological Information															
			Weather Condition		Semi-Cloudy													
			Barometric Pressure		704 (in mm Hg)													
			Wind Direction		(South-West)													
Type of Industries	Iron Ore Mines		Average Temperature (°C)		27													
Company Status	Operating		Relative Humidity (%)		63													
Sampling Location	(D) Near Main Canteen				(E) Near Enviromental Laboratory				(f) Near Gua Club									
Latitude & Longitude	(22°12'54.85"N) & (85°21'31.49"E)				(22°12'49.43"N) & (85°22'38.00"E)				(22°12'42.28"N) (85°22'54.07"E)									
Sampling Time	04:10 Pm - 04:10 Pm				04:30 Pm - 04:30 Pm				04:50 Pm - 04:50 Pm									
Test Results																		
Parameters	Units	Sampling Location			Permissible Limit													
		Site D	Site E	Site F														
Particulate Matter (PM 10)	µg/m³	84.62	87.32	61.12	100													
Test Method - IS 5182 (Part-23)																		
Particulate Matter (PM 2.5)	µg/m³	32.78	38.38	26.75	60													
Test Method - IS 5182 (Part-24)																		
Sulphur Dioxide (SO₂)	µg/m³	31.62	29.90	28.18	80													
Test Method - IS 5182 (Part-2)																		
Nitrogen Dioxide (NO₂)	µg/m³	33.18	40.19	37.85	80													
Test Method - IS 5182 (Part-6)																		

- Remarks
- 1) Test values are found within the prescribed limit of National Ambient Air Quality (NAAQ 2009).
 - 2) Results relate only to the items sampled and tested.
 - 3) The Test report shall not be reproduced except in full without approval of the laboratory.
 - 4) Sample will be disposed after 30 days from the issue date of the report.
 5. Any dispute is subject to Ranchi Jurisdiction Only.

Karishma
28/03/2025
Karishma Kujur
Tested By (Analyst)



Kumari Soni Mehta
Authorized Signatory
Authorized Signatory
Gems Project Pvt. Ltd.
(Environmental Laboratory Division)
Page 1 of 1



GEMS PROJECTS PVT. LTD.

(ENVIRONMENTAL LABORATORY DIVISION)

NABL ACCREDITED | ISO9001 & OHSAS 18001 CERTIFIED | JSPCB RECOGNISED



Certificate No.-TC-11067

TEST REPORT

ULR Number	TC	1	1	0	6	7	2	5	0	0	0	0	0	2	5	1	F
Sample Description		Noise Level Monitoring						Sampling Details									
Job Registration ID		G/JRN/250324/NOISE-01						Sampling Date				21st-22nd March.2025					
Test Report No.		G/TRN/250328-01						Sample Collected by				Vishwajit & Team					
Work Order No.		JSPCB-21807956						Sample Receiving Date				24-03-2025					
Report Release Date		28-03-2025						Test Starting Date				24-03-2025					
Customer Details & Address M/s Duarguiburu Iron Ore Mining Lease, M/s. Sail Gua Ore Mines, Sail , Post- Gua Dist- West Singhbhum (Jharkhand)								Test Completion Date				24-03-2025					
								Sampling Protocol				IS 9989-1981 (RA-2001)					
								Meteorological Information									
								Weather Condition				Semi- Cloudy					
								Barometric Pressure				704 (in mm Hg)					
								Wind Direction				(South-West)					
Type of Industries		Iron Ore Mines						Average Temperature (°C)				27					
Company Status		Operating						Relative Humidity (%)				63					
Test Results																	
Sampling Time		Sampling Location				Parameters		Units		Day Time				Night Time			
03:10 Pm - 03:10 Pm		(A)- Near Main Canteen				Leq		dB (A)		66.2				48.2			
Latitude		(22°12'54.85"N)															
Longitude		(85°21'31.49"E)															
03:40 Pm - 03:40 Pm		(B)- Near Enviromental Lab				Leq		dB (A)		65.3				40.3			
Latitude		(22°12'49.43"N)															
Longitude		(85°22'38.00"E)															
04:20 Pm - 04:20 Pm		(C)- Near Gua Club				Leq		dB (A)		58.4				35.7			
Latitude		(22°12'42.28"N)															
Longitude		(85°22'54.07"E)															
04:40 Pm - 04:40 Pm		(D)- Near Gua Hospital				Leq		dB (A)		59.7				38.5			
Latitude		(22°12'39.66"N)															
Longitude		(85°22'53.52"E)															

Remarks

- (1) All values are observed well within the limit
- (2) Leq = Level Equivalent.
- (3) Day Time - From 6:00 Am to 10:00Pm, Night Time - From 10:00 PM to 6:00 Am
- (4) The Noise Pollution (Regulation and Control) Rules, 2000, (CPCB)

Area/Zone	Day Time/Night Time
Industrial Area	75/70, Limits in dB(A)
- (5) The Test report shall not be reproduced except in full without approval of the laboratory.
- (6) Sample will be disposed after 30 days from the issue date of the reports.
- (7) Any dispute is subject to Ranchi Jurisdiction Only.

Karishma
28/03/2025
Karishma Kujur
Tested By (Analyst)



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