

# The Sandur Manganese & Iron Ores Limited

(An ISO 9001:2015; ISO 14001:2015 and 45001:2018 certified company)  
CIN: L85110KA1954PLC000759; Website: www.sandurgroup.com

## REGISTERED OFFICE

'SATYALAYA', No.266  
Ward No.1, Palace Road  
Sandur – 583 119, Ballari District  
Karnataka, India  
Tel: +91 8395 260301/ 283173-199  
Fax: +91 8395 260473



## CORPORATE OFFICE

'SANDUR HOUSE', No.9  
Bellary Road, Sadashivanagar  
Bengaluru – 560 080  
Karnataka, India

Tel: +91 80 4152 0176 - 79 / 4547 3000  
Fax: +91 80 4152 0182

06 March 2026

No: SMIORE/MN/060326/2679/1065

The Environmental Officer,  
Karnataka State Pollution Control Board,  
Ward No.25, 4th Main Road,  
Kuvempu Nagar,  
Ballari – 583104



Dear Sir,

Sub: Submission of reports pertaining to monitoring of environmental parameters for the month of February 2026 in respect of Mining Lease No. 2679.

- Ref: 1. EC Identification No. EC24B0000KA5391575N dated 01 September 2024.  
2. Consent for Operation No. AW-337273 dated 10 April 2023.  
3. Consent for Operation No. AW-348553 dated 29 April 2025.  
4. Consent for Operation No. AW-351293 dated 12 November 2025.

With reference to the letter cited above, we are enclosing herewith environmental monitoring reports from NABET accredited and MoEF&CC empaneled laboratory M/s Mineral Engineering Services as per stipulated environmental parameters in Environmental Clearance and Consent for Operation-Expansion for the month of February 2026 in respect of Mining Lease No. 2679, Ramghad Manganese & Iron Ore Mine of The Sandur Manganese & Iron Ores Limited.

Kindly request you to acknowledge receipt of the reports and oblige.

Thank you,  
for The Sandur Manganese & Iron Ores Limited,

Parthipan P  
Sr. General Manager & Agent

Encl: Monitoring Reports

**MINES OFFICE:** Deogiri - 583112, Sandur Taluk, Ballari District  
Tel: +91 8395 271025 / 28 / 29 / 40; Fax: +91 8395 271066

--- OFFICE: Metal & Ferroalloy Plant. Vvasankere, Mariyammanahalli – 583 222, Hosapete Taluk, Ballari District



National Accreditation Board for  
Testing and Calibration Laboratories

**CERTIFICATE OF ACCREDITATION**

**ENVIRONMENTAL LABORATORY (UNIT OF MINERAL  
ENGINEERING SERVICES LLP)**

has been assessed and accredited in accordance with the standard

**ISO/IEC 17025:2017**

**"General Requirements for the Competence of Testing &  
Calibration Laboratories"**

for its facilities at

#948,2ND CROSS, ST.THOMAS TOWN POST,KAMMANAHALLI MAIN ROAD, BENGALURU, BENGALURU  
URBAN, KARNATAKA, INDIA

in the field of

**TESTING**

Certificate Number: TC-6172

Issue Date: 24/05/2025

Valid Until: 23/05/2027

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.  
(To see the scope of accreditation of this laboratory, you may also visit NABL website [www.nabl-india.org](http://www.nabl-india.org))

Name of Legal Entity: MINERAL ENGINEERING SERVICES LLP

Signed for and on behalf of NABL



  
Anuja Anand  
Director

  
N. Venkateswaran  
Chief Executive Officer



**LIFE**  
Lifestyle For  
Environment



केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
CENTRAL POLLUTION CONTROL BOARD  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार  
MINISTRY OF ENVIRONMENT FOREST & CLIMATE CHANGE GOVT OF INDIA

12<sup>th</sup> June 2025

F. No. LB/99/7/2021-INST LAB-HO-CPCB-HO/Pvt./554

Recognition Letter

To,  
The Head of Laboratory,  
M/s Environmental Laboratory (Unit of Mineral Engineering Services),  
948 2<sup>nd</sup> Cross St Thomas Town Post,  
Kammanahalli, Bengaluru-560084,  
Karnataka.

**Subject: Recognition of M/s Environmental Laboratory (Unit of Mineral Engineering Services), 948 2<sup>nd</sup> Cross St Thomas Town Post, Kammanahalli, Bengaluru-560084, Karnataka as Environmental laboratory under the Environmental (Protection) Act- 1986- reg.**

Sir,

With reference to your application dated 19/03/2025 along with acceptance of the terms & conditions of the guidelines for recognition of environmental laboratories under the Environmental (Protection) Act, 1986, submitted to Central Pollution Control Board (CPCB), the Competent Authority of CPCB has accorded approval for renewal of recognition of Environmental laboratory and Govt. Analysts. Subsequently, M/s **Environmental Laboratory (Unit of Mineral Engineering Services), 948 2<sup>nd</sup> Cross St Thomas Town Post, Kammanahalli, Bengaluru-560084, Karnataka** shall be notified considering the current requirement of mandatory accreditation / certifications of the laboratory with a validity up to 23/05/2028 (for three years), subject to validity of ISO/IEC 17025 and IS/ISO 45001.

2. The following analysts have been approved as Government Analysts:

1. Sh. M. Sachin Raju
2. Smt. Arshiya Kousar
3. Smt. Binu Mani

3. The laboratory should compulsorily follow the accepted terms and conditions and may undertake the following tests:

- a) **Physical Tests:** Conductivity, Colour, pH, Fixed & Volatile Solids, Total Solids, Total Dissolved Solids, Total Suspended Solids, Turbidity, Temperature, Velocity & Discharge Measurement of Industrial Effluent Stream, Flocculation Test (Jar Test), Odour, Salinity, Settleable Solids and Sludge Volume Index (SVI).
- b) **Inorganic (General and Non-metallic):** Acidity, Alkalinity, Ammonical Nitrogen, Chloride, Chlorine Residual, Dissolved Oxygen, Fluoride, Total Hardness, Total Kjeldahl Nitrogen (TKN), Nitrite Nitrogen, Nitrate Nitrogen, Phosphate, Sulphate, Cyanide, Silica and Sulphide.
- c) **Inorganic (Trace Metals):** Boron, Cadmium, Calcium, Total Chromium, Chromium Hexavalent, Copper, Iron, Lead, Magnesium, Mercury, Nickel, Potassium, Sodium, Sodium Absorption Ratio (SAR), Zinc, Arsenic, Aluminium, Antimony, Barium, Cobalt, Selenium, Silver, Tin and Vanadium.
- d) **Organics (General) and Trace Organics:** Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Oil and Grease, Phenolic Compounds, Pesticides (each) (Organo-Chlorine and Organo Nitrogen-Phosphorus), Poly-Chlorinated Biphenyl (PCB's) each, Polynuclear Aromatic Hydrocarbon (PAH), Surfactants and Tannin & Lignin.
- e) **Microbiological Test:** Total Coliform, Faecal Coliform, *E. coli*, Faecal Streptococci and Total Plate Count.
- f) **Toxicological Tests:** Bioassay Method for Evaluation of Toxicity Using Fish (90% survival of fish after 96 hrs in 100% effluent) and Measurement of toxicity using Daphnia or other organism.

contd.

‘परिवेश भवन’ पर्वी अर्जुन नगर, दिल्ली-110032

Parivesh Bhawan, East Arjun Nagar, Delhi-110032

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



- g) **Biological Test:** Macrophytic Identification, Planktonic Identification Count and Chlorophyll.
- h) **Characterization of Hazardous Waste:** Corrosivity, Ignibility (Flash Point) and Measurement of Heavy Metals/Pesticides in the Waste/Leachate.
- i) **Soil/Sludge/Sediment and Solid Waste:** Boron, Cation Exchange Capacity (CEC), Electrical Conductivity, Nitrogen (Available), Organic Carbon/Matter (Chemical Method), pH, Phosphorous (Available), Phosphate (Ortho), Phosphate (Total), Potassium, SAR in Soil Extract, Sodium, Soil Moisture, TKN, Calorific Value, Ammonia, Bicarbonate, Calcium, Calcium Carbonate, Chloride, Colour, H. Acid, Heavy Metal, Magnesium, Nitrate, Nitrite, Potash(Available), Sulphate, Sulphur, Total Organic Carbon (TOC), Total Water Soluble Salt and Water Holding Capacity.
- j) **Ambient Air/ Fugitive Emissions:** Nitrogen Dioxide (NO<sub>2</sub>), Sulphur Dioxide (SO<sub>2</sub>), Total Suspended Particulate Matter, Respirable Suspended Particulate Matter (PM<sub>10</sub>), Ammonia, Carbon monoxide, Chlorine, Lead, Ozone, Benzene Toluene Xylene (BTX), Polycyclic Aromatic Hydrocarbon (PAH) Benzo-a-Pyrene & others and PM<sub>2.5</sub>.
- k) **Stack Gases/ Source Emission:** Particulate Matter, Sulphur Dioxide, Velocity & Flow, Carbon Dioxide, Carbon Monoxide, Temperature, Oxygen, Oxides of Nitrogen, Acid Mist, Ammonia, Chlorine, Total Hydrocarbon, Hydrogen Sulphide and Carbon Disulphide.
- l) **Noise Level:** Noise level measurement (20 to 140 dba) and Ambient Noise & Source Specific Noise.
- m) **Meteorological:** Ambient Temperature, Wind Direction, Wind Speed, Relative Humidity, Solar Radiation and Rain Fall.
4. The laboratory shall compulsorily participate in the Analytical Quality Control (AQC) Exercise conducted by the CPCB to ascertain the capability of the laboratory and analysts. The lab shall submit quarterly progress report on the sample analysis carried out to CPCB.
5. The surprise inspection / periodic surveillance of the recognized environment laboratory will be undertaken to assess its proper functioning systematic operation and reliability of data generated at the laboratory by a Joint Team as per the Notification.
6. The laboratory should have the mandatory requisite accreditation and certificate of the ISO: 17025 and ISO: 45001 as per rules. This recognition is subject to such accreditations and renewals as applicable and in case of serious non-compliance of any of the terms and conditions, the laboratory may be black listed for a minimum period of two years and civil/criminal proceedings, as applicable, may be initiated for performing functions on behalf of the Government in an unauthorized manner.
7. **M/s Environmental Laboratory (Unit of Mineral Engineering Services), Bengaluru, Karnataka** is required to apply for further renewal of recognition through online using CPCB web portal (<https://cpcbepalab.in/epalab>) before expiry of recognition with mandatory accreditation / certification concerned.

Yours faithfully,

*M. S. S. S.*  
*12/6/2024*  
Divisional Head  
Instrumentation Laboratory

फा. सं. एलबी-2021/7/99/इंस्टलैब-एचओ-सीपीसीबी-एचओ / प्राइवेट / 554

मान्यता पत्र

सेवा में,

प्रयोगशाला प्रमुख,  
मैसर्स एनवायरनमेंटल लैबोरेटरी (यूनिट ऑफ मिनरल इंजीन्यरिंग सर्विसेस एलएलपी),  
948 दूसरी क्रॉस सेंट थॉमस टाउन पोस्ट,  
कम्पनहल्ली, बेंगलुरु-560084,  
कर्नाटक।

विषय: पर्यावरण (संरक्षण) अधिनियम, 1986 के अंतर्गत पर्यावरणीय प्रयोगशाला के रूप में मैसर्स एनवायरनमेंटल लैबोरेटरी (यूनिट ऑफ मिनरल इंजीन्यरिंग सर्विसेस एलएलपी), 948 दूसरी क्रॉस सेंट थॉमस टाउन पोस्ट, कम्पनहल्ली, बेंगलुरु-560084, कर्नाटक की मान्यता के बारे में।

महोदय,

केंद्रीय प्रदूषण नियंत्रण बोर्ड (के.प्र.नि.बोर्ड) को पर्यावरण (संरक्षण) अधिनियम, 1986 के अंतर्गत पर्यावरण प्रयोगशालाओं की मान्यता के लिए दिशानिर्देशों के निबंधन और शर्तों की स्वीकृति के साथ आपके दिनांक 19/03/2025 के प्रस्तुत आवेदन के संदर्भ में, के.प्र.नि.बोर्ड के सक्षम प्राधिकारी ने पर्यावरण प्रयोगशाला और सरकार के विश्लेषक की मान्यता के नवीनीकरण को अनुमोदन प्रदान किया है। तदनुसार, मैसर्स एनवायरनमेंटल लैबोरेटरी (यूनिट ऑफ मिनरल इंजीन्यरिंग सर्विसेस एलएलपी), 948 दूसरी क्रॉस सेंट थॉमस टाउन पोस्ट, कम्पनहल्ली, बेंगलुरु-560084, कर्नाटक को भारत की राजपत्र अधिसूचना में प्रयोगशाला की अनिवार्य प्रत्यायन/प्रमाणन की वर्तमान अपेक्षा को ध्यान में रखते हुए दिनांक 23/05/2028 (तीन साल) तक आईएसओ/ आईईसी 17025 और आईएस/आईएसओ 45001 की वैधता के साथ अधिसूचित किया जाएगा।

2. निम्नलिखित विश्लेषकों को सरकारी विश्लेषक के रूप में अनुमोदित किया गया है:

1. श्री. एम. सचिन राजू
2. श्रीमती अर्शिया कौसर
3. श्रीमती. बिनु मणि

3. प्रयोगशाला अनिवार्य रूप से स्वीकृत निबंधन और शर्तों का पालन करते हुए निम्नलिखित परीक्षणों करेगी:

- क. **भौतिक परीक्षण:** चालकता, रंग, पीएच, स्थिर और वाष्पशील ठोस, कुल ठोस, कुल विलीन ठोस, कुल निलंबित ठोस, आविलता, तापमान, वेग एवं निर्वहन औद्योगिक बहिःस्राव धारा का विसर्जन मापन, फ्लोक्यूलेशन टेस्ट (जार टेस्ट), गंध, लवणता, निपटान योग्य ठोस और आपंक वॉल्यूम इंडेक्स (एसवीआई)।
- ख. **अकार्बनिक (सामान्य और गैर-धात्विक):** अम्लता, क्षारीयता, अमोनिकल नाइट्रोजन, क्लोराइड, क्लोरीन अवशिष्ट, विलीन ऑक्सीजन, फ्लोराइड, कुल कठोरता, कुल केजेलडहल नाइट्रोजन (टीकेएन), नाइट्राइट नाइट्रोजन, नाइट्रेट नाइट्रोजन, फॉस्फेट, सल्फेट, साइनाइड, सिलिका और सल्फाइड।
- ग. **अकार्बनिक (सूक्ष्म मात्रिक धातु):** बोरोन, कैडमियम, कैल्शियम, टोटल क्रोमियम, क्रोमियम हेक्सावैलेंट, तांबा, लोहा, सीसा, मैग्नीशियम, पारा, निकल, पोटेशियम, सोडियम, सोडियम अवशोषण अनुपात (एसएआर), जिंक, आर्सेनिक, एल्युमीनियम, एंटीमनी, बेरियम, कोबाल्ट, सेलेनियम, सिल्वर, टिन और वैनेडियम।
- घ. **ऑर्गेनिक्स (सामान्य) और ट्रेस ऑर्गेनिक्स:** बायोकेमिकल ऑक्सीजन डिमांड (बीओडी), रासायनिक ऑक्सीजन डिमांड (सीओडी), तेल और ग्रीस, फेनोलिक यौगिक, कीटनाशक (प्रत्येक) (ऑर्गेनो-क्लोरीन और ऑर्गेनो नाइट्रोजन-फॉस्फोरस), पॉली-क्लोरीनेटेड बाइफेनाइल (पीसीबी) (प्रत्येक), पॉलीन्यूक्लियर एरोमैटिक हाइड्रोकार्बन (पीएच), सर्फेक्टेंट और टैनिन & लिग्निन।
- ङ. **सूक्ष्म जीवविज्ञान परीक्षण:** टोटल कोलीफॉर्म, फीकल कोलीफॉर्म, ई.कोली, फीकल स्ट्रेप्टोकोक्की, स्ट्रेप्टोकोक्की और टोटल प्लेट काउंट।
- च. **आविष विज्ञानी परीक्षण:** मछली का उपयोग करके विषाक्तता के मूल्यांकन के लिए जैव परख विधि (100% प्रवाह में 96 घंटे के बाद मछली का 90% जीवित रहना), और डैफ़निया या अन्य जीव का उपयोग करके विषाक्तता का मापन।

जारी.

- छ. **जैविक परीक्षण:** मैक्रोफाइटिक पहचान, प्लवक पहचान गणना और क्लोरोफिल।
- ज. **परिसंकटमय अपशिष्ट का लक्षण वर्णन:** संक्षारकता, ज्वलनशीलता (फ्लैश प्वाइंट) और अपशिष्ट & निक्षालक में भारी धातुओं/पीड़कनाशियों का मापन।
- झ. **मृदा/आपंक/तलछट और ठोस अपशिष्ट:** बोरॉन, कटियन एक्सचेंज क्षमता (सीईसी), विद्युत चालकता, नाइट्रोजन (उपलब्ध), कार्बनिक कार्बन/पदार्थ (रासायनिक विधि), पीएच, फास्फोरस (उपलब्ध), फॉस्फेट (ऑर्थो), फॉस्फेट (कुल), पोटेशियम, मृदा के अर्क में एसएआर, सोडियम, मृदा की नमी, टीकेएन, कैलोरी मान, अमोनिया, बाइकार्बोनेट, कैल्शियम, कैल्शियम कार्बोनेट, क्लोराइड, रंग, एच एसिड, भारी धातु, मैग्नीशियम, नाइट्रेट, नाइट्राइट, पोटेश (उपलब्ध), सल्फेट, सल्फर, कुल कार्बनिक कार्बन (टीओसी), कुल पानी में घुलनशील नमक और जल धारण क्षमता।
- ञ. **परिवेशी वायु/पलायक उत्सर्जन:** नाइट्रोजन डाइऑक्साइड (एनओ<sub>2</sub>), सल्फर डाइऑक्साइड (एसओ<sub>2</sub>), कुल निलंबित विविक्त कण, श्वसन योग्य निलंबित कण पदार्थ (पीएम<sub>10</sub>), अमोनिया, कार्बन मोनोऑक्साइड, क्लोरीन, सीसा, ओजोन, बेंजीन टोल्युनि जाइलीन (बीटीएक्स), पॉलीसाइक्लिक एरोमैटिक हाइड्रोकार्बन (पीएच) बेंजो-ए-पाइरिन और अन्य और पीएम<sub>2.5</sub>।
- ट. **चिमनी गैसें/स्रोत उत्सर्जन:** पार्टिकुलेट मैटर, सल्फर डाइऑक्साइड, वेग और प्रवाह, कार्बन डाइऑक्साइड, कार्बन मोनोऑक्साइड, तापमान, ऑक्सीजन, नाइट्रोजन के ऑक्साइड, एसिड धुंध, अमोनिया, कुल हाइड्रोकार्बन, हाइड्रोजन सल्फाइड और कार्बन डाइसल्फाइड।
- ठ. **रव (शोर) स्तर:** शोर स्तर माप (20 से 140 डीबीए) और परिवेश रव & स्रोत विशिष्ट रव।
- ड. **मौसम संबंधी:** परिवेश का तापमान, हवा की दिशा, हवा की गति, सापेक्ष आर्द्रता, सौर विकिरण और वर्षा।
4. प्रयोगशाला और विश्लेषकों की क्षमता का पता लगाने के लिए प्रयोगशाला को के.प्र.नि. बोर्ड द्वारा आयोजित विश्लेषणात्मक गुणवत्ता नियंत्रण) एक्यूसी (अभ्यास में अनिवार्य रूप से भाग लेना होगा। प्रयोगशाला किए गए नमूना विश्लेषण पर के.प्र.नि. बोर्ड को तिमाही प्रगति रिपोर्ट प्रस्तुत करेगी।
5. अधिसूचना के अनुसार, एक संयुक्त दल द्वारा मान्यता प्राप्त पर्यावरण प्रयोगशाला का औचक निरीक्षण/आवधिक निगरानी उस के उचित कामकाज, व्यवस्थित प्रचालन और प्रयोगशाला में तैयार किए गए आंकड़ों की विश्वसनीयता का निर्धारण करने के लिए की जाएगी।
6. प्रयोगशाला के पास नियमानुसार ISO/IEC: 17025)2017 ( और IS/ ISO: 45001 का अपेक्षित प्रत्यायन और प्रमाण पत्र होना चाहिए। यह मान्यता यथा लागू प्रत्यायन और नवीनीकरण के अधीन है और किसी भी निबंधन और शर्तों के गंभीर गैर-अनुपालन के मामले में, प्रयोगशाला को न्यूनतम दो साल की अवधि के लिए ब्लैकलिस्ट किया जा सकता है और सरकार की ओर से अनधिकृत तरीके से कार्य करने के लिए, यथा लागू सिविल/आपराधिक कार्यवाही शुरू की जा सकती है।
7. **मैसर्स एनवायरनमेंटल लैबोरेटरी (यूनिट ऑफ मिनरल इंजीनियरिंग सर्विसेस एलएलपी), बेंगलुरु, कर्नाटक** को संबंधित अनिवार्य प्रत्यायन/प्रमाणीकरण के साथ मान्यता की समाप्ति से पूर्व केंद्रीय प्रदूषण नियंत्रण बोर्ड के वेबपोर्टल (<https://cpcbepalab.in/epalab>) का उपयोग कर के ऑनलाइन मान्यता के नवीनीकरण के लिए आवेदन करना अपेक्षित है।

भवदीय,  
 14/6/2024  
 प्रभागप्रमुख  
 उपकरणीय प्रयोगशाला

# ENVIRONMENTAL MONITORING REPORT

Project	<b>Ramgad Manganese Ore Mine ML No. 2679</b>
Location	Ramgad village, Sandur Taluk, Ballari Dist, Karnataka
Client	M/s. The Sandur Manganese & Iron Ores Limited
Office Address	Sandur, Ballari District, Karnataka
Monitoring Month	February -2026

## **ENVIRONMENTAL LABORATORY** **(Unit of Mineral Engineering Services LLP)**

Recognised by MoEF&CC Under E(P) Act 1986

&

Accredited by NABL

#948, 2<sup>nd</sup> Cross, Kammanahalli Main Road,

St Thomas Town Post,

Bangalore- 560 084, Karnataka

### LIST OF TABLES

<b>SL. NO.</b>	<b>PARTICULARS</b>	<b>Table No.</b>
1	Test Report of Ambient Air Quality	1 to 10
2	Test Report of Fugitive Air Quality	11
3	Dust Fall Measurement	12
4	Ambient Noise Monitoring Report	13
5	Source Noise Monitoring Report	14
6	Surface Water Test Report	15
7	Stack Monitoring Report	16 & 17



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028

## TEST REPORT

Table No.1

### AMBIENT AIR QUALITY

<b>Name of the Client</b>	: The Sandur Manganese & Iron Ores Limited					
<b>Name of the Project</b>	: Mining Lease No. 2679					
<b>Location</b>	: Ramgad village, Sandur Taluk, Ballari Dist, Karnataka					
<b>Sample Collected by</b>	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
<b>Code &amp; Station</b>	: A1 - ML Area (Core Zone)					
<b>Duration</b>	: 24 Hrs					
<b>Issue date</b>	: 02.03.2026					
<b>Sampling &amp; Test Method</b>	: IS 5182 & Lab SOP					
Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
06.02.2026	N011426021	9	13	56	32	0.44
07.02.2026	N002426022	12	16	53	28	0.26
13.02.2026	N029826022	14	18	46	25	0.38
14.02.2026	N000126023	9	12	43	22	0.33
16.02.2026	N004226023	11	15	50	30	0.24
17.02.2026	N008826023	10	13	45	28	0.52
25.02.2026	N021026024	14	17	55	32	0.38
26.02.2026	N024926024	9	11	40	24	0.42
<b>NAAQS Limits for Industrial , Residential, Rural and other Areas</b>		<b>80</b> 24 Hrs	<b>80</b> 24 Hrs	<b>100</b> 24 Hrs	<b>60</b> 24 Hrs	<b>4</b> 1 Hr
<b>Note : * Parameters monitored for period of 1 hr</b>						

*Arshya Kousar*  
ARSHYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028

## TEST REPORT

Table No.2

### AMBIENT AIR QUALITY

Name of the Client	: The Sandur Manganese & Iron Ores Limited					
Name of the Project	: Mining Lease No. 2679					
Location	: Ramgad village, Sandur Taluk, Ballari Dist, Karnataka					
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
Code & Station	: A2 - Core Zone (Myadara Banda Block)					
Duration	: 24 Hrs					
Issue date	: 02.03.2026					
Sampling & Test Method:	: IS 5182 & Lab SOP					
Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
06.02.2026	N011626021	9	13	48	29	0.22
07.02.2026	N002626022	12	16	38	21	0.27
13.02.2026	N030026022	14	18	52	30	0.32
14.02.2026	N000326023	10	13	47	27	0.26
16.02.2026	N004426023	11	15	44	22	0.39
17.02.2026	N009026023	12	17	40	21	0.35
25.02.2026	N021226024	9	12	54	28	0.42
26.02.2026	N025126024	10	13	47	29	0.38
NAAQS Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	4 1 Hr
Note : * Parameters monitored for period of 1 hr						

*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028

## TEST REPORT

Table No.3

### AMBIENT AIR QUALITY

Name of the Client	: The Sandur Manganese & Iron Ores Limited					
Name of the Project	: Mining Lease No. 2679					
Location	: Ramgad village, Sandur Taluk, Ballari Dist, Karnataka					
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
Code & Station	: A3 - Core Zone (Governor Point)					
Duration	: 24 Hrs					
Issue date	: 02.03.2026					
Sampling & Test Method	: IS 5182 & Lab SOP					
Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
06.02.2026	N011726021	11	15	51	29	0.33
07.02.2026	N002726022	13	19	58	33	0.25
13.02.2026	N030126022	10	14	43	26	0.22
14.02.2026	N000426023	9	12	53	28	0.25
16.02.2026	N004526023	12	16	49	27	0.33
17.02.2026	N009126023	11	15	55	30	0.45
25.02.2026	N021326024	10	17	52	28	0.26
26.02.2026	N025226024	9	13	46	27	0.27
NAAQS Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	4 1 Hr
Note : * Parameters monitored for period of 1 hr						

*Arshiya K. Kusar*  
ARSHIYA K. KUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028

## TEST REPORT

Table No.4

### AMBIENT AIR QUALITY

Name of the Client	: The Sandur Manganese & Iron Ores Limited					
Name of the Project	: Mining Lease No. 2679					
Location	: Ramgad village, Sandur Taluk, Ballari Dist, Karnataka					
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
Code & Station	: A4 - Core Zone (Neerlabi)					
Duration	: 24 Hrs					
Issue date	: 02.03.2026					
Sampling & Test Method	: IS 5182 & Lab SOP					
Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
06.02.2026	N011826021	14	18	35	18	0.42
07.02.2026	N002826022	9	13	45	22	0.36
13.02.2026	N030226022	10	15	51	28	0.52
14.02.2026	N000526023	14	19	49	26	0.48
16.02.2026	N004626023	12	15	53	30	0.36
17.02.2026	N009226023	10	14	44	23	0.37
25.02.2026	N021426024	9	12	50	26	0.22
26.02.2026	N025326024	13	18	58	32	0.41
NAAQS Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	4 1 Hr
Note : * Parameters monitored for period of 1 hr						

*Arushi Koular*  
ARSHIYA KOUJAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028

## TEST REPORT

Table No.5

### AMBIENT AIR QUALITY

<b>Name of the Client</b>	: The Sandur Manganese & Iron Ores Limited					
<b>Name of the Project</b>	: Mining Lease No. 2679					
<b>Location</b>	: Ramghad village, Sandur Taluk, Ballari Dist, Karnataka					
<b>Sample Collected by</b>	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
<b>Code &amp; Station</b>	: A5 - Ramghad village					
<b>Duration</b>	: 24 Hrs					
<b>Issue date</b>	: 02.03.2026					
<b>Sampling &amp; Test Method</b>	: IS 5182 & Lab SOP					
Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
06.02.2026	N011926021	12	15	53	27	0.37
07.02.2026	N002926022	9	12	44	29	0.47
13.02.2026	N030326022	10	14	50	25	0.52
14.02.2026	N000626023	14	18	56	33	0.48
16.02.2026	N004726023	9	15	51	30	0.55
17.02.2026	N009326023	10	17	45	25	0.49
25.02.2026	N021526024	8	10	36	21	0.55
26.02.2026	N025426024	12	14	48	25	0.38
<b>NAAQS Limits for Industrial , Residential, Rural and other Areas</b>		<b>80 24 Hrs</b>	<b>80 24 Hrs</b>	<b>100 24 Hrs</b>	<b>60 24 Hrs</b>	<b>4 1 Hr</b>
<b>Note : * Parameters monitored for period of 1 hr</b>						

*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028

## TEST REPORT

Table No.6

### AMBIENT AIR QUALITY

Name of the Client	: The Sandur Manganese & Iron Ores Limited					
Name of the Project	: Mining Lease No. 2679					
Location	: Ramgad village, Sandur Taluk, Ballari Dist, Karnataka					
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
Code & Station	: A6 - Dharmapura village					
Duration	: 24 Hrs					
Issue date	: 02.03.2026					
Sampling & Test Method	: IS 5182 & Lab SOP					
Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
06.02.2026	N012026021	7	11	50	28	0.52
07.02.2026	N003026022	10	13	40	21	0.47
13.02.2026	N030426022	13	18	57	30	0.52
14.02.2026	N000726023	11	15	55	27	0.37
16.02.2026	N004826023	9	13	48	25	0.48
17.02.2026	N009426023	10	14	45	24	0.22
25.02.2026	N021626024	14	17	50	28	0.44
26.02.2026	N025526024	12	15	56	32	0.38
NAAQS Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	4 1 Hr
Note : * Parameters monitored for period of 1 hr						

*Arushi Kojisar*  
ARSHIYA KOJSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028

## TEST REPORT

Table No.7

### AMBIENT AIR QUALITY

Name of the Client : The Sandur Manganese & Iron Ores Limited  
Name of the Project : Mining Lease No. 2679  
Location : Ramgad village, Sandur Taluk, Ballari Dist, Karnataka  
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)  
Code & Station : A7 - Garaga village  
Duration : 24 Hrs  
Issue date : 02.03.2026  
Sampling & Test Method: IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
06.02.2026	N012126021	7	11	45	22	0.38
07.02.2026	N003126022	13	15	53	27	0.33
13.02.2026	N030526022	9	12	50	25	0.48
14.02.2026	N000826023	10	17	40	22	0.55
16.02.2026	N004926023	12	18	47	24	0.52
17.02.2026	N009526023	9	11	39	22	0.23
25.02.2026	N021726024	13	16	52	30	0.20
26.02.2026	N025626024	11	14	44	24	0.37
NAAQS Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	4 1 Hr

Note : \* Parameters monitored for period of 1 hr

*Arshiyakumar*  
ARSHIYAKUMAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028

## TEST REPORT

Table No.8

### AMBIENT AIR QUALITY

<b>Name of the Client</b>	: The Sandur Manganese & Iron Ores Limited					
<b>Name of the Project</b>	: Mining Lease No. 2679					
<b>Location</b>	: Ramgad village, Sandur Taluk, Ballari Dist, Karnataka					
<b>Sample Collected by</b>	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
<b>Code &amp; Station</b>	: A8 - Yeswanthanagar					
<b>Duration</b>	: 24 Hrs					
<b>Issue date</b>	: 02.03.2026					
<i>Sampling &amp; Test Method:</i> IS 5182 & Lab SOP						
Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
06.02.2026	N010926021	10	14	48	25	0.54
07.02.2026	N002026022	14	17	56	32	0.33
09.02.2026	N011126022	12	15	52	27	0.28
10.02.2026	N017726022	10	14	47	25	0.49
20.02.2026	N019626023	13	16	50	30	0.52
21.02.2026	N000926024	11	13	56	32	0.33
23.02.2026	N007926024	12	18	43	25	0.46
24.02.2026	N014926024	10	13	49	28	0.38
<b>NAAQS Limits for Industrial , Residential, Rural and other Areas</b>		<b>80</b> 24 Hrs	<b>80</b> 24 Hrs	<b>100</b> 24 Hrs	<b>60</b> 24 Hrs	<b>4</b> 1 Hr
<b>Note : * Parameters monitored for period of 1 hr</b>						

*Arshiya Kolsar*  
ARSHIYA KOLSAR  
Dy TM - Chemical,  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028

## TEST REPORT

Table No.9

### AMBIENT AIR QUALITY

Name of the Client	: The Sandur Manganese & Iron Ores Limited					
Name of the Project	: Mining Lease No. 2679					
Location	: Ramgad village, Sandur Taluk, Ballari Dist, Karnataka					
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
Code & Station	: A9 - Subbarayanahalli					
Duration	: 24 Hrs					
Issue date	: 02.03.2026					
Sampling & Test Method	: IS 5182 & Lab SOP					
Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
06.02.2026	N010526021	6	9	36	21	0.42
07.02.2026	N001626022	9	13	46	25	0.28
09.02.2026	N010726022	11	16	53	28	0.36
10.02.2026	N017326022	13	18	57	30	0.51
20.02.2026	N019226023	8	15	50	28	0.44
21.02.2026	N000526024	10	13	44	23	0.56
23.02.2026	N007526024	7	11	37	21	0.38
24.02.2026	N014526024	10	14	52	28	0.22
NAAQS Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	4 1 Hr
Note : * Parameters monitored for period of 1 hr						

*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028

## TEST REPORT

Table No.10

### AMBIENT AIR QUALITY

Name of the Client : The Sandur Manganese & Iron Ores Limited  
Name of the Project : Mining Lease No. 2679  
Location : Ramgad village, Sandur Taluk, Ballari Dist, Karnataka  
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)  
Code & Station : A10 - Siddapura village  
Duration : 24 Hrs  
Issue date : 02.03.2026

Sampling & Test Method: IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
06.02.2026	N011526021	11	14	45	25	0.48
07.02.2026	N002526022	8	12	53	28	0.33
13.02.2026	N029926022	12	17	50	26	0.28
14.02.2026	N000226023	11	15	38	17	0.45
16.02.2026	N004326023	12	19	55	32	0.26
17.02.2026	N008926023	9	13	48	24	0.38
25.02.2026	N021126024	10	14	52	30	0.26
26.02.2026	N025026024	12	16	49	26	0.46
NAAQS Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	4 1 Hr

Note : \* Parameters monitored for period of 1 hr

*Arshiya Housar*  
ARSHIYA HOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028

## TEST REPORT

Table No. 11

### Fugitive Emission

Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Project	: Mining Lease No. 2679
Location	: Ramgad village, Sandur Taluk, Ballari Dist, Karnataka
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Duration	: 08 Hrs
Issue Date	: 02.03.2026

Code & Station	Date of sample	Report No	Particulate mater ( $\mu\text{g}/\text{m}^3$ )
FA1, Loading point	14.02.2026	N000926023	285
FA2, Dumping point	13.02.2026	N030626022	488
FA3, Haulage Road	13.02.2026	N030726022	468
FA4, Stack Yard	14.02.2026	N001026023	357
FA5, Drilling Point	16.02.2026	N005026023	463
FA6, Waste Dumping Point	16.02.2026	N005126023	425

Ref : Environmental (Protection) Rules, 2010 (Sixth Amendment)

Particulate mater ( $\mu\text{g}/\text{m}^3$ )

Permissible limits for Fugitive Emissions

600  $\mu\text{g}/\text{m}^3$

*Arshya Indusar*  
ARSHYA INDUSAR  
Dy TM - Chemical  
Govt Analyst/Authorized Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028

## TEST REPORT

Table No. 12

### Analysis Report of Dust Fall Measurement

Name of the Client	The Sandur Manganese & Iron Ores Limited
Name of the Project	Mining Lease No. 2679
Location	Ramgad village, Sandur Taluk, Ballari Dist, Karnataka
Month	01.02.2026 to 28.02.2026
Sample Type	Total Dust Fall Rate
Duration of Monitoring	One Month
Issue Date	02.03.2026

### Result

Code	Location	Result	unit	Reference Method
DF1	Mine Office Area	0.042	g/m <sup>2</sup> month	IS 5182 (Part 01) : 2006
DF2	Near Crusher Area	0.056	g/m <sup>2</sup> month	IS 5182 (Part 01) : 2006

Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)

*Arshiyha Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028


## TEST REPORT

Table No. 13

### AMBIENT NOISE LEVEL DATA

Report No : ELMES026203

Name of the Client	: The Sandur Manganese & Iron Ores Limited							
Name of the Project	: Mining Lease No. 2679							
Location	: Ramgad village, Sandur Taluk, Ballari Dist, Karnataka							
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)							
Particulars of Sample	: Noise levels							
Issue Date	: 02.03.2026							
Sampling	: IS : 9889 & CPCB Guidelines							
<b>Corezone</b>								
Code No.	Monitoring stations	Date of monitoring	Day			Night		
			L <sub>min</sub>	L <sub>eq</sub>	L <sub>max</sub>	L <sub>min</sub>	L <sub>eq</sub>	L <sub>max</sub>
N1	Core zone ML Area	13.02.2026	39.0	56.8	63.0	36.0	48.2	54.2
N2	Myadara Banda Block	13.02.2026	37.0	50.8	56.8	35.0	45.3	50.2
N3	Governor Point)	13.02.2026	40.0	58.8	67.5	36.0	47.8	56.0
N4	Neerlabbi	13.02.2026	42.0	55.6	64.2	36.0	46.9	55.0
<b>Bufferzone</b>								
Code No.	Monitoring stations	Date of monitoring	Day			Night		
			L <sub>min</sub>	L <sub>eq</sub>	L <sub>max</sub>	L <sub>min</sub>	L <sub>eq</sub>	L <sub>max</sub>
N5	Ramgad village	14.02.2026	41.0	50.6	57.0	35.4	43.6	47.0
N6	Dharmapura	14.02.2026	37.0	49.8	56.2	35.2	42.8	46.0
N7	Garaga village	14.02.2026	35.0	46.8	53.8	33.5	40.5	43.2
N8	Yeshwanthanagar	16.02.2026	36.0	50.5	57.0	35.0	42.5	47.2
N9	Subbarayanahalli	16.02.2026	37.0	49.6	55.4	36.0	42.1	45.2
N10	Siddapura	16.02.2026	38.0	48.8	56.0	34.0	43.1	46.2
<b>Permissible Limits of Ambient Noise Levels as per CPCB Guidelines</b>								
			Leq. Limit dB(A)					
			Day		Night			
Industrial areas			75		70			
Commercial area			65		55			
Residential area			55		45			

  
 ARSHIYA INDUSAR  
 Dy TM - Chemical  
 Govt Analytical Lab, Ballari

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028

## TEST REPORT

Table No. 14

### SOURCE NOISE LEVEL DATA

Report No : ELMES026204

Name of the Client : The Sandur Manganese & Iron Ores Limited  
Name of the Project : Mining Lease No. 2679  
Location : Ramgad village, Sandur Taluk, Ballari Dist, Karnataka  
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)  
Particulars of Sample : Noise levels  
Issue Date : 02.03.2026  
Sampling : IS : 9989 & CPCB Guidelines

#### Source

Code No.	Monitoring stations	Date of monitoring	Day			Remarks
			L <sub>min</sub>	L <sub>eq</sub>	L <sub>max</sub>	
N1	Loading Point	17.02.2026	38.0	60.4	65.0	During operation
N2	Dumping Point	17.02.2026	42.0	72.7	78.0	During operation
N3	Haulage Road	17.02.2026	40.0	59.7	66.0	During operation

#### Permissible Limits of Ambient Noise Levels as per CPCB Guidelines

Leq. Limit dB(A)

Day Night

Industrial areas 75 70

#### Heavy Earth Moving Machineries

Code No.	Monitoring stations	Date of monitoring	Day			Remarks
			L <sub>min</sub>	L <sub>eq</sub>	L <sub>max</sub>	
N4	Wheel Loader	17.02.2026	37.0	70.8	76.0	During operation in side of the cabin
			42.0	73.6	78.0	During operation 10mts outside of the cabin
N5	Tata Hitachi 200LC	17.02.2026	42.0	59.0	67.0	During operation in side of the cabin
			43.0	64.3	70.0	During operation 10mts outside of the cabin

#### Permissible limits as per ILO Code of Practice

For Unprotected ear - 8 hrs working shift

Warning limit - 85 dB(A)

Danger limit - 90 dB(A)

Worker not to be exposed for more than 115 dB(A)

With ear protection -

130 dB(A) 'Impulse' or 120 dB(A) 'Fast'

No entry when noise level exceeds 140 dB(A)

*Arshiya Dusar*  
ARSHIYA DUSAR  
Dy TM - Chemical  
Govt Analyst/Authorized Signatory

Office &amp; Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028

## TEST REPORT

Table No.15

Name of the Client	: The Sandur Manganese & Iron Ores Limited						
Name of the Project	: Mining Lease No. 2679						
Location	: Ramgad village, Sandur Taluk, Ballari Dist, Karnataka						
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)						
Nature of sample	: Surface water						
Sample Location	: SW1 - Ragavapura kere water, SW2 - Dhananayakana kere water : SW3 - Narihalla Upstream water, SW4 - Narihalla Downstream water						
Issue Date	: 02.03.2026						
Ref : IS : 2296, Water Quality Standards							
Date of sample collection	06.02.2026	06.02.2026	13.02.2026	13.02.2026	Limits	Method of Testing	
Date of sample receipt	07.02.2026	07.02.2026	13.02.2026	13.02.2026			
Report No	M000326022	M000426022	M009826022	M009926022			
Sl.No.	Sample Code	SW1	SW2	SW3	SW4		
	Parameters	Results					
1	pH	8.16	8.23	8.38	8.40	6.5 to 8.5	IS:3025(Part-11)2022
2	Colour (Hazen Units), Max	20	50	5	10	300	IS 3025 (Part 11) 2022
3	Odour	Agreeable	Agreeable	Agreeable	Agreeable	-	IS:3025 (P-5) 2018
4	Total Dissolved Solids (mg/l), Max	206	314	1026	784	1500	IS 3025 (Part 16) 2023
5	Total Suspended Solids, mg/l	86.0	90.0	84	106	-	IS 3025 (Part 17) 2023
6	Dissolved Oxygen (as O <sub>2</sub> ), mg/l	5.70	5.60	5.50	5.40	Min 4	IS:3025(Part-38)1989RA 2019
7	Biochemical Oxygen Demand (as O <sub>2</sub> ), mg/l	<3.0	<3.0	<3.0	<3.0	3	IS 3025 (Part 44) 2023
8	Total Hardness (as CaCO <sub>3</sub> ),mg/l,Max	138	150	520.0	360	-	IS:3025 (P-21);2009 RA 2023
9	Sulphates as SO <sub>4</sub> (mg/l), Max	16.0	30.0	50.0	30.0	400	APHA (24th Edition ):4110B
10	Phosphates (as P), mg/l	<0.05	<0.05	<0.05	<0.05	-	IS 3025 (P-31) Sec 1 2022 1976
11	Chloride (as Cl),mg/l, Max	23.0	80.0	330.0	270.0	600	IS:3025(Part-32) 1988RA2019
12	Fluoride (as F),mg/l, Max	0.56	0.68	0.84	0.86	1.5	IS 3025 (Part 60-Sec1) 2023
13	Sulphide (as H <sub>2</sub> S), mg/l, Max	<0.01	<0.01	<0.01	<0.01	-	IS:3025 (P-29) 2022
14	Boron (as B), mg/l, Max	<0.1	<0.1	<0.1	<0.1	-	IS:3025 (Part-57) 2021
15	Iron (as Fe),mg/l, Max	<0.005	<0.005	<0.005	<0.005	50	IS 3025 (Part 65) 2022
16	Percent of Sodium (%)	26	35	25.0	30.0	-	IS 2488 part 5
17	Residual Sodium Carbonate (meq/l)	<0.05	<0.05	<0.5	<0.5	-	IS 11624 .2009
18	Total Coliform, MPN/100ml	63	80	130	115	5000	IS 15185 2016 RA 2021

"END OF REPORT"

  
BINU MANI  
TM - Microbiology  
Govt Analyst/Authorised Signatory

  
ARSHIYA KOJSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envttest.in



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(GPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028

## TEST REPORT

Table No. 16

### Stack Monitoring Report

Name of the Client :	The Sandur Manganese & Iron Ores Limited
Name of the Mine :	RAMGAD MANGANESE & IRON ORE MINE (ML NO. 2679)
Location :	Ramgad village, Sandur Taluk, Ballari Dist, Karnataka
Sample Collected by :	Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Stack ID & Capacity :	DG Set 35 KVA Ramgad-KK1 Mines
Instrument used for sampling :	Emissions collected through stack sampler
Date of Collection :	13.02.2026
Date of Sample Receipt :	14.02.2026
Report No :	N001026022
Issue date :	02.03.2026

#### STACK DETAILS

1	Fuel Used	Diesel
2	Ambient Temperature (°C)	30
3	Stack Temperature (°C)	152
4	Velocity (m/s)	8.29
5	Stack diameter (M)	0.15
6	Quantity of flue Gas Discharged into atmosphere (Nm <sup>3</sup> /hr)	348
7	Sample Condition When Received	Satisfactory
8	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1
9	Serial No. of the Equipment	338 DTH 14
10	Calibration due date	17.07.2026
11	Test Method	IS 11255 & flue gas analyser

#### Pollutional Parameters (Result)

Sl.No	Parameters	Unit	Results	Standard
1	Particulate Matter	g/Kw-hr	0.079	<0.2
2	CO	g/Kw-hr	0.159	<3.5
3	NOx +HC	g/Kw-hr	0.229	<4.0

INFERENCE	As per KSPCB
	Report Status - The measured values for the above parameters for those standards have been specified were observed to be within the said standards

*Archya Kousar*  
ARCHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028

## TEST REPORT

Table No. 17

### Stack Monitoring Report

Name of the Client :	The Sandur Manganese & Iron Ores Limited
Name of the Mine :	RAMGAD MANGANESE & IRON ORE MINE (ML NO. 2679)
Location :	Ramgad village, Sandur Taluk, Ballari Dist, Karnataka
Sample Collected by :	Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Location :	Mining Lease No. 2679
Stack ID & Capacity :	DG Set 20 KVA Ramgad Mines
instrument used for sampling :	Emissions collected through stack sampler
Date of Collection :	13.02.2026
Date of Sample Receipt :	14.02.2026
Report No :	N001126022
Issue date :	02.03.2026

#### STACK DETAILS

1	Fuel Used	Diesel
2	Ambient Temperature (°C)	29
3	Stack Temperature (°C)	154
4	Velocity (m/s)	7.8
5	Stack diameter (M)	0.15
6	Quantity of flue Gas Discharged into atmosphere (Nm <sup>3</sup> /hr)	326
7	Sample Condition When Received	Satisfactory
8	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1
9	Serial No. of the Equipment	338 DTH 14
10	Calibration due date	17.07.2026
11	Test Method	IS 11255 & flue gas analyser

#### Pollutional Parameters (Result)

Sl.No	Parameters	Unit	Results	Standard
1	Particulate Matter	g/Kw-hr	0.081	<0.2
2	CO	g/Kw-hr	0.244	<3.5
3	NOx +HC	g/Kw-hr	0.652	<4.0

INFERENCE	As per KSPCB Report Status - The measured values for the above parameters for those standards have been specified were observed to be within the said standards
-----------	--

*Arshiyaa Kousar*  
ARSHIYAA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in