E-mail: paribesh1@ospcboard.org
Website: www.ospcboard.org

STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST, ENVIRONMENT & CLIMATE CHANGE, GOVERNMENT OF ODISHA]
ParibeshBhawan, A/118, Nilakantha Nagar, Unit – VIII
Bhubaneswar – 751012

No. 15169 / IND-II-CTE-7495 Date: 12.08.2025/

Through online/
By speed post

To,

The Managing Partner
Raikela Iron Ore Mines of M/s Geetarani Mohanty
At: Station Road, PO: Barbil,
District: Keonjhar – 758035

Sub: **Environmental Safeguards for enhancement of production of Iron Ore of capacity from 4.99 MTPA to 5.988 MTPA (20%) along with crushing & screening plants over existing mining lease area of 67.586 Ha. Located at Raikela, Tahsil- Koira, District- Sundargarh**

Ref: 1. SEIAA, Environmental Clearance vide EC25B000OR5972294N; File No. 523021/28-MINIB1/02-2025 dated 16.06.2025

2. MoEF&CC, Government of India, Office Memorandum, Dt. 14.01.2025 on streamlining the implementation of Notification G.S.R 702 (E) and G.S.R 703 (E), Dt. 12-11-2024

Sir,

In consideration of the online application no. **6500722** read with MoEF&CC, Government of India Office Memorandum dtd. 14.01.2025, the State Pollution Control Board is pleased to issue Environmental Safeguards in place of its Consent to Establish under section 25 of Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act 1981 for **enhancement of production of Iron Ore of capacity from 4.99 MTPA to 5.988 MTPA (20%) along with existing mobile Crusher 2x400 TPH, static crusher 1x1000 TPH, mobile screen 2x400 TPH and mobile screen 2x300 TPH** over existing mining lease area of 67.586 Ha. At- Raikela, Tahsil- Koira in the district of **Sundargarh** with the following conditions:

A. GENERAL SAFEGUARD:

1. The proponent shall comply with the stipulations and carry out mining activity as per the Environmental Clearance granted by SEIAA vide EC ID No. EC25B000OR5972294N; File No. 523021/28-MINIB1/02-2025 dated 16.06.2025 for **enhancement in Production Capacity of Iron Ore from 4.99 MTPA to 5.988 MTPA (20%) from Raikela Iron Ore Mines (ML Area - 67.586Ha) along with Crushing & Screening Plants**.
2. The mine shall apply for grant of Consent to Operate under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 & under section 21 of Air (Prevention & Control of Pollution)

Act, 1981 at least 3 (three) months before the commencement of production and obtain Consent to Operate from this Board.

3. The mine shall implement the Pollution Control Measures and safeguards as proposed in the Environment Management Plan (EMP) of Environment Impact Assessment (EIA) report.
4. The proponent shall abide by the Wildlife Management Plan or wildlife clearance wherever applicable.
5. The proponent shall obtain Forest Clearance for the forest land which is involved in the leasehold area.
6. The proponent shall comply the recommendation of study conducted by NEERI, Nagpur on provision of parking plaza for vehicles used for transportation of ore and also ore transportation.
7. The mine shall implement the pollution control measures and safeguards as proposed in the Environment Management Plan (EMP) of the Environment Impact Assessment (EIA) report.
8. The project proponent shall obtain requisite permission from the CGWA for withdrawal/use of ground water for the project.
9. The project proponent shall obtain requisite permission from the Water Resources Department, Govt. of Odisha for drawl of surface water and ground water.
10. The construction and demolition waste to be generated from the proposed project shall be disposed of in accordance with the provision under "Construction & Demolition Wastes Management Rules 2016".
11. The proponent shall comply to the provisions of E-Waste (Management) Rules, 2022 and shall handover e-waste to authorized collection centres / register dismantlers/ recyclers for proper disposal of e-waste.
12. The proponent shall comply with the provision made under Plastic Waste Management Rules, 2016 and amendment made thereafter and shall ensure prohibition on use of Single Use Plastics within the premises.
13. All the plastic waste generated from the premises shall be collected and sent for co-processing to the nearby cement kilns and / or registered recyclers under Plastic Waste Management Rules, 2016.
14. The construction shall be carried out with the fly ash bricks. If the fly ash bricks are not available locally the construction may be carried out with other bricks with prior intimation to the concerned Regional Office of SPCB. A statement indicating use of fly ash bricks during construction period shall be submitted to the Board quarterly for record.
15. The project proponent shall develop greenbelt in 7.5 m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease.
16. The project proponent shall carryout plantation / afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department / Agriculture Department / Rural Development Department / Tribal Welfare Department / Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this

respect shall also be adhered. The density of the trees shall be around 2500 saplings per hectare. Adequate budgetary provision shall be made for protection and care of trees.

17. A separate environmental management cell with suitable qualified personnel shall be set up under a Senior Executive, who will report directly to the Head of the organization.

18. The Board may impose further conditions or modify the conditions stipulated in this order during installation and/or at the time of obtaining consent to operate.

19. The above conditions will be enforced, inter-alia, under the provisions of the water (Prevention & Control of pollution) Act, 1974 and Air (Prevention & Control of Prevention) Act, 1981 and Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and Rule.

20. The project shall abide by Environment (Protection) Act, 1986 and the rules framed thereunder.

21. The grant of this Environmental Safeguard Order is issued in accordance with the Office Memorandum dated 14.01.2025 by the Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India, and is subject to compliance with any subsequent guidelines or directions that may be issued by the MoEF&CC, Govt. of India, New Delhi in this regard.

B. WATER POLLUTION SAFEGUARD:

22. The domestic wastewater generated from the township shall be treated in sewage treatment plant. The treated water shall be reused for gardening and dust suppression and the surplus water if any shall be discharged to outside after meeting the following prescribed standards as notified by the MoEF&CC, Govt. of India vide G.S.R. 1265 (E), dated 13.10.2017.

Sl. No.	Parameters	Standards
1.	pH	6.5-9.0
2.	BOD(mg/l)	≤30
3.	TSS(mg/l)	<100
4.	Fecal Coliform (MPN/100ml)	< 1000

23. Garland drains along with settling pit shall be provided around the iron ore fines stock yard to control washout of fines from the stockyard along with surface runoff.

24. Surface run-off from OB dump area, mineral stock yard, top soil storage area and rain water to be pumped from quarry shall be routed through adequate settling pond (designed maximum hourly rain fall basis) to meet prescribed standard of SS - 100 mg/l and Oil & Grease-10 mg/l before discharge into natural stream/water courses during monsoon.

25. At stockpile and loading plant area, a network of drains shall be constructed at a depth of 1.5 meter below the lowest level on the sites parallel to the stockpile area with interconnected box culverts. The sloping of surface shall be given inward to the stockpiles so that surface water will only infiltrate in to the drain.

26. The unit shall provide storm water drain around raw material stock yard and product stock yard. Surface run-off generated from this area shall be treated in settling tanks of adequate capacity and same shall be stored in rain water harvesting pond for reuse in dust suppression, green belt etc.

27. The unit shall provide high pressure water spraying nozzle at the iron ore fines and stock yards and feeding section.

28. All the permanent internal roads along the crusher and screening plant shall be concreted or black topped. Permanent high pressure water sprinkling system shall be installed for regular spraying of water on roads to minimize fugitive dust emission.

29. Rain water harvesting shall be followed by utilizing the rain water collected from the roof of the administrative buildings for recharging of ground water within the premises as per the concept and practices prescribed by CPCB.

30. The Mine shall provide mechanized wheel washing system along with effluent treatment and recycling facilities at the exit point of the mine.

C. AIR POLLUTION SAFEGUARD:

31. Ambient Air Quality shall be maintained as per National Ambient Air Quality standard prescribed for industrial and mixed used area under E (P) Act, 1986.

32. Fugitive and AAQ monitoring shall be carried out and report shall be submitted to the Board regularly.

33. Drill shall be wet operated or with dust extractors and controlled blasting shall be practices. Pre-wetting of blasting site shall be practiced.

34. The primary crusher, screen and secondary crusher shall be placed in covered shed. All the conveyor shall be covered with corrugated GI Sheets.

35. Dust suppression (dry fog) for mobile units and both extraction (bag filter) system and dust suppression system for fixed units shall be provided at all dust generating sources of mineral handling plants such as crushing, screening & material transfer points etc. such that, particulate matter concentration in ambient air shall not be more than 1200 $\mu g/m^3$ at a distance of 25.0 ± 2.0 m from the source of fugitive emission in the predominant down wind direction as per MoEF&CC, Govt. of India notification No. G.S.R. 809(E), dated 04.10.2010 (copy enclosed as **Annexure - I**).

36. The proponent shall engage truck mounted fog cannons for dust suppression in dust prone areas in the mine for strengthening dust suppression measures.

37. Dust suppression on mine haul roads, active OB dumps and mine working benches shall be done by spraying water through water sprinklers along with chemical binders/wetting agents at frequent interval in order to reduce water consumption and to improve retention and re-absorption capacity of water. Water sprinklers of fixed type shall also be provided at the mine HEMM maintenance shop, other service centers and approach roads from mines to raw material handling & product handling area to prevent the generation of dust to be air borne.

38. Adequate measures shall be taken for control of noise levels in the work environment of mine area so that noise levels at the boundary line of mining lease area shall not exceed 75 dB (A) during day time (06:00 AM to 10:00 PM) and 70 dB(A) during night time (10:00 PM to 06:00 AM).

39. Adequate noise barriers shall be provided surrounding the crushing and screening plants to control noise pollution and avoid impact on wildlife due to operation of crushing and screening plants during night hours.

40. Online noise monitoring system shall be installed to monitor noise level during night hours.

41. Protective barriers shall be provided for the lights to prevent illumination towards the forest area during night hours.

42. Fixed auto sprinklers on both sides of major haul road and approach roads of the mine shall be installed and frequency of water sprinkling through mobile water tankers shall be enhanced at the said areas till installation of fixed auto sprinklers.

43. Regular water sprinkling through mobile water tankers shall be carried out at mineral stockpile area, mines approach road and transportation road to avoid generation of dust during movement of vehicles.

44. Necessary preventive measures shall be taken during construction as well as operational period so that the ambient air quality including noise at the boundary shall conform to National Ambient Air Quality Standards and standards for noise in industrial area as per **Annexure- II and III**.

45. Ambient Air Quality shall be monitored at three locations within core zone and three locations within buffer zone of ML area as per NAAQS standards. Fugitive emission shall also be monitored at relevant locations as specified in the Condition No. 14. The location of the monitoring stations shall be decided in consultation with Regional Officer, SPCB, Odisha,

46. The proponent shall install 03 nos. of Online Continuous Ambient Air Quality Monitoring Station (CAAQMS) inside the mining lease area order to monitor PM_{10}, $PM_{2.5}$, SO_2, NOx, CO for online real time data transmission through GPRS system to SPCB RTDAS server and also upload data to CPCB.

47. IP Cameras shall be installed at major dust prone areas of mine such as mine quarry, mineral/fines stock yards, haul roads, transportation roads, mineral handling plants etc. and they shall be connected to SPCB Server.

48. Dry fog system shall be provided at the point of loading to the conveyor to minimize fugitive emission.

49. The trucks carrying fines shall be covered with tarpaulin and over loading shall be avoided to minimize fugitive emission.

50. The permanent internal roads used for transportation shall be made block topped/ Concreted. Fixed type water sprinklers shall be provided along these internal roads to minimize fugitive emission.

51. Regular collection of spilled over fines from haul roads shall be practiced to prevent the generation of dust to be air borne.

D. SOLID & HAZARDOUS WASTE SAFEGUARD:

52. Solid waste to be generated during course of mining shall be dumped in the earmarked dump area as per approved mining plan.

53. The OB/waste dumps shall be properly dressed benched at low angle with terracing in the slopes. Vegetation should be carried out over dump slopes and hydro seedling technique or use of geo-tiles mat embedded with seed shall be adopted.

54. Hazardous waste storage area shall be earmarked before disposal of hazardous waste as per guidelines.

55. Top soil should be stacked separately with proper slope at earmarked site (s) with adequate measures and shall be used for reclamation and rehabilitation of mined out areas.

56. The OB/waste dumps shall be properly dressed benched stopped at low angle (30°) with terracing and coir matting in the slopes making retaining walls stone barriers at the toe of the dumps gully plugging etc. to prevent the soil erosion during monsoon, besides establishing vegetation on dump top as well as its slope surface. In difficult cases, hydro-seedling technique or use of geo-tiles mat embedded with seeds shall be adopted.

57. The proponent shall comply to the provisions of Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 and amended thereafter.

58. The industry shall obtain authorization under provisions of Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 as amended from time to time and dispose hazardous waste as per authorization.

Enc.: Annexure I, II & III

11.8.25

MEMBER SECRETARY

Memo No._____/ Date: _____/

Copy forwarded to the Member Secretary, Ministry of Environment, Forest and Climate Change, Government of India (IA Division), At- Indira Paryavaran Bhawan, Jorbagh Road, New Delhi – 110003 for information. This letter for Environmental Safeguard is issued in compliance with Office Memorandum dated 14.01.2025 of MoEF&CC, Government of India for streamlining the implementation of Notification G.S.R 702 and G.S.R 703 Dt. 12th Nov 2024. (Para-E: Projects which have been already been granted EC after 12th November 2024 but for which CTE has not been granted)

ADDL. CHIEF ENV. ENGINEER

Memo No._____/ Date: _____/

Copy forwarded to:

1. The Collector and District Magistrate, Sundargarh
2. The DDM, Koira
3. The Regional Officer, SPCB, Odisha, Rourkela
4. CTO Cell (Mines), SPCB, Odisha, Bhubaneswar
5. HWM Cell, SPCB, Odisha, Bhubaneswar
6. Guard file

ADDL. CHIEF ENV. ENGINEER

MINISTRY OF ENVIRONMENT AND FORESTS

NOTIFICATION

New Delhi, the 4th October, 2010

G.S.R. 809(E).—In exercise of the powers conferred by Sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following Rules further to amend the Environment (Protection) Rules, 1986, namely:-

1. (1) These rules may be called the Environment (Protection) (Sixth Amendment) Rules, 2010.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Environment (Protection) Rules, 1986, in schedule I, after serial number 17 and the existing entries relating thereto, the following serial number and entries shall be inserted, namely :-

<table>
<tr><th>S. No.</th><th>Industry</th><th>Parameter</th><th>Standard</th></tr>
<tr><td>(1)</td><td>(2)</td><td>(3)</td><td>(4)</td></tr>
<tr><td rowspan="6">"18</td><td rowspan="6">Iron Ore Mining and Ore Processing</td><td colspan="2">A. Emission Standards for Stack for De-dusting Unit</td></tr>
<tr><td>Particulate matter</td><td>100 mg/ Nm^3</td></tr>
<tr><td>Stack height **</td><td>15.0 m</td></tr>
<tr><td colspan="2">** Stack height for De-dusting unit shall be calculated as $H=74\ Q^{0.27}$, where H and Q are stack height in metre and particulate matter (PM) emission in tonne/hr respectively, i.e.

Q (kg/hr) — H (metre)
up to 2.71 — 15
2.72 - 7.86 — 20
7.87 - 17.96 — 25
17.97 - 35.29 — 30

Note:- Stack attached to De-dusting unit shall have minimum height of 15.0 metres and would be atleast 2.50 metres above the top-most point of the nearby building/shed or plant in the mine.</td></tr>
<tr><td colspan="2">B. Fugitive Emission Standards</td></tr>
<tr><td>Particulate matter</td><td>1200 µg/m^3</td></tr>
<tr><td colspan="2">Note:- Fugitive emission shall be monitored in the predominant downwind direction at a distance 25.0±2.0 metres from the source of fugitive emission as per following:</td></tr>
</table>

1	2	3	4
		Area	**Monitoring location**
		Mine face/ Benches	Drilling, excavation and loading applicable for operating benches above watertable
		Haul Roads/ Service Roads	Haul roads to ore processing plant, waste dumps and loading areas and service road
		Crushing plant	Run-off mine unloading at hopper, crushing areas, screens and transfer points
		Screening Plant	Screens, conveying and transportation of ore discharge points
		Ore Storage & Loading	Intermediate stock bin/pile areas, ore stock bin/pile areas, wagon/truck loading areas
		Waste dump	Active waste/reject dumps
		C. Effluent Standards	
		pH	5.5-9.0
		Suspended solids (non-rainy day)	50 mg/l
		Suspended solids (rainy day)	100 mg/l
		Oil & grease	10 mg/l
		Note:- (i) All efforts shall be made to reuse and re-circulate the treated effluent. (ii) The aforesaid effluent standards shall be complied with for sewage, service water, beneficiation of ore washwater and surface run-off put together.".	

[F. No. Q-15017/21/2007-CPW]

RAJNEESH DUBE, Jt. Secy.

Note :The principal rules were published in the Gazette of India vide number S.O. 844 (E) 19th November, 1986; and subsequently amended vide S.O. 433 (E) dated 18th April 1987; S.O. 64 (E), dated the 18th January 1988 and recently amended vide G.S.R. 97(E), dated the 18th February, 2009; G.S.R. 149 (E), dated the 4th March, 2009; G.S.R. 512(E), dated the 9th July, 2009; G.S.R. 543 (E), dated the 22nd July, 2009; G.S.R. 595(E), dated the 21st August, 2009; G.S.R. 794 (E), dated the 4th November, 2009; G.S.R. 826 (E), dated the 16th November, 2009; G.S.R. 01 (E), dated the 01st January, 2010; G.S.R. 61 (E), dated the 5th February, 2010; GSR 485(E), dated the 9th June, 2010; GSR 608 (E), dated the 21st July, 2010 and GSR 739 (E), dated, the 9th September, 2010.

Printed by the Manager, Government of India Press, Ring Road, Mayapuri, New Delhi-110064
and Published by the Controller of Publications, Delhi-110054.

NATIONAL AMBIENT AIR QUALITY STANDARDS
CENTRAL POLLUTION CONTROL BOARD
NOTIFICATION

New Delhi, the 18th November, 2009

No. B-29016/20/90/PCI-L—In exercise of the powers conferred by Sub-section (2) (h) of section 16 of the Air (Prevention and Control of Pollution) Act, 1981 (Act No.14 of 1981), and in supersession of the Notification No(s). S.O. 384(E), dated 11th April, 1994 and S.O. 935(E), dated 14th October, 1998, the Central Pollution Control Board hereby notify the National Ambient Air Quality Standards with immediate effect, namely:-

NATIONAL AMBIENT AIR QUALITY STANDARDS

S. No.	Pollutant	Time Weighted Average	Concentration in Ambient Air		
			Industrial, Residential, Rural and Other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1	Sulphur Dioxide (SO_2), $\mu g/m^3$	Annual*	50	20	- Improved West and Gaeke
		24 hours**	80	80	-Ultraviolet fluorescence
2	Nitrogen Dioxide (NO_2), $\mu g/m^3$	Annual*	40	30	- Modified Jacob & Hochheiser (Na-Arsenite)
		24 hours**	80	80	- Chemiluminescence
3	Particulate Matter (size less than 10µm) or PM_{10} $\mu g/m^3$	Annual*	60	60	- Gravimetric - TOEM
		24 hours**	100	100	- Beta attenuation
4	Particulate Matter (size less than 2.5µm) or $PM_{2.5}$ $\mu g/m^3$	Annual*	40	40	- Gravimetric - TOEM
		24 hours**	60	60	- Beta attenuation
5	Ozone (O_3) $\mu g/m^3$	8 hours**	100	100	- UV photometric - Chemilminescence
		1 hour**	180	180	- Chemical Method
6	Lead (Pb) $\mu g/m^3$	Annual*	0.50	0.50	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper - ED-XRF using Teflon filter
		24 hours**	1.0	1.0	
7	Carbon Monoxide (CO) mg/m^3	8 hours**	02	02	- Non Dispersive Infra Red (NDIR) spectroscopy
		1 hour**	04	04	
8	Ammonia (NH_3) $\mu g/m^3$	Annual*	100	100	-Chemiluminescence
		24 hours**	400	400	-Indophenol blue method

(1)	(2)	(3)	(4)	(5)	(6)
9	Benzene (C_6H_6) $\mu g/m^3$	Annual*	05	05	- Gas chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10	Benzo(a)Pyrene (BaP) - particulate phase only, ng/m^3	Annual*	01	01	- Solvent extraction followed by HPLC/GC analysis
11	Arsenic (As), ng/m^3	Annual*	06	06	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper
12	Nickel (Ni), ng/m^3	Annual*	20	20	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper

* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Note. — Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation.

SANT PRASAD GAUTAM, Chairman
[ADVT-III/4/184/09/Exty.]

Note: The notifications on National Ambient Air Quality Standards were published by the Central Pollution Control Board in the Gazette of India, Extraordinary vide notification No(s). S.O. 384(E), dated 11th April, 1994 and S.O. 935(E), dated 14th October, 1998.

Printed by the Manager, Government of India Press, Ring Road, Mayapuri, New Delhi-110064
and Published by the Controller of Publications, Delhi-110054.

ANNEXURE-II

SCHEDULE
(see rule 3(l) and 4(l)

Ambient Air Quality Standards in respect of Noise

Area Code	Category of Area/Zone	Limits in dB(A) Leq *	
		Day Time	Night Time
(A)	Industrial area	75	70
(B)	Commercial area	65	55
(C)	Residential area	55	45
(D)	Silence Zone	50	40

Note

1. Day time shall mean from 06:00 A.M. to 10:00 P.M.
2. Night time shall mean from 10:00 P.M. to 06:00 A.M.
3. Silence zone is defined as an area comprising not less than 100 meters around hospitals, educational institutions and courts. The silence zones are zones which are declared as such by the competent authority.
4. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.

*dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

A "decibel" is a unit in which noise is measured.

"A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

Leq : It is an energy mean of the noise level, over a specified period.