BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 1394 OF 2024

In the matter of :

News item titled "The Environmental Crisis In Odisha" appearing in and around Odisha Dated 24.12.2024

..... Petitioner / Appellant

VERSUS

Ministry of Environment & Climate Change & Others ....Respondent / Defendant

ADDITIONAL AFFIDAVIT ON BEHALF OF THE RESPONDENT NO.3 (STATE POLLUTION CONTROL BOARD, ODISHA).

PAPER BOOK

(KINDLY SEE INDEX INSIDE)

ADVOCATE FOR RESPONDENT NO.3:

MANORANJAN PAIKARAY

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INDEX

N.D.H.: 28.04.2026

Sl. No.	Particulars of Document	Page No.
1.	Additional Affidavit on behalf of the Respondent No.3 (State Pollution Control Board, Odisha)	1-4
2.	**ANNEXURE - R3/F:** True copy of the status report on Compliance of Consent to Operate Conditions of the mines situated in Talcher (Angul), Sukinda (Jajpur) and Iron Ore area (Sundargarh and Keonjhar) as on April, 2026	5-48
3.	**Proof of Service**	**49**

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New Delhi
Dated: **25.04.2026**

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 1394 OF 2024

24 APR 2026

In the matter of :

News item titled "The Environmental Crisis In Odisha" appearing in and around Odisha Dated 24.12.2024

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Ministry of Environment & Climate Change & Others ....Respondent / Defendant

ADDITIONAL AFFIDAVIT ON BEHALF OF THE RESPONDENT NO. 3 (STATE POLLUTION CONTROL BOARD, ODISHA)

I, Shri Manoj V. Nair, IFS, son of N. Vasudevan Nair aged around 52 years, at present working as Member Secretary, State Pollution Control Board, having my office at Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, P.O. Nayapalli, Bhubaneswar, Dist – Khurda, Odisha-751012, do hereby solemnly affirm and state as under:

1. That I am the Member Secretary of the Respondent No. 3 Board and, as such, am well-acquainted with the facts and

NOTARY M.K. PRADHAN BHUBANESWAR REGD.NO.ON-71/09 DATE EXPIRY 02.03.2029 GOVT. OF ODISHA (INDIA)

circumstances of the case and competent to swear this affidavit.

2. That this Hon'ble Tribunal in their order dtd.28.01.2026 has observed that the Respondent No.3 Board has not placed on record the status of compliance of Consent to Operate (CTO) conditions by the above mines.

3. That in compliance to the aforesaid direction the Respondent No.3 Board is placing on record the status of 104 nos. of operational mines, i.e. 17 Coal Mines situated in the district of Angul, 11 Chromite Mines situated in the district of Jajpur and 76 Iron and Manganese Mines, situated in the district of Sundargarh and Keonjhar, as on April-2026 for kind perusal of this Hon'ble Tribunal.

4. That all the above 104 mines are operational with valid CTO and all have provided basic air and water pollution control measures. Solid waste management plans, surface run-off management facilities are in place in all the mines which are physically verified from time to time. Effluent Treatment Plants (ETP) installed in coal and chromite mines are in operating conditions.

NOTARY
M.K. PRADHAN
BHUBANESWAR
DATE EXPIRY
GOVT. OF ODISHA (INDIA)

Operational efficiency of air and water pollution control measures are dynamic in nature and the Respondent No. 3 Board is vigilant on the conditions of operational efficiencies and is working jointly with the Mining Authorities and Institutes of Repute for continuous improvement in the pollution control systems. For such improvements and for technological interventions, additional conditions are imposed in the CTO orders for time bound compliance by the mine authorities. Implementation of the additional conditions are periodically reviewed by the Respondent No. 3 Board and further improvements are suggested from time to time if felt necessary.

5. That further, a status report on Compliance of Consent to Operate Conditions of the mines situated in Talcher (Angul), Sukinda (Jajpur) and Iron Ore area (Sundargarh and Keonjhar) as on April, 2026 is annexed herewith this affidavit and marked as **ANNEXURE - R3/F**.

NOTARY M.K. PRADHAN BHUBANESWAR REGD.NO.ON-71/09 DATE EXPIRY 02.03.2028 OF ODISHA (INDIA)

6. That this Respondent No.3 Board is filing this affidavit in compliance to direction dtd. 28.01.2026 of this Hon'ble Tribunal passed in the aforesaid OA and to bring on record the status report on Compliance of Consent to Operate

MANJULA KUMAR PRADHAN
NOTARY PUBLIC
BHUBANESWAR
REGD. NO. ON-71/2009
PH-9437627119 (M)

24/04/26

Conditions of the mines situated in Talcher (Angul), Sukinda (Jajpur) and Iron Ore area (Sundargarh and Keonjhar) as on April, 2026 vide Annexure - R3/F.

7. That the Respondent No.3 Board craves the leave of this Hon'ble Tribunal to file further affidavit if necessary for proper adjudication of this case.

8. That the contents of the above paragraphs are true and correct to the best of my knowledge, as derived from the official records, and that nothing material has been concealed therefrom.

DEPONENT
Member Secretary
State Pollution Control Board
Odisha, Bhubaneswar

VERIFICATION:

I, the above named deponent, do hereby verify that the contents of the above affidavit are true and correct to the best of my knowledge, as derived from official records, and that nothing material has been concealed therefrom.

Verified at Bhubaneswar on this the 24th day of April, 2026.

SWORN BEFORE ME

NOTARY
M.K. PRADHAN
BHUBANESWAR
REGD.NO.ON-71/09
DATE EXPIRY
02.03.2029
GOVT. OF ODISHA (INDIA)

DEPONENT
Member Secretary
State Pollution Control Board
Odisha, Bhubaneswar

MANJULA KUMAR PRADHAN
NOTARY PUBLIC
BHUBANESWAR
REGD. NO. ON-71/2009
PH-9437627119 (M)

24/04/26

ANNEXURE R3/F

Environmental Compliance of Coal (Angul), Chromite (Jajpur) and Iron & Manganese Mines (Sundargarh & Keonjhar) Districts of Odisha

(In the matter of OA No. 1394/2024)

STATE POLLUTION CONTROL BOARD, ODISHA

APRIL-2026

Index

List of Tables

Compliance Status Report on CTO Conditions of Mines in Talcher (Angul), Sukinda (Jajpur), and Iron Ore (Sundargarh & Keonjhar) in the matter of OA No.1394/2024

Background

Hon'ble National Green Tribunal (NGT) took Suo-moto cognizance of the matter raised in article "The Environmental Crisis in Odisha" appeared in a local newspaper in its 24th December 2024 issue. The news article particularly pointed out the weaknesses in the monitoring and evaluation mechanism of Environmental Clearance (EC). It highlighted that the process of EC and preparation of Mining Plan have become meaningless formalities and the promises made in the EC are far from realities, irrespective of whether the mine is operated by any Private-run or State-run company. To make the matters worse, as the article alleged, that mining through Mine Developers and Operators (MDOs) focuses primarily on production and the environmental aspects of mining are largely ignored. These problems have specifically been highlighted for (i) Talcher coal mine area of Angul District, (ii) Sukinda chromite mining area of Jajpur District, and (iii) Iron and Manganese mines of Sundargarh and Keonjhar Districts.

In pursuant of the order of Hon'ble NGT dated 13.01.2025, a Joint committee was constituted comprising of (i) Director, NEERI, as the head of committee and members like (ii) Jt. Secretary, MoEF&CC (iii) Representative of Member Secretary, Central Pollution Control Board, (iv) Regional Officer, MoEF&CC, Bhubaneswar, (v) Member Secretary, State Pollution Control Board, Odisha and (vi) Principal Chief Conservator of Forest, Odisha. In this background, Director, NEERI nominated Dr. S. K. Goyal, Chief Scientist, CSIR-NEERI to head the Committee. The Joint committee visited all the three mining areas of the State and their joint report was submitted before Hon'ble NGT in due course. Through the report, the committee evaluated the highlights of the news article and observations of the joint committee.

In pursuant of the subsequent order of Hon'ble NGT dated 28.01.2026, State Pollution Control Board, Odisha, was to file an affidavit within ten weeks, furnishing the compliance status of the Consent to Operate (CTO) conditions applicable to the mines operating in the aforesaid areas. The matter has been listed for hearing on 28-04-2026.

A. Procedure for grant of Consent to Operate (CTO)

SPCB, Odisha upon receipt of online application for consent to operate (CTO), verifies the application and the following procedure is followed for grant of CTO to Mines.

1. Verification of Minimum requisite documents- Valid EC, Stage II FC, Lease Deed, Valid Mine Plan, Clerance from CGWA and/or Department of Water Resources.
2. Inspection report/ Field verification report on compliance to CTE/ CTO conditions.
3. Compliance monitoring of Ambient air quality (AAQ) through manual monitoring and through continuous ambient air quality monitoring system (CAAQMS).
4. Compliance monitoring of Effluent quality through filed sampling and through continuous effluent quality monitoring system (CEQMS) installed at outlet of ETP.
5. Verification of compliance to CTO conditions.

Conditions imposed to Mines through Consent to Operate (CTO)

Consent to operate (CTO) is the most significant tool used by SPCB for environmental compliance in mines. The process of grant of CTO is dynamic and CTO is granted for a specified period. Specific CTO conditions have been formulated for the mining projects based on the nature and scale of operations and those conditions are imposed for compliance through the consent to operate (CTO). These conditions typically encompass measures relating to air and water pollution control and waste management. Once the CTO is granted, the State Pollution Control Board officials undertake periodic inspections and monitoring to verify adherence to the stipulated conditions.

The compliance status of the mines is assessed through field visits, review of monitoring data, and examination of records maintained by the project proponents. In case of major violations to the CTO conditions, appropriate regulatory action is initiated ranging from issuance of directions /show cause notice for corrective measures, imposition of penalties, or suspension/revocation of CTO in cases of persistent non-compliances. For further improvements, additional conditions are also imposed from time to time as the improvement process is dynamic in nature. This mechanism ensures that mining activities are carried out within the framework of statutory environmental safeguards and that deviations are promptly addressed in the interest of environmental protection. Details of CTO conditions and compliance levels are highlighted in the following section in Table-A-1.

Table- A-1 Major conditions imposed to mines while granting consent to operate

Sl. No.	Type and Sources Pollution with monitoring mechanism	Conditions stipulated as Specific Conditions in Consent to Operate
	1. SOURCES OF AIR POLLUTION AND ITS CONTROL	
1a.	**Drilling and Blasting**	1. Drills to be fitted with dust extraction system or water injection system. 2. Controlled sequential blasting to be adopted
1b.	**Excavation and Mining**	Mechanised mining with adequate dust suppression
1c.	**Mineral Handling Plants**	1. Installation of Bag filters or dry fog system in the crushing and screening 2. Water sprinkling by fixed sprinklers and fog canons in work zone
1d.	**Haul Roads and Mineral Transportation Roads and other area sources**	1. Concreting/ blacktopping of haulage and transportation roads and to maintain those. 2. Water sprinkling on haulage and transportation roads. 3. Plantation of thick leaf trees on both sides of the road shall be done. 4. To fully cover all transportation vehicle by tarpaulin. 5. Wheel washing system of transporting vehicles
1e.	**Mineral Stackyard**	1. Dust suppression by fog canons and fixed sprinklers on mineral stackyards.
1e.	**Railway siding**	1. Dust suppression by fog canons and fixed sprinklers at Railway siding. 2. Prevention of fire in Railway siding and provision of firefighting measures 3. Installation of Wind barrier around coal stackyard. 4. Installation of mechanised loading facility.
1f.	**Air Pollution Monitoring**	1. Ambient air monitoring though manual monitoring and compliance with the standards prescribed for coal mining. 2. Installation of CAAQMS in large mines and data transmission to SPCB.
	2. SOURCES OF WATER POLLUTION AND ITS CONTROL	
2a.	**Surface water runoff control**	1. Collection system for entire storm water during monsoon and provision for its treatment in sedimentation ponds.

Sl. No.	Type and Sources Pollution with monitoring mechanism	Conditions stipulated as Specific Conditions in Consent to Operate
		2. Provision of retention walls, garland drains and sedimentation pits. 3. Collection of mine strata water and treatment of pumped out wastewater in mine discharge treatment plants (MDTPs)
2b.	**Domestic Effluent**	1. Installation of STP in townships 2. Treatment by septic tank and soak pit in mining offices
2c.	**Workshop effluent**	Installation of ETP to remove O&G and TSS from workshop effluent and reuse of treated water
	3. OB DUMP AND SOLID WASTE MANAGEMENT	
3a.	**Top soil and Overburden (OB)**	1. Separate storage of top soil and OB at designated areas. 2. Backfilling of mined out area by OB 3. Stabilisation of external OB dumps by adequate dosing and plantation.
3c.	**Plantation**	Besides, OB dumps and roadside, Plantation at vacant areas, safety zones and township

Besides the conditions mentioned in Table A-1, conditions specific to the type of mine imposed through CTO are as follows.

Conditions specific to Coal Mines

1. Use of surface miners for excavation of coal
2. Wetting of coal surface on the transporting vehicle through instant shower system.
3. Prevention of fire in coal stackyards and provision of firefighting measures
4. Transportation of coal through Railways for minimum 80 % of coal production.
5. Prevention of fire in OB dumps due to burning of residual coal

Conditions specific to Chromite Mines

Looking at the potential health hazards of hexavalent chromium (Cr^{6+}) in wastewater discharges from chromite mines, operational efficiencies of ETPs are more significant. Therefore, conditions have been imposed to

1. To collect entire surface runoff generated from OB dumps, vacant areas, exposed mine surfaces, haulage roads and treat entire wastewater in ETPs.
2. To store mine strata water in sumps and pump entire wastewater to ETPs.
3. Treat the wastewater in adequately designed ETPs for removal of Cr^{6+} and TSS in wastewater.

Conditions specific to Iron and Manganese Mines

A separate standard for measurement of fugitive emissions in iron and manganese mines exist and therefore all the Iron and manganese mines are imposed with a condition to measure fugitive emissions and take corrective actions accordingly.

Besides the above conditions for improvements, SPCB advises the minse to technologically renovate their processes and pollution control measures. Additional conditions are imposed from time to time in the CTO conditions for implementation in time bound manner.

B. TALCHER COAL MINE AREA (ANGUL DISTRICT)

Coal Mining Details

Talcher coalfield is home to a number of large-scale coal mines, including underground and open-cast mining. Currently, there are 17 operating mines with a consented production capacity of 161.815 MTPA of coal. Out of these, 13 mines are managed by Mahanadi Coalfields Limited (MCL), a subsidiary of Coal India Limited and other four mines are managed by private organisations. The list of mines with their working status, production capacity along with mineral handling units, and CTO validity are presented in Table-B-1.

Table- B-1 List of Coal Mines with their Consented Capacities in Talcher Area in Angul District

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	Type of Mines	Production Capacity in MTPA	CTO Validity
1.	Deulbera Colliery of MCL	954.110	Underground	NIL* Sand Stowing	31.03.2028
2.	Handidhua Colliery of MCL	671.276	Underground	NIL* Sand Stowing	31.03.2028
3.	Talcher Colliery of MCL	1140	Underground	0.27	31.03.2028
4.	Nandira Colliery of MCL	370	Underground	0.175	31.03.2027

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	Type of Mines	Production Capacity in MTPA	CTO Validity
5.	Jagannath Colliery of MCL	553.95	Opencast	7.5	31.03.2027
6.	Bharatpur OCP of MCL	1324.80	Opencast	15	31.03.2027
7.	Balram OCP of MCL	2574.00	Opencast	15	31.03.2027
8.	Ananta OCP of MCL	1214.49	Opencast	24	31.03.2027
9.	Lingaraj OCP of MCL	1410.01	Opencast	20	31.03.2027
10.	Hingula OCP of MCL	1870	Opencast	15	31.03.2027
11.	Bhubaneswari OCP of MCL	658.724	Opencast	30	31.03.2027
12.	Kaniha OCP of MCL	718	Opencast	14	31.03.2027
13.	Subhadra Open Cast Coal Mine Project of MCL	1111.85	Opencast	2	31.03.2027
14.	Utkal-D and Utkal-E Coal Mines of M/s NALCO Ltd.	824.316	Opencast	4	31.03.2027
15.	Utkal- C Coal Mine of M/s Jindal Steel Ltd.	575.07	Opencast	3.37	31.03.2027
16.	Naini Coal Mine of M/s Singareni Collieries Company Ltd.	912.799	Opencast	6	31.03.2027
17.	Utkal-B1 Coal Block of M/s Jindal Steel Ltd.	270	Opencast	5.5	31.03.2027

* Sand stowing is a mine closure activity in underground coal mines after mining by depillaring. Sand and water are poured into the vacancies created due to underground mining operation so that land subsidence does not occur at the surface and it does not affect the flora and fauna existing at the surface.

Major Polluting Operations in Coal Mines

1. Removal of Top soil and Overburden (OB)
2. Drilling and blasting of OB and Coal mining by using surface miner
3. Maintenance of benches
4. Operation of Coal handling plants (CHPs)
5. Loading and unloading of OB and coal

6. Haulage and Transportation
7. Maintenance of heavy machineries

Field verifications of coal mines are conducted at regular intervals and SPCB works closely with mine authorities for improvement in environmental conditions. All the coal mines have provided air and water pollution abatement measures in their respective mines.

Based on the observations made during field verifications, a compilation of compliances by coal mines is presented in Table- B-2.

Table- B-2 Compliance Evaluation Table for Coal Mines in Talcher Area

		Air Pollution Control Measures								Water Pollution Control Measures			Waste Management	Overall Compliance Status
Sl. No.	Name of Coal Mine	Dust suppression measures in Haul and Transportation road	Dust suppression measures in Stockyard	Dust suppression measures in Railway Siding	Wheel Washing Facility	Road Sweeper	Manual Air Quality Monitoring Status within ML area	CAAQMS monitoring Status	Surface Runoff Management Facility	Worksop Effluent Treatment Facility	ETP Outlet	Domestic Effluent Treatment Facility	OB Management Facility	
1.	Deulbera Colliery of MCL	Presently there is no mining operation except sand stowing having no pollution potential.												Satisfactory
2.	Handidhua Colliery of MCL	Presently there is no mining operation except sand stowing having no pollution potential.												Satisfactory
3.	Talcher Colliery of M/s MCL	Mine is non operational	Mine is non operational	No Railway Siding within the ML area	Mine is non operational	Not required	Mine is non operational	Not installed	Adequate	Mine is non operational	Not available	Treated through septic tank and soak pit	Mine is non operational	Satisfactory
4.	Nandira Colliery of M/s MCL	Adequate	Frequency to improve	No Railway Siding within the ML area	Not installed	Not deployed	Within standard	Not installed	Need improvement	ETP not installed	Not available	STP capacity adequate	Not required	CTO granted with Condition
5.	Jagannath Colliery of M/s MCL	Frequency to improve	Not adequate	No Railway Siding within the ML area	Installed but defunct	Deployed	Partially complying	Within standard	Adequate	ETP need improvement	Partially complying	STP need improvement	Management practice is generally good	CTO granted with Condition
6.	Bharatpur OCP of M/s MCL	Adequate	Adequate	Adequate	Installed and working satisfactorily	Deployed	Within standard	Within standard	Adequate	ETP capacity adequate	Within standard	STP capacity adequate	Management practice is generally good	Satisfactory
7.	Balaram OCP of M/s. MCL	Adequate	Adequate	Under installation	Installed and working satisfactorily	Deployed	Within standard	Within standard	Adequate	ETP capacity adequate	Within standard	STP capacity adequate	Management practice is generally good	Satisfactory
8.	Ananta OCP of M/s MCL	Adequate	Adequate	Adequate	Installed and working satisfactorily	Deployed	Partially complying	Within standard	Adequate	ETP capacity adequate	Within standard	STP capacity adequate	Management practice is generally good	CTO granted with Condition

9.	Lingaraj OCP of M/s MCL	Adequate	Adequate	Frequency to improve	Installed and working satisfactorily	Deployed	Within standard	Within standard	Adequate	ETP capacity adequate	Within standard	STP capacity adequate	Management practice is generally good	Satisfactory
10.	Hingula OCP of M/s MCL	Adequate	Adequate	No Railway Siding within the ML area	Installed and working satisfactorily	Deployed	Within standard	Within standard	Adequate	ETP capacity adequate	Within standard	STP not required	Management practice is generally good	Satisfactory
11.	Bhubaneswari OCP of M/s MCL	Adequate	Adequate	Adequate	Installed and working satisfactorily	Deployed	Within standard	Within standard	Adequate	ETP capacity adequate	Within standard	STP not required	Management practice is generally good	Satisfactory
12.	Kaniha OCP of M/S MCL	Adequate	Adequate	Adequate	Installed and working satisfactorily	Deployed	Within standard	Commissioned but not yet connected	Adequate	ETP capacity adequate	Within standard	STP not required	Management practice is generally good	CTO granted with Condition
13.	Subhadra OCP of M/s MCL	Under installation	Under installation	No Railway Siding within the ML area	Not installed	Not deployed	Not available	Not installed	Need improvement	ETP not installed	Not available	STP not installed	OB excavation not started	CTO granted with Condition
14.	Utkal-D & Utkal-E Coal Mines of M/s NALCO Ltd.	Adequate	Adequate	Railway siding under construction	Installed and working satisfactorily	Not deployed	Within standard	Not working	Adequate	ETP not operational	Not available	STP capacity adequate	Management practice is generally good	CTO granted with Condition
15.	Utkal-C Coal Mine of M/s Jindal Steel Ltd.	Adequate	Adequate	No Railway Siding within the ML area	Installed and working satisfactorily	Not deployed	Exceeding Standard	Within standard	Adequate	ETP not operational	Not available	Treated through septic tank and soak pit	Management practice is generally good	CTO granted with Condition
16.	Naini Opencast Coal Mine of M/s SCCL	Adequate	Not adequate	No Railway Siding within the ML area	Not installed	Not deployed	Within standard	Not installed	Need improvement	ETP not installed	Not available	STP not installed	Management practice is generally good	CTO granted with Condition
17.	Utkal B1 Coal Mine of M/s Jindal Steel Ltd.	Adequate	Not adequate	No Railway Siding within the ML area	Not installed	Not deployed	Exceeding Standard	Not installed	Need improvement	ETP not installed	Not available	STP not required	Management practice is generally good	CTO granted with Condition

C. CHROMITE MINES IN SUKINDA VALLEY (JAJPUR DISTRICT)

Chromite Mining Details

Sukinda Valley, located in Jajpur district accommodates about 97% of India's total chromite reserves. Currently, there are 11 operating mines with a consented production capacity of 5.356 MTPA of chromite ore. The list of mines with their working status, CTO validity and production capacity along with mineral processing units, is given in Table-C-1.

Table- C-1 List of Chromite Mines with their Consented Capacities in Sukinda Valley

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	Production Capacity in MTPA	Opencast/ Underground	Mineral Handling Plants	CTO Validity
1.	Kalarangiata Chromite Mines of FACOR Ltd.	23.8	Chrome Ore- 0.15 MTPA	Opencast	--	31.03.2027
2.	Sukurangi Chromite Mines of OMC Ltd.	382.709	Chrome Ore- 0.3 MTPA	Opencast	--	31.03.2027
3.	Jindal Chromite Mines (Kaliapani) of Jindal Stainless Ltd.	89	Chrome Ore (ROM)-0.215 MTPA	Opencast	COBP-I of 36,000 TPA and COBP-II of 24,000 TPA	31.03.2027
4.	Ostapal Chromite Mines of FACOR	72.843	Chrome Ore - 1.04 MTPA	Opencast	COB Plant of 0.1 MTPA	31.03.2027
5.	South Kaliapani Chromite Mines of OMC Ltd.	720.727	Chrome Ore- 1.4 MTPA	Opencast	COB Plant of 0.47 MTPA	31.03.2027
6.	Saruabil Chromite Mines of M/s. Tata Steel Ltd.	246.858	Chrome Ore - 0.6 MTPA	Opencast	--	31.03.2027
7.	Sukinda Chromite Mines of M/s IMFA Ltd.	116.76	Chrome Ore - 0.351 MTPA	Opencast & Underground	Screening Plant of 1 × 100 TPH	31.03.2027
8.	Mahagiri Chromite Mines of M/s IMFA Ltd.	73.777	Chromite Ore - 0.6 MTPA	Underground	Back filling plant of 1 x 100 cum/hour, 1 x 150 cum/hour and	31.03.2027

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	Production Capacity in MTPA	Opencast/ Underground	Mineral Handling Plants	CTO Validity
					Crushing and Screening Plant of 1 x 150 TPH, 1 x 100 TPH	
9.	Kaliapani Chromite Mines of M/s Balasore Alloys Ltd.	64.463	Chrome Ore (ROM) - 0.6 MTPA	Opencast	COB Plant of 1 x 20 TPH	30.06.2026
10.	Kamarda Chromite Mines of Tata Steel Mining Ltd.	107.24	Chromite Ore [ROM] - 0.1 MTPA	Opencast	Crushing Plant of 1 x 30 TPH and Screening plant of 1 x 30 TPH	31.03.2027
11.	Sukinda Chromite Mines of M/s TATA Steel Ltd.	406	Chrome Ore (ROM)-Nil	Opencast	--	31.03.2027

Out of the above 11 mines, chromite mining is presently continuing in 10 mines, while mining in the Sukinda Chromite mines of TATA Steel Ltd has been suspended. As it is operating its township and its ETP and water treatment plant, it has obtained CTO from the Board. Besides there are six (06) more mines in Sukinda valley, which are not in operation since long.

In Chromite specific steps of mining are

1. Removal of Top Soil and Overburden (OB)
2. Drilling and Blasting
3. Mineral excavation
4. Maintenance of benches
5. Mineral sizing and Beneficiation
6. Haulage and Transportation

Field verifications of chromite mines are conducted at regular intervals and SPCB works closely with mine authorities for improvement in environmental conditions. All the chromite mines have provided air and water pollution abatement measures in their respective mines.

Compliance to the aforesaid conditions stipulated in Consent to Operate (CTO) are evaluated by the Board regularly and based on the compliance level, CTO for further period is considered. Additional conditions are also imposed in CTO order for further improvement in environmental conditions. The compliance evaluation table for the chromite mines is given in Table C-2.

Table- C-2 Compliance Evaluation Table for Chromite Mines of Sukinda Valley

		Air Pollution Control Measures							Water Pollution Control Measures								Waste Management	Overall Compliance Status
Sl. No.	Name of Chromite Mine	Status of APC devices in Crusher & Screening plant	Dust suppression measures in Haul and Transportation road	Dust suppression measures in Stockyard	Wheel Washing Facility	Road Sweeper	Manual Air Quality monitoring Status	CAAQMS monitoring Status	Surface Runoff Management Facility	Mine Drainage Water Management Facility	ETP Status	ETP Outlet	Cr^{+6} Conc. at ETP Outlet	Online EQMS	Domestic Effluent Treatment Facility	Water from COBP	OB Management Facility	
1.	Kalarangiata Chromite Mines of M/s FACOR Ltd.	Not applicable	Adequate	Frequency to improve	Installed and working satisfactorily	Not deployed	Within standard	Not installed	Adequate	Adequate	ETP capacity adequate	Within standard	Within standard	Installed	STP was non-operational	No COBP	Management practice is generally good	CTO granted with Condition
2.	Sukurangi Chromite Mines of OMC Ltd.	Not applicable	Frequency to improve	Frequency to improve	Installed and working satisfactorily	Deployed	Exceeding Standard	Partially complying	Adequate	Adequate	Under installation	Not available	Not available	Not installed	STP capacity adequate	No COBP	Management practice is generally good	CTO granted with Condition
3.	Jindal Chromite Mines (Kaliapani) of Jindal Stainless Ltd.	Not applicable	Adequate	Frequency to improve	Installed and working satisfactorily	Not deployed	Within standard	Not yet connected to Board's server	Adequate	Adequate	ETP capacity adeqaute	Within standard	Within standard	Installed	STP capacity adeqaute	Was under maintenance	Management practice is generally good	CTO granted with Condition
4.	Ostapal Chromite Mines of M/s FACOR Ltd.	Not applicable	Adequate	Frequency to improve	Installed and working satisfactorily	Not deployed	Partially complying	Within standard	Adequate	Adequate	ETP capacity adeqaute	Within standard	Within standard	Installed	STP capacity adeqaute	Recyled	Management practice is generally good	CTO granted with Condition
5.	South Kaliapani Chromite	Adequate but need	Adequate	Not adequate	Installed and working	Deployed	Exceeding Standard	Partially complying	Need improvement	Adequate	ETP capacity adeqaute	Within standard	Within standard	Installed	Treated through septic tank	Recyled	Management practice is	CTO granted

	Mines of OMC Ltd.	mainte nance			satisfacto rily										and soak pit		generally good	with Condition
6.	Saruabil Chromite Mines of M/s. Tata Steel Ltd.	Adequ ate	Adequate	Frequenc y to improve	Installed and working satisfacto rily	Not deployed	Partially complyin g	Not installed	Adequate	Adequate	ETP capacity adeqaute	Within standard	Within standard	Install ed	Treated through septic tank and soak pit	No COBP	Managem ent practice is generally good	CTO granted with Condition
7.	Sukinda Chromite Mines of M/s IMFA Ltd.	Adequ ate	Adequate	Adequate	Installed and working satisfacto rily	Not deployed	Partially complyin g	Within standard	Adequate	Adequate	ETP capacity adeqaute	Within standard	Within standard	Install ed	STP capacity adeqaute	No COBP	Managem ent practice is generally good	CTO granted with Condition
8.	Mahagiri Chromite Mines of M/s IMFA Ltd.	Adequ ate	Adequate	Not adequate	Installed and working satisfacto rily	Not deployed	Partially complyin g	Within standard	Adequate	Adequate	ETP capacity adeqaute	Within standard	Within standard	Install ed	STP capacity adeqaute	No COBP	Managem ent practice is generally good	CTO granted with Condition
9.	Kaliapani Chromite Mines of Balasore Alloys Ltd.	Not applica ble	Frequency to improve	Adequate	Installed but not working	Not deployed	Partially complyin g	Not installed	Adequate	Adequate	ETP need improve ment	Exceedi ng Standard	Exceedi ng Standard	Install ed	STP was non-operational	Recyled	Managem ent practice is generally good	CTO granted with Condition
10.	Kamarda Chromite Mines of Tata Steel Mining Ltd.	Adequ ate	Adequate	Frequenc y to improve	Installed and working satisfacto rily	Not deployed	Partially complyin g	Not installed	Need improve ment	Adequate	ETP capacity adeqaute	Within standard	Within standard	Install ed	Treated through septic tank and soak pit	No COBP	Managem ent practice is generally good	CTO granted with Condition
11.	Sukinda Chromite Mines of M/s TATA Steel Ltd.	Mine is non operati onal	Mine is non operational	Mine is non operation al	Mine is non operation al	Not required	Mine is non operation al	Not installed	Adequate	Adequate	ETP capacity adeqaute	Within standard	Within standard	Install ed	STP capacity adeqaute	No COBP	Mine is non operationa l	Satisfacto ry

Due to geogenic presence of chromium in the Sukinda valley, the mine drainage water and surface runoff contains chromium in hexavalent (Cr^{6+}) form and therefore minimisation of Cr^{6+} in the discharge water has been the main environmental concern. Under the Environment (Protection) Rules, 1986, the discharge standard for Cr^{6+} in mine drainage water is set at 0.1 mg/l. Recognizing the elevated health risks, the State Pollution Control Board (SPCB), Odisha, revised this standard to a more stringent 0.05 mg/l effective from 09.03.2015.

In response to persistent contamination of Damsala Nallah, SPCB had commissioned a study through IIT Kharagpur and recommended upgradation of individual Effluent Treatment Plants (ETPs) at each mine. It was also recommended to divert surface runoff from broken-up lease areas (dumps, roads, stackyards) to the ETPs for treatment prior to discharge. All the mines have completed upgradation of their ETPs. SPCB conducts fortnightly monitoring of inlet and outlet water quality at the operational ETPs. The treated effluent consistently conforms to the revised discharge standard of 0.05 mg/l for Cr^{6+}, besides a few occasions. A study conducted by the Central Ground Water Board (CGWB) also confirms that the discharge quality from each of the mine is confirming the prescribed standards.

D. IRON AND MANGANESE MINES IN KEONJHAR AND SUNDARGARH DISTRICTS

Iron and Manganese Mines Details

The major mining activities for mining of Iron and Manganese Ore is concentrated in Joda-Barbil, and Koira sector of Keonjhar and Sundargarh Districts respectively. There are 76 nos. of iron ore and manganese mining leases in Keonjhar and Sundargarh district with a consented production capacity of 243.74 MTPA. The other leases are not in operation due to lacking statutory clearances. The list of mines with their working status, production capacity along with mineral handling units, CTO validity is given in Table-D-1.

Table- D-1 List of Iron and Manganese Mines with their Consented Capacities in Joda- Barbil and Koira Sector

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	District	Production Capacity in MTPA	Mineral Handling Plants	CTO Validity
1.	Guali Iron Ore Mines of OMC Ltd.	365.026	Keonjhar	Iron Ore - 12.0 MTPA	Stationary crusher plant of capacity 1 x 200 TPH, 2 x 400 TPH,	31.03.2027

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	District	Production Capacity in MTPA	Mineral Handling Plants	CTO Validity
					Mobile crusher plant of capacity 1 x 150 TPH, 1 x 150 TPH, 5 x 250 TPH, Stationary screen plant of capacity 1 x 1500 TPH	
2.	Unchabali (Mahaparbat) Iron Ore Mines of OMC Ltd.	68	Keonjhar	Iron - 1 MTPA	Mobile Crushing Plant of capacity 1 x 200 TPH, Mobile Screening Plant of capacity 1 x 400 TPH	31.03.2027
3.	Bagiaburu Iron Ore Mines of M/s Orissa Minerals Development Company Limited	21.521	Keonjhar	Iron Ore (ROM) - 3,60,000 TPA	Mobile iron ore crushing and screening plant of 1 x 270 TPH	31.03.2027
4.	Deojhar Iron Ore Mines of Tarini Minerals (P) Ltd.	34.368	Keonjhar	Iron Ore 1.5 MTPA	Stationary crushing plant of capacity 1 x 400 TPH, Mobile screening plants of capacity 3 x 200 TPH	31.03.2027
5.	Balda Block Iron Mines of Serajuddin & Co. (Lease expired. Again Lease auctioned to M/s. Serajjuniddin & Co.)	343.981	Keonjhar	Iron Ore (ROM)- 10.632 MTPA	Mobile Screening Plants of capacity 3 x 250 TPH and 6 x 150 TPH, Mobile Crushing Plants of capacity 3 x 150 TPH, Stationary Crushing Plants of capacity 1 x 200 TPH, 1 x 175 TPH and 1x600 TPH, Stationary Screening Plants of capacity 1 x 1500 TPH	31.03.2027

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	District	Production Capacity in MTPA	Mineral Handling Plants	CTO Validity
6.	Khandabandh Iron Ore Mines of OMC Limited	366.311	Keonjhar	Iron Ore - 1 MTPA	Mobile Crushing & Screening Plant of capacity 1 x 350 TPH, Crushing and Screening Plant of capacity 1 x 350 TPH, Mobile Screening Plant of capacity 2 x 250 TPH	31.03.2027
7.	Banspani Iron Mines of OMC Ltd.	380.4	Keonjhar	Iron Ore - 1 MTPA	Mobile Crushing & Screening Plant of capacity 1 X 200 TPH, Mobile Screening Plant of capacity 1 x 400 TPH	31.03.2027
8.	Tiringpahar Iron Ore Mines of OMC Ltd.	79.3	Keonjhar	Iron ore - 0.995 MTPA	Mobile Crushing and screening plant of capacity 2 x 200 TPH	31.03.2027
9.	Katamati Iron Ore Mines of TATA Steel Ltd.	403.324	Keonjhar	Iron ore 13.5 MTPA (Total Excavation – 15 MTPA)	Stationery Crushing and Screening Plant of Capacity 1 x 500 TPH, Mobile Crushing and Screening Plant of Capacity 1 x 500 TPH	31.03.2027
10.	Joda East Iron Mines of Tata Steel Ltd.	671.093	Keonjhar	Iron Ore (ROM)- 19.5 MTPA	Wet beneficiation plant of throughput capacity 9.6 MTPA, Dry crushing plant of capacity 1 x 1000 TPH and 1 x 900 TPH (8 MTPA throughput capacity), Railway siding of handling capacity 16.45 MTPA	31.03.2027

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	District	Production Capacity in MTPA	Mineral Handling Plants	CTO Validity
11.	Jaribahal Iron Ore Mines of M/s. Kashvi International Pvt. Ltd.	106.534	Keonjhar	Iron ore - 0.998 MTPA	Iron ore crushing plant 1 x 250 TPH, Iron ore screening plant 3 x 150 TPH, 1 x 300 TPH, 2 x 250 TPH	31.03.2027
12.	Murgabeda Iron Ore Mines of D R Patnaik	15.378	Keonjhar	Iron Ore - 2 MTPA	Mobile crushing plant of capacity 2 x 200 TPH, Mobile screening plants of capacity 2 x 200 TPH	31.03.2027
13.	Baitarani Iron Ore Mines of Dr. Sarojini Pradhan	65.397	Keonjhar	Iron Ore-571600 TPA	Mobile Crusher of capacity 1 x 200 TPH, Mobile Screen of capacity 2 x 200 TPH	31.03.2027
14.	Jururi Iron Ore Mines of M/s Jagat Janani Services (P) Ltd.	73.228	Keonjhar	Iron Ore-7,00,020 TPA	Mobile crushing plants of capacity 2 x 150 TPH, Mobile iron ore screening plants of capacity 1 x 150 TPH, Stationery iron ore screening plant of capacity 1 x 350 TPH, Iron ore beneficiation plant of throughput capacity of 0.432 MTPA	31.03.2027
15.	Roida-II Iron Ore Mines of M/s. Narbheram Power & Steel Pvt. Ltd.	74.867	Keonjhar	Iron Ore - 3.5 MTPA	Mobile Crushing Plants of capacity 2 x 250 TPH, Mobile Screening Plants of capacity 3 x 600 TPH & 2 x 800 TPH	31.03.2027

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	District	Production Capacity in MTPA	Mineral Handling Plants	CTO Validity
16.	Nuagaon Iron Ore Mines of M/s JSW Steels Ltd.	767.284	Keonjhar	Iron Ore - 7.99 MTPA	Iron Ore Crushing and screening Plant (CPU) of capacity 1500 TPH	31.03.2027
17.	Thakurani Iron Ore Mines of M/s Arcelor Mittal India Pvt. Ltd.	228.04	Keonjhar	Iron Ore- 5.5 MTPA	Mobile Screening Plant of capacity 5 x 300 TPH, Stationary Crushing Plant of capacity 1 x 300 TPH	31.03.2027
18.	Jilling-Langolata Iron & Manganese Mines of OMC Ltd.	456.1	Keonjhar	Iron Ore- 9.9999 MTPA (Saleable Iron Ore- 7.7723 MTPA & Mineral Rejects- 2.2276 MTPA)	Railway Sidings of handling capacity 10 MTPA, Stationary Crusher Plant (Inpit Plant) of capacity 1x400 TPH (Jaw Crusher) & 1x250 TPH (Cone Crusher), Stationary Crusher Plant (OCU-1) of capacity 1x800 TPH (Jaw Crusher) & 1x400 TPH (Cone Crusher), Stationary Crusher Plant (OCU-2) of capacity 1x300 TPH (Jaw Crusher) & 1x200 TPH (Cone Crusher), Stationary Crusher Plant (OCU-5) of capacity 1x600 TPH (Jaw Crusher) & 1x600	31.03.2027

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	District	Production Capacity in MTPA	Mineral Handling Plants	CTO Validity
					TPH (Cone Crusher), Stationery Mobile Crusher Plant of capacity 1x600 TPH (Jaw Crusher) & 1x400 TPH (Cone Crusher), Mobile Screening Plant of capacity 4x250 TPH	
19.	Gandhamardan Iron Ore Mines of M/s OMC Ltd.	2209.4433	Keonjhar	Iron Ore - 9.47 MTPA	Static Crushing Plant of capacity 1 x 325 TPH, 1 x 450 TPH, 1 x 900 TPH, Mobile Screening Plant of capacity 5 x 500 TPH, 2 x 350 TPH, 2 x 200 TPH, Static Screening Plant of capacity 1 x 1200 TPH, Mobile crushing plant of capacity 1 x 250 TPH	31.03.2027
20.	Daitari Iron Ore Mines of OMC Ltd.	190.2	Keonjhar	Iron ore - 6 MTPA	Crushing & screening plant of capacity 1 x 800 TPH, Mobile integrated iron ore crushing and screening plant of capacity 1 x 700TPH	08.08.2026
21.	Kasia Iron & Dolomite Mines of M/s JSPL	134.733	Keonjhar	Iron Ore (ROM)- 74,99,910 TPA	Stationery Screening & Crushing Plant of capacity 1 x 750 TPH (Screening capacity = 750 TPH and Crushing capacity = 400 TPH,	31.03.2027

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	District	Production Capacity in MTPA	Mineral Handling Plants	CTO Validity
					Mobile Screening Plant of capacity 4 x 175 TPH, Stationary Screening Plant of capacity 1 x 450 TPH	
22.	Nayagarh Iron Ore Mines of KCP Iron Private Limited	24.57	Keonjhar	Iron Ore - 299060 TPA	Mobile screening plant 1 x 30 TPH & 2 x 100 TPH, Mobile crushing plant 1 x 30 TPH & 2 x 100 TPH	31.03.2027
23.	Khandbandh Iron & Manganese ore Mines of Sree Metaliks Ltd.	35.77	Keonjhar	Iron ore - 1.8 MTPA	Mobile crushing plant of capacity 1 x 200 TPH, Mobile screening plant of capacity 1 x 200 TPH, Integrated stationary crushing and screening plant of capacity 1 x 200 TPH	31.03.2027
24.	Sirkaguttu Iron & Manganese Mines of M/s. Prakash Industries Ltd.	19.532	Keonjhar	Iron - 600000 TPA	Iron ore crushing plant of capacity 1 x 200 TPH, Iron ore screening plant of capacity 1 x 200 TPH	31.03.2027
25.	Siljora-Kalimati Iron & Manganese Mines of Debabrata Behera	715.639	Keonjhar	Iron Ore - 0.136035 MTPA & Manganese - 0.189657 MTPA	crushing & screening plant of capacity 1x60 TPH	31.03.2027
26.	Jajang Iron and Manganese Mines of JSW Stells Ltd.	666.15	Keonjhar	Nil	--	31.03.2027
27.	Roida - C Iron Ore Mines of OMC Ltd. Operated by IDC of Odisha Ltd.	96.775	Keonjhar	Iron Ore - 0.46 MTPA & Manganese -0.007 MTPA	Crushing plant of capacity 2 x 90 TPH,	31.03.2027

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	District	Production Capacity in MTPA	Mineral Handling Plants	CTO Validity
					Screening plant of capacity 2 x 150 TPH	
28.	Naibaga and Katupalli Iron & Mn ore Mines of Tarini Prasad Mohanty	47.219	Keonjhar	Iron ore - 0.6 MTPA and Manganese -0.025 MTPA	Mobile Crushing Plant of capacity 2x150 TPH, Mobile Screening Plant of capacity 2x150 TPH	31.03.2027
29.	Unchabali Iron & Manganese Mines of Indrani Patnaik	106.113	Keonjhar	Iron Ore - 4 MTPA	Mobile Iron Ore Crusher Plant of capacity 2 x 200 TPH, Mobile Iron Ore Screening Plant of capacity 3 x 250 TPH	31.03.2027
30.	Bolani Iron Ore Mines of SAIL (5.1 Sq. Miles)	1321.45	Keonjhar	Iron - 12.0 MTPA including liquidation of dump fines maximum up to1.2 MTPA	Wet Beneficiation Plant of capacity 1 x 1600 TPH, Crushing & Screening Plant of capacity 1 x 600 TPH, Mobile Crushing & Screening Plant of capacity 6 x 300 TPH	31.03.2027
31.	Bamebari Manganese Mines of Tata Steel Limited	464	Keonjhar	Manganese - 0.0832 MTPA	Mobile screening plant 1 x 75 TPH	31.03.2030
32.	Joda West Manganese Mines of Tata Steel Limited	1437.715	Keonjhar	Manganese - 0.18 MTPA	Stationery screening plant 1 x 70 TPH	31.03.2027
33.	Khondbodh Iron & Manganese ore Mines of Tata Steel Ltd.	978	Keonjhar	Iron Ore - 8 MTPA & Manganese - 0.1 MTPA alongwith Wet Beneficiation Plant of throughput capacity 6 MTPA	Wet Beneficiation Plant of throughput capacity 6 MTPA, Mobile Crushing & Screening Plant of capacity 2 x 220 TPH,	31.03.2027

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	District	Production Capacity in MTPA	Mineral Handling Plants	CTO Validity
					Mobile Screening Plant of capacity 1 x 100 TPH, 1 x 220 TPH	
34.	Dalpahar Iron and Manganese Mines of D.C. Jain	89.961	Keonjhar	Iron ore- 0.31 MTPA, Manganese ore- 0.094 MTPA	Mobile Crushing Plant of capacity 1 x 100 TPH, Mobile Screening Plant of capacity 1 x 200 TPH	31.03.2027
35.	Katasahi Manganese Ore Mine of M/s Agrasen Sponge Pvt. Ltd.	196.86	Keonjhar	Manganese -0.019291 MTPA	--	31.03.2027
36.	Dubna Sakradihi Iron and Manganese Ore Mines of M/s. OMC Ltd.	1332.019	Keonjhar	Iron Ore (ROM)-3.0 MTPA & Manganese Ore (ROM)- 0.05 MTPA	Crushing Plant of capacity 1 x 300 TPH, Screening Plant of capacity 1 x 400 TPH, Crushing and screening Plant of capacity 1 x 300 TPH	31.03.2027
37.	Tiringpahar Manganese Mines of Tata Steel Limited	169	Keonjhar	Manganese -0.085 MTPA	Mobile Screening Plant 1 x 392 TPD, Mobile Crushing Plant 1 x 50 TPH	31.03.2030
38.	Bolani Iron Ore Mines of SAIL (6.9 Sq. miles)	1586.36	Keonjhar	Manganese Ore - 15000 TPA	--	31.03.2030
39.	Jalahuri Iron Ore and Manganese Block of M/s Anandam Minerals Pvt. Ltd.	182.109	Keonjhar	Iron Ore- 0.6 MTPA	Mobile Iron Ore Crushing plant of capacity 1 x 150 TPH, Mobile Iron Ore Screening Plant of capacity 1 x 120 TPH, 1 x 80 TPH & 2 x 150 TPH, Stationery Iron Ore Screening	31.03.2027

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	District	Production Capacity in MTPA	Mineral Handling Plants	CTO Validity
					Plant of capacity 1 x 80 TPH	
40.	Laserda Pacheri Iron and Manganese Mines of M/s Thriveni Earthmovers Pvt. Limited	131.8	Keonjhar	Iron Ore-1.545 MTPA and Manganese -0.11 MTPA	Mobile Screening Plant of capacity – 1 x 150 TPH & 2 x 250 TPH, Static Crushing Plant of capacity – 2 x 200 TPH	31.03.2027
41.	Putulpani Iron Ore Mines of M/s DEE VEE Projects Ltd.	100.1632	Keonjhar	Iron Ore - 1.425 MTPA	Mobile Crushing Plant of capacity 1 x 200 TPH, Mobile Screening Plant of capacity 2 x 200 TPH and 1 x 250 TPH	31.03.2027
42.	Tantra Iron Ore Mines of Korp Resources Pvt. Ltd.	72.56	Sundargarh	Iron Ore 0.24 MTPA	Crushing Plant of capacity 1 x 60 TPH, Mobile Screening Plant of capacity 1 x 200 TPH, Mobile Crushing Plant of capacity 1 x 200 TPH, Wet Beneficiation Plant of throughput capacity 1 MTPA	31.03.2030
43.	Kurmitar Iron Ore Mines of OMC Ltd.	1212.47	Sundargarh	Iron Ore - 6 MTPA	Static Integrated Crushing and screening plant of capacity 1200 TPH, Mobile Crusher Plant 3 x 400 TPH, Mobile Screening Plant 3 x 400 TPH	31.03.2028
44.	Bhanjapalli Iron Ore Mines of M/s JSP Minerals Pvt. Ltd.	18	Sundargarh	Iron Ore-0.26 MTPA	Mobile screening of capacity 3 x 100 TPH,	31.03.2027

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	District	Production Capacity in MTPA	Mineral Handling Plants	CTO Validity
					Mobile crushing and screening plant 1 x 150 TPH	
45.	Raikela Iron Ore Mines of Geetarani Mohanty	67.586	Sundargarh	Iron Ore-5.998 MTPA	Mobile Crushing Plant of capacity 2 x 400 TPH, Mobile Screening Plant of capacity 2 x 300 TPH & 2 x 400 TPH, Fixed Crushing and Screening Plant of capacity 1 x 1000 TPH	31.03.2027
46.	TRB Iron Ore Mines of Jindal Steel and Power Limited	297.848	Sundargarh	Iron Ore - 1.509295 MTPA	Crushing plant of capacity 1 x 250 TPH, Mobile screening plant of capacity 2 x 350 TPH	31.03.2030
47.	Raikela & Tantra Iron Ore Mines of Penguin Trading & Agencies Ltd.	49.372	Sundargarh	Iron Ore-2.592 MTPA	Mobile crushing plant of capacity 1 x 150 TPH, 1 x 200 TPH and 1 x 250 TPH, Mobile screening plant of capacity 2 x 250 TPH and 1 x 500 TPH	31.03.2027
48.	Patabeda Iron Ore Mines of MGM Minerals Ltd.	28.397	Sundargarh	Iron ore - 1.5 MTPA	Iron ore crushing & screening plant of capacity 1 x 350 TPH, Iron ore screening plant of capacity 1 x 250 TPH & 1 x 100 TPH	31.03.2027
49.	Patabeda Iron Ore Mines of M. G. Mohanty	14	Sundargarh	Iron ore - 0.12 MTPA	Mobile screening plant of capacity 1 x 250 TPH	31.03.2027
50.	Raikela Iron Ore Mines of National Enterprises	45.932	Sundargarh	Iron Ore-502200 TPA	Mobile Crusher Plant of capacity 1 x 150 TPH,	31.03.2027

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	District	Production Capacity in MTPA	Mineral Handling Plants	CTO Validity
					Mobile Screen Plant of capacity 1 x 150 TPH	
51.	Oraghat Iron Ore Mines of Rungta Sons (P) Ltd.	82.966	Sundargarh	Iron Ore - 8.35 MTPA [7.35 MTPA ROM + dry screening and crushing of 1.0 MTPA of low grade ore from old dumps]	Mobile crushing and screening plants of capacity 2x150 TPH & 4x100 TPH, Mobile crushing plants of capacity 6x250 TPH, 2 x 150 TPH, 2x100 TPH, Mobile screening plants of capacity 1 x 100 TPH, 19 x 150 TPH & 3 x 300 TPH	31.03.2028
52.	Barsuan-Taldih-Kalta Iron Ore Mines of M/s SAIL	2558.581	Sundargarh	Iron ore-10.0 MTPA	Iron Ore beneficiation plant: 2 x 700 TPH capacities with both dry and wet circuit in Barsuan Block, Mobile Crushing & Screening Plant of 2 x 300TPH and Mobile Screening Plant of 3x300TPH in Taldihi Block, Mobile Crushing & Screening Plant of 3 x 300TPH and Mobile Screening Plant of 4x300TPH in Kalta Block, Mobile Crushing & Screening Plant of 1 x 300 TPH in Barsuan Block.	31.03.2027
53.	Adaghat Iron Ore Mines of National Enterprises	15.074	Sundargarh	Iron - 0.7 MTPA	Mobile Crusher of capacity 2 x 150 TPH	31.03.2027

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	District	Production Capacity in MTPA	Mineral Handling Plants	CTO Validity
					Mobile Screen of capacity 2 x 150 TPH	
54.	Sanindpur Iron & Bauxite Mines of Rungta Sons Pvt. Ltd.	147.1	Sundargarh	22.935 MTPA (20.85 MTPA of ROM Iron Ore + handling of 2.085 MTPA of low-grade ore from old stacks/dumps)	Mobile Screening Plants of capacity 31x300 TPH and 6x200 TPH, Mobile crushing unit Screening combination Type-1 of capacity 18x250 TPH Mobile crushing unit Screening combinationType -2 of capacity 3x150 TPH Wet beneficiation plant of capacity 2x250 TPH	31.03.2030
55.	KJST (Jaldih) Iron Manganese& Bauxite Mines of Sri Prabodh Mohanty	188.523	Sundargarh	Iron Ore (ROM)- 3.35 MTPA and Bauxite (ROM)- 0.13 MTPA	Crushing Plant 3 x 200 TPH, Screening Plant 2 x 400 TPH, 1 x 300 TPH, 2 x 250 TPH and 1 x 100 TPH	31.03.2029
56.	Nuagaon Iron & Manganese Mines of Sri Prabodh Mohanty	29.257	Sundargarh	Iron ore - 125500 TPA & Manganese - 5650 TPA	Iron ore screening plant of capacity 1 x 350 TPH	31.03.2027
57.	Gonua Iron & Manganese Mines of JSW Steels Ltd.	86.886	Sundargarh	Iron Ore [ROM] - 1.2 MTPA	Mobile crushing plant of capacity 1 x 100 TPH, Mobile screening plant of capacity 2 x 60 TPH, 1 x 250 TPH, 1 x 350 TPH	31.03.2027
58.	Patabeda Iron & Manganese Ore Mines of M.G. Mohanty	19.425	Sundargarh	Iron Ore- 5,72,305 TPA	Stationery Crushing & Screening Plant of capacity 1 x 120 TPH,	31.03.2031

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	District	Production Capacity in MTPA	Mineral Handling Plants	CTO Validity
					Mobile Screening Plant of capacity 2 x 250 TPH, Mobile Crushing Plant of capacity 1 x 250 TPH	
59.	Sanindpur Iron and Manganese Mines of National Enterprises	70.917	Sundargarh	Iron Ore- 3.0 MTPA	Mobile Crusher of capacity 2 x 200 TPH, Mobile Screen of capacity 8 x 200 TPH, Static Crusher of capacity 1 x 200 TPH	31.03.2027
60.	Nadidih Iron Ore Block of M/s ESL Steel Ltd.	74.5	Sundargarh	Iron Ore- 34,84,125 TPA	Mobile crushing plant of 2 x 150 TPH, 2 x 250 TPH, Fixed screening plant of 1 x 600 TPH, Mobile screening plant 4 x 300 TPH, Wet beneficiation plant 0.5 MTPA	31.03.2027
61.	Nadidih Iron and Manganese Ore Mines of M/s ESL Steel Ltd.	117.206	Sundargarh	Iron Ore- 33,52,278 TPA	Mobile screening plant 4 x 250 TPH, 7 x 300 TPH & 2 x 150 TPH, Primary mobile crushing plant 3 x 150 TPH & 1 x 250 TPH, Secondary mobile crushing plant 3 x 150 TPH & 1 x 250 TPH	31.03.2027
62.	Narayanposhi Iron & Manganese	349.254	Sundargarh	Iron Ore- 6 MTPA and	Stationery screening plant of	31.03.2027

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	District	Production Capacity in MTPA	Mineral Handling Plants	CTO Validity
	Ore Mines of JSW Steel Ltd.			Manganese -0.036 MTPA	capacity 1 × 350 TPH Crushing and Screening Plant of capacity 1 × 2000 TPH	
63.	Ghorabuhrani-Sagasahi Iron Ore Block of M/s. Arcelor Mittal Nippon Steel India Limited	139.17	Sundargarh	Iron ore (ROM)-7.16 MTPA	Stationary Crushing and Screening Plant of capacity 1 x 1350 TPH, Mobile Crushing and Screening Plant of capacity 2 x 500 TPH	31.03.2027
64.	Mithirda Iron Ore Mines of M/s. Neelachal Ispat Nigam Ltd.	874.29	Sundargarh	Iron Ore-2 MTPA	Mobile Crushing & Screening Plant of capacity 1 x 450 TPH and 1 x 300 TPH	31.03.2029
65.	Bandhal Manganese Mines of Kanakdhara Mining & Minerals Pvt. Ltd.	28.021	Sundargarh	Manganese - 8000 TPA	--	31.03.2027
66.	Patmunda Manganese Mines of Sun Alloys & Minerals Ltd.	81.197	Sundargarh	Manganese -5086 TPA	--	31.03.2027
67.	Kanther-Koira Manganese Mines of M/s. P. M. Granite Export Pvt. Ltd.	73.653	Sundargarh	Manganese -20025 TPA	Mobile Screening Plant of capacity 1x150 TPH	31.03.2030
68.	Kolmong Manganese Mines of M/s Yazdani Steel and Power Ltd.	218.538	Sundargarh	Iron Ore-0.3 MTPA Manganese Ore-0.04 MTPA	Mobile Crusher of capacity 1 x 150 TPH, Mobile Screen of capacity 1 x 150 TPH	31.03.2027
69.	Mahulsukha Manganese Ore Mines of M/s. Rungta Sons Private Limited	399.839	Sundargarh	Iron-1.0 MTPA and Manganese Ore - 150000 TPA	Mobile Screening Plant of capacity 2 x 250 TPH and 1 x 150 TPH, Mobile Crushing & Screening Plant	31.03.2030

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	District	Production Capacity in MTPA	Mineral Handling Plants	CTO Validity
					of capacity 2 x 250 TPH	
70.	Chandiposhi Iron Ore Block of M/s Rungta Mines Limited	131.58	Sundargarh	Iron - 1.0 MTPA	Mobile Screening Plant of capacity 3 x 300 TPH, Mobile Crushing Plant– 2 x 250 TPH	31.03.2027
71.	Jumka Pathiriposhi Pahar Iron Ore Block of M/s Rungta Mines Limited	158.509	Sundargarh	Iron - 3.35 MTPA	Mobile Screening Plant of capacity 6 x 300 TPH, Mobile Crushing Plant- 3 x 250 TPH	31.03.2027
72.	Kalamang West (Northern Part) Block Iron Ore Mines of M/s Tata Steel Ltd.	92.875	Sundargarh	Iron Ore- 2.95 MTPA	Mobile Crushing & Screening Plant of 1 × 250 TPH	31.03.2027
73.	Koira Iron Ore Block M/s GVPR Engineers Limited	90.143	Sundargarh	Iron Ore - 2.989 MTPA	Stationary crushing and screening plant 1 x 300 TPH, Semi-mobile crushing and screening plant 1 x 200 TPH, Mobile screening plant 8 x 250 TPH	31.03.2027
74.	Netrabandha Pahar Iron Ore Block of M/s Bhushan Power & Steel Ltd.	139.223	Sundargarh	Iron Ore (ROM) i. 1.25 MTPA (2025-26) ii. 2.0 MTPA (2026-27)	Mobile Crushing Plant of capacity 2 x 100 TPH, Mobile Screening Plant of capacity 4 x 150 TPH	31.03.2027
75.	Purheibahal Iron Ore Block of M/s Rungta Mines Limited		Sundargarh	Iron - 1.0 MTPA	Mobile Screening Plant of capacity 3 x 300 TPH, Mobile Crushing Plant- 2 x 250 TPH	31.03.2027
76.	Raikela, Bahamba & Tensa Iron &	69.606	Sundargarh	Iron Ore (ROM) -	--	31.03.2027

Sl. No.	Name of Mines / Lessee	Lease Area in Ha	District	Production Capacity in MTPA	Mineral Handling Plants	CTO Validity
	Manganese Ore Mines			0.050 MTPA		

In any Iron and Manganese Mines the specific operational steps in mining are

1. Removal of Top soil and Overburden if any
2. Drilling and Blasting
3. Mining using shovel dumper combination
4. Maintenance of benches
5. Loading and unloading of mineral
6. Mineral crushing and sizing to get output
7. Haulage and Transportation

Field verifications of iron and manganese mines are conducted at regular intervals and SPCB works closely with mine authorities for improvement in environmental conditions. All the mines have provided air and water pollution abatement measures in their respective mines.

Compliance to the aforesaid conditions stipulated in Consent to Operate (CTO) are evaluated by the Board regularly and based on the compliance level, CTO for further period is considered. Additional conditions are also imposed in CTO order for further improvement in environmental conditions. The Compliance evaluation table for the Iron and Manganese Mines is given in Table D-2.

Table-D-2 The Compliance Evaluation Table for Iron and Manganese mines in Keonjhar and Sundargarh District of Odisha.

			Air Pollution Control Measures					Water Pollution Control Measures			Waste Management	
Sl. No.	**Name of Iron Ore Mine**	**Consented Capacity**	**Status of APC measures in Crusher & Screening plant**	**Dust suppression measures in Haul and Transportation road**	**Mechanized Wheel Washing Facility**	**Fugitive Emission Status**	**CAAQMS monitoring Status**	**Surface Runoff Management Facility**	**Worksop Effluent Treatment Facility**	**Domestic Effluent Treatment Facility**	**OB Management Facility**	**Overall Compliance Status**
1	Guali Iron Ore Mines of OMC Ltd {Previous lessee R P Sao}	Iron Ore - 12.0 MTPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Installed	Need improvement	Oil and Grease Trap provided	Treated through septic tank and soak pit	OB Management is good but need improvement at some places	Satisfactory
2	Unchabali (Mahaparbat) Iron Ore Mines of OMC Ltd.	Iron Ore - 1 MTPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Not required	Need improvement	Oil and Grease Trap provided	Treated through septic tank and soak pit	OB Management is good but need improvement at some places	Satisfactory
3	Bagiaburu Iron Ore Mines of M/s Orissa Minerals Development Company Limited	Iron Ore (ROM) - 3,60,000 TPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Not installed	Need improvement	Oil and Grease Trap provided	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
4	Deojhar Iron Ore Mines of Tarini Minerals (P) Ltd.	Iron Ore - 1.5 MTPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Not required	Inadequate	ETP capacity adequate	STP capacity adequate	OB Management is good but need improvement at some places	Satisfactory
5	Balda Block Iron Mines of Serajuddin& Co. (Lease expired. Again Lease auctioned to M/s. Serajuddin & Co.)	Iron Ore (ROM) - 10.632 MTPA	Adequate	Adequate	WWF not installed	Within standard	Installed	Adequate	ETP was non operational	STP capacity adequate	Management practice is generally good	CTO granted with conditions for further improvement
6	Khandabandh Iron Ore Mines of OMC Limited	Iron Ore - 1 MTPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Not required	Adequate	Oil and Grease Trap provided	STP capacity adequate	Management practice is generally good	Satisfactory
7	Banspani Iron Mines of OMC Ltd.	Iron Ore - 1 MTPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Not required	Need improvement	ETP not installed	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory

8	Tiringpahar Iron Ore Mines of OMC Ltd.	Iron Ore - 0.995 MTPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Not required	Need improvement	ETP not installed	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
9	Katamati Iron Ore Mines of TATA Steel Ltd.	Iron ore 13.5 MTPA (Total Excavation – 15 MTPA)	Adequate	Adequate	Installed and working satisfactorily	Within standard	Installed	Adequate	ETP not required	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
10	Joda East Iron Mines of Tata Steel Ltd	Iron Ore (ROM) - 19.5 MTPA	Adequate	Water sprinkling frequency to be increased	Not required	Within standard	Installed	Adequate	ETP capacity adequate	STP capacity adequate	Management practice is generally good	Satisfactory
11	Jaribahal Iron Ore Mines of M/s. Kashvi International Pvt. Ltd. [Formerly Patnaik Minerals Pvt. Limited]	Iron ore - 0.998 MTPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Not required	Need improvement	ETP not required	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
12	Murgabeda Iron Ore Mines of D R Patnaik	Iron Ore - 2 MTPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Not required	Need improvement	ETP capacity adequate	STP capacity adequate	Management practice is generally good	Satisfactory
13	Baitarani Iron Ore Mines of Dr. Sarojini Pradhan	Iron Ore- 571600 TPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Not required	Need improvement	ETP capacity adequate	STP capacity adequate	Management practice is generally good	Satisfactory
14	Jururi Iron Ore Mines (73.228 Ha.) of M/s Jagat Janani Services (P) Ltd. (Previous Lessee Kalinga Mining Corporation)	Iron Ore- 7,00,020 TPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Not required	Adequate	ETP capacity adequate	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
15	Roida-II Iron Ore Mines of M/s. Narbheram Power & Steel Pvt. Ltd. [Formerly K. N. Ram and Co.}	Iron Ore - 3.5 MTPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Installed	Need improvement	ETP not required	Treated through septic tank and soak pit	OB Management is good but need improvement at some places	Satisfactory
16	Nuagaon Iron Ore Mines of M/s JSW Steels Ltd [Formerly KJS Alhuwalia]	Iron Ore - 7.99 MTPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Installed	Need improvement	ETP capacity adequate	STP capacity adequate	Management practice is generally good	Satisfactory
17	Thakurani Iron Ore Mines of M/s Arcelor	Iron Ore - 5.5 MTPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Installed	Need improvement	ETP Defunct	Treated through	Management practice is generally good	CTO granted with conditions

	Mittal India Pvt. Ltd									septic tank and soak pit		for further improvement
18	Jilling-Langolata Iron & Manganese Mines of OMC Ltd. [Formerly Essel Mining Industries Ltd.]	Iron Ore-9.9999 MTPA (Saleable Iron Ore-7.7723 MTPA & Mineral Rejects-2.2276 MTPA)	Adequate	Adequate	Installed and working satisfactorily	Within standard	Installed	Need improvement	Oil and Grease Trap provided	STP capacity adequate	Management practice is generally good	Satisfactory
19	Gandhamardan Iron Ore Mine of M/s OMC	Iron Ore - 9.47 MTPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Installed	Need improvement	ETP not installed	STP capacity adequate	Management practice is generally good	Satisfactory
20	Daitari Iron Ore Mines of OMC Ltd.	Iron Ore - 6 MTPA	Adequate	Adequate	Not required	Within standard	Installed	Need improvement	ETP capacity adequate	Treated through septic tank and soak pit	at present no top soil or OB dump exist	Satisfactory
21	Kasia Iron & Dolomite Mines of M/s JSPL (Previous lessee Essel Mining Industries Ltd.)	Iron Ore (ROM)-74,99,910 TPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Installed	Need improvement	ETP capacity adequate	STP capacity adequate	OB Management is good but need improvement at some places	Satisfactory
22	Nayagarh Iron Ore Mines of KCP Iron Private Limited, Sri Sidharth Pradhan, Managing Director	Iron Ore - 299060 TPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Not required	Need improvement	ETP not required	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
23	Khandbandh Iron& Mn ore Mines of Sree Metaliks Ltd	Iron Ore - 1.8 MTPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Not required	Adequate	ETP capacity adequate	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
24	Sirkaguttu Iron & Manganese mines of M/s. Prakash Industries Ltd.	Iron - 600000 TPA	DFS system was not functional	Adequate	Installed and working satisfactorily	Within standard	Not required	Need improvement	ETP not required	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
25	Siljora-Kalimati Iron & Manganese Mines of	Iron Ore - 0.136035 MTPA & Manganese -	Adequate	Adequate	WWF not installed	Within standard	Not required	Adequate	ETP not required	STP capacity adequate	Management practice is generally good	Satisfactory

	Debabrata Behera [Formerly Mangilal Rungta]	0.189657 MTPA										
26	Jajang Iron and Manganese Mines of JSW Stells Ltd [Formerly Rungta Mines Ltd.]	Nil	The Mine is not in operation	The Mine is not in operation	The Mine is not in operation	The Mine is not in operation	The Mine is not in operation	The Mine is not in operation	The Mine is not in operation	The Mine is not in operation	The Mine is not in operation	The Mine is not in operation
27	Roida -C Iron Ore Mines of OMC Ltd. Operated by IDC of Odisha LTd.	Iron Ore - 0.46 MTPA & Manganese - 0.007 MTPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Not required	Adequate	ETP not installed	Treated through septic tank and soak pit	OB Management is good but need improvement at some places	Satisfactory
28	Naibaga and Katupalli Iron& Mn ore Mines of Tarini Prasad Mohanty	Iron ore - 0.6 MTPA and Manganese - 0.025 MTPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Not required	Need improvement	ETP not required	Treated through septic tank and soak pit	OB Management is good but need improvement at some places	Satisfactory
29	Unchabali Iron & Manganese Mines of Indrani Patnaik	Iron Ore - 4 MTPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Installed	Adequate	ETP capacity adequate	STP capacity adequate	Management practice is generally good	Satisfactory
30	Bolani Iron Ore Mines of SAIL (5.1 Sq. miles)	Iron - 12.0 MTPA including liquidation of dump fines	Adequate	Adequate	Installed and working satisfactorily	Within standard	Installed	Adequate	ETP not installed	Treated through septic tank and soak pit	OB Management is good but need improvement at some places	Satisfactory
31	Bamebari Manganese Mines of Tata Steel Limited	Manganese - 0.0832 MTPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Not required	Adequate	ETP not required	STP capacity adequate	Management practice is generally good	Satisfactory
32	Joda West Manganese Mines of Tata Steel Limited	Manganese - 0.18 MTPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Installed	Adequate	ETP not installed	STP capacity adequate	Management practice is generally good	Satisfactory
33	Khondbodh Iron & Mn ore Mines of Tata Steel Ltd	Iron Ore - 8 MTPA & Manganese - 0.1 MTPA Wet Beneficiation Plant capacity 6 MTPA	Adequate	Adequate	WWF not installed	Within standard	Installed	Need improvement	ETP not installed	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory

34	Dalpahar Block 'A' Iron and Manganese Mines of D.C. Jain	Iron Ore-0.31 MTPA, Manganese ore- 0.094 MTPA	Adequate	Water sprinkling frequency to be increased	WWF is defunct	Within standard	Not required	Need improvement	ETP not required	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
35	Katasahi Manganese Ore Mine of M/s Agrasen Sponge Pvt. Ltd.	Manganese - 0.019291 MTPA		Water sprinkling frequency to be increased	Not required	Within standard	Not required	Adequate	ETP not required	STP not required	Management practice is generally good	Satisfactory
36	Dubna Sakradihi Iron and Manganese Ore Mines of M/s. OMC Ltd.	Iron Ore (ROM)-3.0 MTPA & Manganese Ore (ROM)-0.05 MTPA	Adequate	Water sprinkling frequency to be increased	WWF not installed	Within standard	Installed	Adequate	ETP not installed	Treated through septic tank and soak pit	Management practice is generally good	CTO granted with conditions for further improvement
37	Tiringpahar Manganese Mines of Tata Steel Limited	Manganese - 0.085 MTPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Not required	Adequate	ETP not required	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
38	Bolani Iron Ore Mines of SAIL (6.9 Sq. miles)	Manganese Ore - 15000 TPA	The Mine is not in operation	The Mine is not in operation	The Mine is not in operation	The Mine is not in operation	The Mine is not in operation	The Mine is not in operation	The Mine is not in operation	The Mine is not in operation	The Mine is not in operation	The Mine is not in operation
39	Jalahuri Iron Ore and Manganese Block of M/s Anandam Minerals Pvt. Ltd.	Iron Ore-0.6 MTPA	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation
40	Laserda Pacheri Iron and Manganese Mines of M/s Thriveni Earthmovers Pvt. Limited	Iron Ore-1.545 MTPA and Manganese-0.11 MTPA	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation
41	Putulpani Iron Ore Mines of M/s DEE VEE Projects Ltd.	Iron Ore - 1.425 MTPA	Adequate	Water sprinkling frequency to be increased	WWF not installed	Within standard	Not required	Need improvement	ETP not installed	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
42	Tantra Iron Ore Mines of Korp Resources Pvt. Ltd.	Iron Ore 0.24 MTPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Not required	Adequate	ETP not required	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
43	Kurmitar Iron Ore Mines of OMC Ltd.	Iron Ore - 6 MTPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Installed	Adequate	Oil and Grease Trap provided	STP capacity adequate	Management practice is generally good	Satisfactory

44	Bhanjipali Iron Mines of J.N. Patnaik	Iron Ore-0.26 MTPA	Adequate	Adequate	WWF not installed	Within standard	Not required	Need improvement	ETP not required	Treated through septic tank and soak pit	Management practice is generally good	CTO granted with conditions for further improvement
45	Raikela Iron Ore Mines of Geetarani Mohanty	Iron Ore-5.998 MTPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Installed	Adequate	ETP capacity adequate	STP capacity adequate	Management practice is generally good	Satisfactory
46	TRB Iron Ore Mines of Jindal Steel and Power Limited	Iron Ore - 1.509295 MTPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Installed	Adequate	Oil and Grease Trap provided	STP capacity adequate	Management practice is generally good	Satisfactory
47	Raikela & Tantra Iron Ore Mines of Penguin Trading & Agencies Ltd.	Iron Ore-2.592 MTPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Installed	Adequate	ETP not required	STP capacity adequate	Management practice is generally good	Satisfactory
48	Patabeda Iron Ore Mines (28.397 Ha) of MGM Minerals Ltd.	Iron ore - 1.5 MTPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Installed	Adequate	ETP capacity adequate	STP capacity adequate	Management practice is generally good	Satisfactory
49	Patabeda Iron Ore Mines (14.0 Ha)of M. G. Mohanty	Iron ore - 0.12 MTPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Not required	Adequate	ETP capacity adequate	STP capacity adequate	Management practice is generally good	Satisfactory
50	Raikela IronOre Mines of National Enterprises	Iron Ore-502200 TPA	Adequate	Water sprinkling frequency to be increased	WWF not installed	Within standard	Installed	Need improvement	ETP not required	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
51	Oraghat Iron Ore Mines of Rungta Sons (P) Ltd.	Iron Ore - 8.35 MTPA [7.35 MTPA + dry screening and crushing of 1.0 MTPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Installed	Need improvement	ETP not required	STP capacity adequate	Management practice is generally good	Satisfactory
52	Barsuan-Taldih-Kalta Iron Ore Mines of M/s SAIL	(i) 10.0 MTPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Installed	Adequate	Oil and Grease Trap provided	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
53	Adaghat Iron Ore Mines of National Enterprises	Iron - 0.7 MTPA	Adequate	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Installed	Need improvement	ETP not installed	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory

54	Sanindpur Iron & Bauxite Mines of Rungta Sons Pvt. Ltd.	22.935 MTPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Installed	Adequate	ETP not required	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
55	KJST (Jaldih) Iron Manganese& Bauxite Mines of Sri Prabodh Mohanty	Iron Ore (ROM)-3.35 MTPA and Bauxite (ROM)-0.13 MTPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Not installed	Adequate	ETP capacity adequate	STP capacity adequate	Management practice is generally good	Satisfactory
56	Nuagaon Iron & Manganese Mines of Sri Prabodh Mohanty	Iron ore - 125500 TPA & Manganese - 5650 TPA	Adequate	Adequate	WWF not installed	Within standard	Not required	Adequate	ETP capacity adequate	Treated through septic tank and soak pit	Management practice is generally good	CTO granted with conditions for further improvement
57	Gonua Iron & Manganese Mines of JSW Steels Ltd [Formerly Pawan Kumar Ahluwalia]	Iron Ore [ROM] - 1.2 MTPA	Adequate	Adequate	WWF not installed	Within standard	Installed	Adequate	ETP capacity adequate	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
58	Patabeda Iron & Manganese Ore Mines, (19.425 ha.) of M.G. Mohanty	Iron Ore-5,72,305 TPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Not required	Adequate	ETP not installed	STP capacity adequate	Management practice is generally good	Satisfactory
59	Sanindpur Iron and Manganese Mines of National Enterprises	Iron Ore-3.0 MTPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Installed	Need improvement	ETP not installed	Treated through septic tank and soak pit	Management practice is generally good	CTO granted with conditions for further improvement
60	Nadidih Iron Ore Block of M/s ESL Steel Ltd. (Previous lessee Bonai Industrial Co. Ltd.) (74.5 Ha)	Iron Ore-34,84,125 TPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Installed	Adequate	ETP not installed	STP capacity adequate	Management practice is generally good	Satisfactory
61	Nadidih Iron and Manganese Ore Mines of M/s ESL Steel Ltd. (Previous lessee Feegrade& Co. Pvt. Ltd.) (117.206 Ha)	Iron Ore-33,52,278 TPA	DFS system was not functional	Water sprinkling frequency to be increased	Installed and working satisfactorily	Within standard	Installed	Need improvement	ETP not required	STP capacity adequate	Management practice is generally good	Satisfactory

62	Narayanposhi Iron & Manganese Ore Mines of JSW Steel Ltd	Iron Ore(ROM)- 6 MTPA and Manganese - 0.036 MTPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Installed	Adequate	ETP Defunct	STP capacity adequate	Management practice is generally good	CTO granted with conditions for further improvement
63	Ghorabuhrani-Sagasahi Iron Ore Block of M/s. Arcelor Mittal Nippon Steel India Limited	Iron ore (ROM)- 7.16 MTPA	Adequate	Adequate	WWF is defunct	Within standard	Installed	Need improvement			Management practice is generally good	CTO granted with conditions for further improvement
64	Mithirda Iron Ore Mines of M/s. Neelachal Ispat Nigam Ltd	Iron Ore-2 MTPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Not installed	Adequate	The workorder has been placed for ETP	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
65	Bandhal Manganese Mines of Kanakdhara Mining & Minerals Pvt. Ltd.	Manganese-8000 TPA	Adequate	Adequate	WWF not installed	Within standard	Not required	Adequate	ETP not required	Treated through septic tank and soak pit	Management practice is generally good	Satisfactory
66	Patmunda Manganese Mines of Sun Alloys & Minerals Ltd.	Manganese - 5086 TPA	The Mine has not resumed its operation	The Mine has not resuemd its operation	The Mine has not resumed its operation	Within standard	Not required	The Mine has not resumed its operation	The Mine has not resumed its operation	The Mine has not resumed its operation	The Mine has not resumed its operation	Satisfactory
67	Kanther-Koira Manganese Mines of M/s. P. M. Granite Export Pvt. Ltd. [Formerly Rungta Mines Ltd.}	Manganese - 20025 TPA	Adequate	Adequate	Installed and working satisfactorily	Within standard	Not installed	Adequate	ETP not required	Treated through septic tank and soak pit	OB Management is good but need improvement at some places	Satisfactory
68	Kolmong Manganese Mines of M/s Yazdani Steel and Power Ltd. (Previous Lessee Rungta Mines Ltd.)	Iron Ore-0.3 MTPA Manganese Ore-0.04 MTPA	Adequate	Adequate	WWF not installed	Within standard	Not required	Adequate	ETP not required	Treated through septic tank and soak pit	Management practice is generally good	CTO granted with conditions for further improvement
69	Mahulsukha Manganese Ore Mines of M/s.	Iron-1.0 MTPA and Manganese	Adequate	The Mine has not started its operation	The Mine has not started its operation	The Mine has not	Not required	The Mine has not started its operation	The Mine has not started its operation	The Mine has not resumed its operation	The Mine has not started its operation	Satisfactory

	Rungta Sons Private Limited [Formerly Patnaik Minerals Pvt. Ltd.]	Ore - 150000 TPA				started its operation						
70	Chandiposhi Iron Ore Block of M/s Rungta	Iron - 1.0 MTPA	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not resumed its operation	The Mine has not started its operation	Satisfactory
71	Jumka Pathiriposhi Iron Ore Block of M/s Rungta Mines	Iron - 3.35 MTPA	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not resumed its operation	The Mine has not started its operation	Satisfactory
72	Kalamang West (Northern Part) Block Iron Ore Mines of M/s Tata Steel Ltd.	Iron Ore-2.95 MTPA	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation
73	Koira Iron Ore Block M/s GVPR Engineers Limited	Iron Ore - 2.989 MTPA	The Mine has not resumed its operation	The Mine has not resumed its operation	The Mine has not resumed its operation	The Mine has not resumed its operation	The Mine has not resumed its operation	The Mine has not resumed its operation	The Mine has not resumed its operation	The Mine has not resumed its operation	The Mine has not resumed its operation	CTO granted with conditions for further improvement
74	Netrabandha Pahar Iron Ore Block of M/s Bhushan Power & Steel Ltd.	Iron Ore (ROM) i. 1.25 MTPA (2025-26) ii. 2.0 MTPA (2026-27)	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation
75	Pureheibahal Iron Ore Mine of M/s Rungta	Iron - 1.0 MTPA	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not resumed its operation	The Mine has not started its operation	Satisfactory
76	Raikela, Bahamba & Tensa Iron & Manganese Ore Mines	Iron Ore (ROM) - 0.050 MTPA	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation	The Mine has not started its operation

Conclusion

Odisha being rich in mineral deposits has witnessed manifold growth in mining coal, chromite, iron and manganese ore, which caters to the raw material requirement of Energy and Steel sector. All these mines are operating after obtaining all statutory clearances like Environmental clearance (EC), Forest Clearnce (FC), Approved mining leases, Approved Mining Plans and Approved Water Drawl documents, without which Consent to Operate (CTO) from SPCB is not considered. Through the CTO, SPCB prescribes and monitors the environmental health of the mines and all the mines are operating with basic air and water pollution control measures. All the mineral processing plants, railway sidings, beneficiations plants have also taken up pollution control measures. Occasional deficiencies in pollution control systems are observed and are rectified with timely vigilance by the field level officers. Pollution control systems are dynamic and technological renovations are taking place in the mines. Presently around 80% of coal is being transported through railways thus minimizing the potential risk of air pollution on roads. Most of the large-scale iron and manganese mines of the State are now connected with Railways and its situation is improving.

Action has been initiated to transport iron ore fines in slurry form through pipelines to reduce air pollution. Similarly pipe conveyor systems are also coming up for transportation to nearby areas. However, air pollution due to road transportation is still a matter of concern for SPCB, which can be improved by coordinated actions by multiple stake holder departments like Highway and Railway authorities, Steel and Mines department, Transport department and District administrations. SPCB is closely working with these departments for further development in transport ecosystem, thereby to improve the air quality in the mining area and the connecting roadways. Air quality monitoring of mines has also improved by installation of continuous ambient air quality monitoring stations (CAAQMS) in all the large-scale mines and their regular performance evaluations.

Almost the entire wastewater of mining sector is reused after treatment except in monsoons, when the runoff volume becomes too high to treat. Looking at the contamination potential of hexavalent chromium (Cr6+), ETPs capacities of chromite mines have been increased after conducting scientific assessment of the prevailing conditions in collaboration with IIT Kharagpur. Situation has further improved by making the discharge standard of Cr6+ more stringent from 0.1 mg/litre to 0.05 mg/litre. SPCB is continuously engaged with the mine and academic institutions to explore further technological interventions for implementation in the mines.

//TRUE COPY//

ODISHA

STATEPOLLUTIONCONTROLBOARD,ODISHA

Gmail

Adv. Manoranjan Paikaray <mpaikray@gmail.com>

Service of Additional Affidavit in OA No. 1394/2024/PB on behalf of Respondent No. 3 (SPCB, Odisha)

1 message

Manoranjan Paikaray <mpaikray@gmail.com> Sat, Apr 25, 2026 at 11:51 PM
To: mscb.cpcb@nic.in, fesec.or@nic.in, roez.bsr-mef@nic.in

Dear Sir,

Please find the attached Additional Affidavit on behalf of the Respondent No. 3 (SPCB, Odisha) in OA No. 1394 of 2024 titled "News Item titled “The Environmental Crisis in Odisha” appearing in Around Odisha dated 24.12.2024 vs. MoEF and CC and Others."

Thanking you,
Yours faithfully,

Manoranjan Paikaray
Counsel for Respondent No. 3 (SPCB, Odisha)

Additional Affidavit dtd.24.04.2026 in OA No1394 of 2025.pdf
9895K