

F. No. J-11015/351/2006-IA II (M)
Government of India
Ministry of Environment, Forests and Climate Change



3rd Floor, Vayu Block,
Indira Paryavaran Bhawan,
Jor Bagh Road,
Aliganj, New Delhi-110003

Dated: 3rd July, 2020

To,

Sh. Ajit Kumar Sinha,
Chief General Manager, M/s Steel Authority of India Ltd.
Barsua Iron Mines, At/Po Tensa,,Koida,
Sundargarh, Orissa-770042
Email- envbim@gmail.com

Subject: Integrated Barsua- Taldih-Kalta Iron Ore Mining (ML-130), Beneficiation and Pelletisation Plant Project of M/s Steel Authority of India Limited, located in Village Tantra and within Toda RF, Tehsil Koira, District Sundargarh, Odisha - Amendment in Environmental clearance for change in product mix and operation by including excavation and dispatch of non-ore fines / slimes keeping total production within permitted EC capacity of 8.05 MTPA under para 7(ii) of EIA Notification - Regarding

Ref: Proposal No **IA/OR/MIN/146098/2020**

Sir,

The proposal of M/s. Steel Authority of India Limited is for amendment under para 7 (ii) of EIA Notification, 2006 in the Environmental Clearance granted vide letter no. J-11015/351/2006-IA. II(M) dated 29th October, 2010 for the production of 8.05 Mt/yr of iron ore from ML-130 lease [MLA: 2486.383 ha] of Barsua-Taldih-Kalta Iron Ore Mines of M/s Steel Authority of India Limited, located in village Tantra and within Tohra RF, Tehsil Koira, District Sundargarh, Odisha. The Mining Lease area is ~18 km long and comprises of 3 mining blocks namely Barsua (Southern part), Taldih (Middle part) and Kalta (Northern part). The mines lease falls in Survey of India Topo-sheet bearing No.73G/1 (F45N1) and is bounded by latitudes from 21°49'25.43800" to 21°59'50.88516" N and longitudes from 85°07'43.73832" to 85°13'53.48136" E.

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category A or Activity 1(a) as the mining lease area is greater than 100 ha.

3. PP has submitted that Environmental Clearance for the production of 8.05 Mt/yr of iron ore from ML-130 was granted by MoEF vide letter no. J-11015/351/2006-

IA.II(M) dated 29th October, 2010. However, the envisaged Long Distance Belt Conveyors (LDBC) for evacuation of ore from Taldih and setting up of Beneficiation Plant of 4.25 MTPA capacity for processing of from Taldih have been held up for want of Stage – II FC for the adjoining non-mineralized lease i.e. ML – 162 (77.94 ha) {part of the infrastructure for mineral despatch are located in this lease} and finalization of the project. Hence, the Taldih Block could not be developed as per the envisaged plan. Delay in development of Taldih Block had resulted acute shortage of iron ore supply to SAIL's Plants. Therefore, subsequently the EC was amended temporarily for a period of 5 years for re-distribution of production from three mining blocks under ML – 130 by MoEFCC's letter no. J-11015/351/2006-IA. II(M) dated 30th March, 2016 viz. i) to change iron ore production (ROM) from three blocks viz. Barsua, Taldih and Kalta in ML-130 lease from 2.5, 4.25 and 1.3 MTPA to 3.5, 2.05 and 2.5 MTPA respectively, keeping the total iron ore (ROM) production restricted to 8.05 MTPA, ii) permission to operate existing beneficiation plant at the rate of 4.5 MTPA instead of 2.5 MTPA and iii) permission for road transportation of part of iron ore from Taldih to Barsua Valley (~11 km) and to Barsua beneficiation plant for a period five years till crushing plant, LDBC are erected and commissioned for the Taldih block.

4. PP has submitted that the **mine lease** (ML-130) was first granted on 06.01.1960 for an area of 2486.383 ha for a period of 30 years which expired on 05.01.1990. The Mining Lease has been renewed vide LOI Memo No. 4004/SM dated 29.05.2014 for 1st Renewal as well as 2nd Renewal period from 06.01.2010 to 05.01.2010. The lease deed for the 2nd renewal period from 06.01.2010 to **05.01.2030** has been executed on 13.11.2014 vide Registration I.D. No. 1721400594.

5. PP submitted that the mine is spread over 2486.383 ha area which includes **2347.673 ha Forest Land**, 24.014 ha private land and 114.696 ha Govt. Non-Forest land. The Forest Land has been diverted for setting up the mine and allied infrastructure. Stage-2 forest clearance for diversion of entire forest land over 2341.931 ha was granted by MoEFCC vide F. No. 8-90/2011-FC(pt), dated 06.03.2013. Stage – II FC for the adjoining non-mineralized lease i.e. ML – 162 was granted on 23.10.2017

6. PP submitted that **Scheme of Mining** for period from 2015-16 to 2019-20 was approved by IBM vide letter No. No. MS/FM/36-ORI/BHU/2014-15/1843 dated 04.09.2015. Further, Review of Mining Plan and progressive mine closure plan for the period from 2020-21 to 2024-25 has also been approved by IBM vide letter no. RMP/A/16-ORI/BHU/2019-20 dated 08.11.2019.

7. The PP submitted that Iron ore shall be produced by conventional **open cast mining** using shovel dumper combination which involves drilling & blasting. Accumulated iron ore fines/tailings will be excavated by shovel dumper combination without drilling & blasting. Overburden generated from mining is / will be dumped in designated areas within mine lease area.

8. PP submitted that depth of **ground water level** near mining lease area in pre & post monsoon are found to be 10.36 to 2.43 mbgl & 1.2 to 8.6 mbgl respectively. PP submitted that the source of water required will be pumped through pipeline from surface water (KuradihiNalla) for which approval has been granted from Sundargarh Irrigation Division, Government of Odisha vide agreement dated 13.08.2015. Mining activity **will not intersect ground water** table hence permission under Ministry's O.M No. 21-103/2015-IA-III is not required. PP submitted that water demand under the present proposal is about **500 m³/day** which includes 450 m³ /day industrial purpose (275 m³ /day for Dust suppression, 75 m³ /day for Wheel washing & 100 m³ /day for equipment washing) and 50 m³ /day for drinking and domestic usage.

9. PP submitted that reclamation through **afforestation** will be carried out in 2486.383 ha area (existing + proposed plan) with a density of 2500 saplings per ha. This will include plant in Virgin Area (683.33 ha), External OB Dump (376.676 ha), Internal Dump (389.558 ha), Quarry (723.466 ha), Safety Zone (126.484 ha), Others (such as Excavation area along ML boundary, along Infrastructure, Embankment Area and in Township Located outside the Lease etc.) (129.261 ha) and roads (57.608 ha). This will be 93.62% of total project area. The funds allocated towards afforestation will be Rs. 6.9 crores.

10. PP has submitted that there is no **Schedule-1 species** in the core zone but there is a presence of Schedule-1 species in the buffer zone viz. Palm Civet, Indian Elephant, Sloth Bear, Wolf, Mouse deer. PP has submitted a Site Specific Conservation Plan with a budget of Rs 2900.96 Lakh for 10 years. The same has been approved from the Office of Principal Chief Conservator of Forest (Wildlife) and Chief Wildlife Warden, Odisha, vide Memo No. 1655/1 WL(C) SSP-224/2012 dated 25.02.2013 with a financial forecast of Rs. 2900.96 lakh which includes the financial forecast of Rs. 1118.96 lakh for the activities to be implemented by M/s. SAIL in project area and financial amount of Rs. 1782.00 lakhs for activities to be implemented by the DFO, Bonai Division in project impact area.

11. PP submitted the **baseline** environmental data covering air quality, water quality, noise levels generated by SAIL during the period April, 2018 to March, 2019 and traffic density studies conducted during October, 2019 at selected locations. PP has submitted that the proposed change in scope of work does not have any significant adverse impacts on environment as revealed by the studies undertaken. PP submitted that Barsua –Taldih – Kalta iron ore mines are located in forest and hilly region. Considering the sensitivity of the forest ecology and environment, adequate measures for safeguarding the environment around the mines have already been adopted over the years. PP has submitted that the Barsua, Taldih and Kalta Iron Mines under ML – 130 have implemented the Integrated Management System (IMS) and accredited to Quality Management System (QMS linked ISO – 9001 - 2015), Environmental Management

System (EMS linked to ISO – 14001 : 2015) and Occupational Health and Safety Management System (linked to ISO – 45001 - 2018).

12. PP submitted that there is no **R&R** in the project area. PP submitted that budget earmarked under Corporate Environmental Responsibility (**CER**) is Rs 0.0839 Crores. Project Proponent submitted that the budget earmarked for Environmental Management Plan (**EMP**) shall be ₹ 4.55 Crores (Capital) & ₹ 0.8 Crores (recurring/annum).

13. PP has submitted the **EC Compliance Report** certified by RO, MoEF vide 101-257/07/EPE dated 17.12.2019. PP also submitted the action plan on the non-compliance and observations made by RO, MoEFCC on EC Compliance Report on 08.04.2020. PP has submitted that being a Major Mineral there is no requirement of District Survey Report.

14. PP also submitted an **undertaking** dated 29.02.2020 that data and information given in the application, enclosure and other documents are true to best of his knowledge and belief and PP is aware that if any part of data or information submitted is found to be false or misleading at any stage the project will be rejected and clearance given if any will be revoked at his risk and cost.

15. PP reported that subsequent to the judgment of Apex Court dated 02.08.2017, the Governments of Odisha has issued demand notices to Barsua-Kalta Mines for payment of compensation towards excess production on or before 31st December, 2017 against EC / CTO capacity. Dy. Director of Mines (DDM), Koira vide letter dated 02.09.2017 issued a demand notice for payment of Rs. 66,89,42,779.5 /- in respect of Barsua / Kalta Iron Mines to recover price of mineral produced without/beyond EC alone under Section 21 (5) of MMDR Act, 1957. The said amount was deposited on 29.12.2017 under protest. Further, letter No.5962/Mines dtd 24.10.2017 of DDM, Koira has directed to pay compensation of Rs.90,19,71,684.40 /- for mining in excess of the permissible limit under the Consent to Operate. Against the above stated demands, SAIL had filed a Writ Petition bearing WP (C) No- 24282/2017 in High Court of Odisha, Cuttack. The matter was heard and Hon'ble High Court had passed the stay order on 04.04.2018 & matter is sub-judice. However, PP submitted an undertaking by the way of an affidavit bearing NO 51AA 243376 dated 20.04.2020 for compliance of all statutory requirement and Common Cause Judgment dated 2.08.2017.

16. PP submitted that the tailings pond of Barsua beneficiation plant is filling up and presently ~4.1 million tonnes of tailings are stored in the pond. Further raising of the height of the tailings dam is not possible. In addition, sub-grade fines are also stacked at mine pit heads of Barsua / Taldih / Kalta. Since, Barsua Mine has no beneficiation & pelletisation facilities for processing of these low grade fines at present, in-house utilisation of tailings / sub-grade ores is not possible.

17. PP submitted that Ministry of Mines, Gov. of India have noted in their Order F.No. 16/30/2019-M.VI dated 16th September, 2019 that vast stocks of slimes and sub-grade ore are lying at pit heads of captive mines of SAIL are potential environmental hazards. Accordingly, Ministry of Mines, Govt. of India have accorded permission for selling of these low grade mineral (tailings and sub-grade ore) in the open market such that mineral can be exhausted and environmental hazards can be mitigated. The disposal of such stockpiles would enhance the availability of iron ore for the purpose of beneficiation and pelletisation and subsequent use for iron & steel making. Based on the application submitted by SAIL, Govt. of Odisha vide letter No.IV(AB)SM-28/2017/9506/SM dated 02.12.2019 granted permission to sell slimes / dump fines from SAIL's captive mines in the State of Odisha including Barsua – Taldih – Kalta Mines.

18. PP submitted that Ministry of Mines, Govt. of India vide Order no. F.NO/16/30/2019-M.VI dated 16.09.2019 also directed concerned State Governments to allow SAIL to sell fresh iron ore also up to 25% of total previous year production for a period of 2 years to mitigate the risk of possible shortage of iron ore on account of expiry of mining leases pertaining to merchant mining by 31.03.2020. In this regard, though SAIL has been allowed to develop Taldih Mine to produce 2.05 MTPA involving dispatch of 1.05 MTPA by road to Barsua Railway Siding and remaining 1.0 MTPA by road to Barsua Beneficiation Plant, the mine could not be operated to its permitted capacity as construction of road from the Taldih Mine to Barsua Beneficiation Plant could not be made due to delay in grant of forest permissions. The activities related installation of originally envisaged and approved Long Distance Belt Conveyor (LDBC) for evacuation of ore from Taldih to Barsua is under progress and expected to take about 3 years. Hence, in order to increase the production from Taldih to its approved EC limit of 2.05 MTPA, it is required that the entire 2.05 MTPA iron ore produced at Taldih will be transported by trucks directly to SAIL's Barsua Siding till commissioning of the LDBC from Taldih to Barsua Siding, which would take about 3 years.

19. PP submitted that though Taldih Mine is operational since November, 2016, the originally envisaged and approved facilities which inter-alia keeps the provision of Long Distance Belt Conveyor (LDBC) and beneficiation facilities for Taldih Block could not be commissioned though the process has started and is expected to take three more years. Hence validity of amended provisions of EC dated 30.03.2016 is essential to maintain continuity of production from Taldih Block beyond 30.03.2021 for a period of two more years i.e. upto 31.03.2023.

20. Project Proponent submitted that the total project cost shall be ₹8.39 Crore and shall give direct employment to 116 persons.

21. The committee has deliberated in detail and opined that the proposal is amendment in EC for redistribution of the production within the sanctioned EC capacity and extension of validity of the amendment granted for further period of two years. The

Committee recommended for amendment in environmental clearance under clause 7(ii)(a) of EIA Notification, 2006 read with subsequent amendments in its meeting held during May 5-6, 2020 after uploading of the minutes PP has requested for some factual change in the MoM and the proposal was again reconsidered in EAC meeting held during 28 & 29th May, 2020 & 1st June, 2020 while re-conforming the minutes of meeting of the 16th EAC, the committee recommended i) Excavation of iron ore from Barsua Block at 3.50 MTPA including a provision of excavation of maximum upto 1 MTPA tailings from the tailings pond at Barsua for selling. The excavated tailings will be transported through internal road over 2.1 km to the stacking yard and then to Barsua Public Siding by public road over 0.6 km or any other nearby railway sidings, ii) Excavation of iron ore from Taldih & Kalta Blocks at 2.05 MTPA and 2.50 MTPA respectively including provision of excavation and dispatch of sub-grade iron ore fines maximum upto 0.5 MTPA from Fines Stocks from each block for selling. The excavated sub-grade iron ore fines will be dispatched by road / road & rail and iii) Continuation of the already amended provisions of EC amendment dated 30.03.2016 (valid up to 30.03.2021) for further two years i.e. up to 31.03.2023, which are [i) Permission to change iron ore production (ROM) from three blocks viz. Barsua, Taldih and Kalta in ML-130 lease from 2.5, 4.25 and 1.3 MTPA to 3.5, 2.05 and 2.5 MTPA respectively, keeping the total iron ore (ROM) excavation restricted to 8.05 MTPA as specified in the earlier environmental clearance, ii) Permission to operate existing beneficiation plant at the rate of 4.5 MTPA instead of 2.5 MTPA], subject to the following conditions (Sl. No 22 A), in addition to the conditions prescribed in the EC and subsequent amendments.

22. The Ministry of Environment, Forest & Climate Change has examined the proposal in accordance with the para 7(ii) of Environmental Impact Assessment Notification, 2006 (as amended) hereby **accords the Environmental Clearance** under the provisions thereof for the amendments as recommended by EAC to the above mentioned proposal i.e. Barsua- Taldih-Kalta Iron Ore Mining (ML-130), Beneficiation and Pelletisation Plant Project of M/s Steel Authority of India Ltd. located in Village Tantra and within Toda RF, Tehsil Koira, District Sundargarh, Odisha subject to compliance of following Specific Conditions. The other conditions prescribed in EC letter dated 29th October, 2010 & EC amendment letter dated 30th March, 2016 shall remain same.

A. Specific Conditions:

- 1) Air pollution control measures, inter alia, include Covering of fines transport vehicles with tarpaulin sheets to avoid fugitive dust emissions; Deployment of additional Mobile Water Sprinklers; Deployment of vehicle mounted Misting Cannons at fines handling areas; Wheel Washing facility for trucks before entering to public road; Regular maintenance of roads to reduce fugitive emissions from roads & vehicular emissions; Regular maintenance of diesel powered vehicles as per manufacturer's guidelines; Construction of concrete approach roads at Kalta & Taldih Mines; etc.

- 2) Additional water sprinkling arrangements shall be made at the excavation / handling / transportation of subgrade ore and tailings.
- 3) An additional amount Rs 0.0839 Crores, as committed by project proponent shall be earmarked for activities under Corporate Environmental Responsibility (CER) and implemented in next two years.
- 4) In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.

B. Standard Conditions

The Standard EC Conditions as per Ministry O.M. No. 22-34/2018-IA.III dated 8.01.2019 is applicable for this project.

23. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

24. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

25. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court and any other Court of Law relating to the subject matter.


26. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Yours faithfully,


(Sharath Kumar Pallerla)
Director/Scientist 'F'
Email: sharath.kr@gov.in
Phone/Fax: 011-26495325

Copy to:

- 1). **The Secretary**, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
- 2). **The Secretary**, Department of Environment, Government of Odisha, Secretariat, Bhubaneswar.
- 3). **The Secretary**, Department of Mines and Geology, Government of Odisha, Secretariat, Bhubaneswar.
- 4). **The Secretary**, Department of Forests, Government of Odisha, Secretariat, Bhubaneswar.
- 5). **The Chairman**, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- 6). **The Additional Principal Chief Conservator of Forests (C)**, Ministry of Environment, Forest and Climate Change, Regional Office (EZ), A/3, Chandersekharapur, Bhubaneswar – 751023.
- 7). **The Chief Wildlife Warden**, Prakruti Bhawan, 5th floor, BDA Apartment Nilakanthanagar, Nayapalli, Bhubaneswar-751012, Odisha
- 8). **The Member Secretary**, Odisha State Pollution Control Board, Parivesh Bhawan, A/118 Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012.
- 9). **The Controller General**, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
- 10). **The Member Secretary**, Central Ground Water Board Ministry of Agriculture and Irrigation, 12/1 Jam Nagar House, Shahjahan Road, New Delhi 110011.
- 11). **The District Collector**, District- **Sundargarh**, State of Odisha.
- 12). **Guard File**.
- 13). **Parivesh Website**.


(Sharath Kumar Pallerla)
Director/Scientist 'F'

F.No. J-11015/351/2006-IA.II (M)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

3rd Floor, Vayu Block
Indira Paryavaran Bhavan,
Jor Bagh Road, Aliganj
New Delhi-110 003

Dated: 13th July, 2020

To,

Shri. Ajit Kumar Sinha

Chief General Manager, M/s. Steel Authority of India Limited
Barsua Iron Mines, At/PO: Tensa, Koida,
Sundargarh, Orissa-770042
Email – envbim@gmail.com

Subject : Integrated Barsua-Taldih-Kalta Iron Ore Mining (ML-130), Beneficiation and Pelletisation Plant Project of M/s Steel Authority of India Limited, located in Village Tantra and within Toda RF, Tehsil Koira, District Sundargarh, Odisha - Amendment in Environmental clearance for change in product mix and operation by including excavation and dispatch of iron-ore fines / slimes keeping total production within permitted EC capacity of 8.05 MTPA under para 7(ii) of EIA Notification – Corrigendum.

Sir,

The is with reference to Environment Clearance granted vide Letter No. J-11015/351/2006-IA. II (M) dated 3rd July, 2020 for the aforementioned project of M/s. Steel Authority of India Limited and letter No. BIM/E&L/2020-21/62 dated 07.07.2020 of M/s. Steel Authority of India Limited wherein it was informed that Point No. 3 is missing in para 21 of the letter issued by MoEF&CC vide No. J-11015/351/2006-IA II (M) dated 3rd July, 2020.

2. The matter was examined in the Ministry and para 21 of the Environment Clearance granted vide Letter No. J-11015/351/2006-IA. II (M) dated 3rd July, 2020 should be read as follows:

"The committee has deliberated in detail and opined that the proposal is amendment in EC for redistribution of the production within the sanctioned EC capacity and extension of validity of the amendment granted for further period of two years. The Committee recommended for amendment in environmental clearance under clause 7(ii)(a) of EIA Notification, 2006 read with subsequent amendments in its meeting

held during May 5-6, 2020 after uploading of the minutes. PP has requested for some factual change in the MoM and the proposal was again reconsidered in EAC meeting held during 28th & 29th May, 2020 & 1st June, 2020 while re-conforming the minutes of meeting of the 16th EAC, the committee recommended **1)** Excavation of iron ore from Barsua Block at 3.50 MTPA including a provision of excavation of maximum upto 1 MTPA tailings from the tailings pond at Barsua for selling. The excavated tailings will be transported through internal road over 2.1 km to the stacking yard and then to Barsua Public Siding by public road over 0.6 km or any other nearby railway sidings, **2)** Excavation of iron ore from Taldih & Kalta Blocks at 2.05 MTPA and 2.50 MTPA respectively including provision of excavation and dispatch of sub-grade iron ore fines maximum upto 0.5 MTPA from Fines Stocks from each block for selling. The excavated sub-grade iron ore fines will be dispatched by road / road & rail, **3)** The entire 2.05 MTPA iron ore excavated at Taldih will be trucked directly to Barsua Private / Public Sidings till construction of road from Taldih to Barsua Beneficiation Plant and **4)** Continuation of the already amended provisions of EC amendment dated 30.03.2016 (valid up to 30.03.2021) for further two years i.e. up to 31.03.2023, which are [i) Permission to change iron ore production (ROM) from three blocks viz. Barsua, Taldih and Kalta in ML-130 lease from 2.5, 4.25 and 1.3 MTPA to 3.5, 2.05 and 2.5 MTPA respectively, keeping the total iron ore (ROM) excavation restricted to 8.05 MTPA as specified in the earlier environmental clearance, ii) Permission to operate existing beneficiation plant at the rate of 4.5 MTPA instead of 2.5 MTPA], subject to the following conditions (Sl. No 22 A), in addition to the conditions prescribed in the EC and subsequent amendments.”

4. The other conditions prescribed in EC letter dated 3rd July, 2020 shall remain same.
5. This issues with the approval of the Competent Authority.

Yours faithfully,


(Sharath Kumar Pallerla)
Scientist 'F'/Director

Copy to:-

1. The Secretary, Ministry of Mines, Government of India, Shastri Bhavan, New Delhi.
2. The Secretary, Department of Mines & Geology, Government of Odisha, Bhubaneswar.
3. The Secretary, Department of Environment, Government of Odisha, Bhubaneswar.

4. The Secretary, Department of Forest, Government of Odisha, Bhubaneswar.
5. The Chief Wildlife Warden, Govt. of Odisha, 5th Floor, BDA Apartments, Prakruti Bhawan, Nilakantha Nagar, Nayapalli, Bhubaneswar-751012.
6. The APCCF, Regional Office (EZ), A/3, Chandrasekharapur, Bhubaneswar – 751023.
7. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office complex, East Arjun Nagar, New Delhi-1100032.
8. The Member Secretary, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
9. The Chairman, OSPCB, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit – VIII, Bhubaneswar – 751012, Odisha.
10. The Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
11. The District Collector, District Sundargarh, Orissa.
12. Guard File /
13. MoEF&CC Website.


(Sharath Kumar Pallerla)
Scientist 'F'/Director