No. J-11015/351/2006-IA.II(M)

Government of India Ministry of Environment & Forests

> Paryavaran Bhavan, C.G.O. Complex, Lodi Road, New Delhi-110 003.

Dated the 29th October, 2010

To

M/s Steel Authority of India Limited 5th Floor, Industry House, 10 Camac Street, Kolkata-700 017

E-mail: rmdsail@gmail.com

Subject:

Integrated Barsua-Taldih-Kalta Iron Ore Mining(ML-130 lease), Beneficiation and Pelletisation Plant Project of M/s Steel Authority of India Limited, located in Village Tantra and within Tohra RF, Tehsil Koira, District Sundargarh, Orissa- environmental clearance regarding.

Sir,

This has reference to your letter No.RMD/K/E&L/09/331 dated 21.11.2009 and subsequent letters dated 04.01.2010, 08.01.2010, 19.02.2010, 02.03.2010, 24.05.2010 and 16.09.2010 on the subject mentioned above. The project was earlier prescribed Terms of Reference (TORs) by the Ministry of Environment and Forests on 15.01.2007 for undertaking detailed EIA study for the purpose of obtaining environmental clearance. The proposal is for renewal of mine lease which fall due since 1990 and enhancement of production of iron ore from 2.54million tonnes per annum (million TPA) to 8.05million TPA along with expansion of beneficiation plant from 2.5million TPA to 6.75million TPA [2.5million TPA (existing) + 4.25million TPA (new)] and setting up of a pelletisation plant of 2.0million TPA capacity.

2. The mines [(Barsua-976.429ha, Taldih-1173.484ha(Taldih Block A & C-617.024ha and Taldih Block B &D-556.46ha) and Kalta-336.47ha) are in ML-130 lease, which comprises of a total mine lease area of 2486.391ha, out of which 19.059ha is an agricultural land, 2347.641ha is forestland, 113.841ha is wasteland and 5.85ha is others (settlements). Area proposed for mining is 1113.024ha, an area of 376.676ha is kept for OB dumps, 30.756ha for mineral storage, 98.505ha for infrastructure, 57.608ha for roads, 126.484ha for green belt and 683.338hs is others. There is an existing beneficiation plant having a capacity of 2.5million' TPA within the mine lease having an area of 7ha and 50ha outside the mine lease (total area of 57ha). In addition, the new beneficiation plant with a capacity of 4.25million TPA will be setup in an area of 83ha, out of which 50ha will be within the mine lease and 33ha, outside mine lease. The pelletisation plant also be outside the mine lease. The tailing pond is located outside the mine lease in Barsua Valley in an area of 35.88ha. No additional land will be acquired for tailing pond for the expansion purpose. The existing tailing pond will be adequate till the life of the plant. The total ..2/-

capacity of the tailing pond is 7.045 million tonnes and the pond is presently having tailings of 2.575million tonnes. Three townships namely Kalta township, Tensa township and Barsua township are located outside the mine lease. The Kalta township is adjacent to the mine lease, whereas the other two townships namely the Tensa township and the Barsua township are located at a distance of 0.5km and 1.5km respectively from the mine lease. The Samij Nala is passing through the mine lease. In addition, the Kurarhi Nala and the Karo River are flowing in the buffer zone of the mine at a distance of 0.15km and 3km respectively from the mine lease boundary. A few initial stage drainage impressions are observed in the mine lease area. Eight first order seasonal streams draining into the Kurarhi nallah will be affected due to the mining operation in the Barsua Block (Id1-122m, Id2-252m and Id3-300m) and in the Taldih Block(Id4-203m, Id5-154m, Id6-160m, Id7-365m and Id8-70m).

- 3. No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve/ wildlife corridors etc. are reported within 10 km of the mine lease. A letter dated 30.11.2009 from the DFO cum Wildlife Warden, Bonai Division has been submitted along with map in this regard. A site specific wildlife conservation plan has been prepared for this project and as per the information provided in the plan the nearest elephant corridor is the Karo-Karampada Corridor, which is about 20km East-North East of the mine lease's northern tip.
- The mine working will be opencast by mechanized method with conventional shovel-dumper combination and involving drilling and blasting. The targetted production capacity of the mine is 8.05million TPA of iron ore (2.5 million TPA from Barsua; 1.3 million TPA from Kalta and 4.25 million TPA from Taldih). The life of the mine in these three blocks varies from 23 years to 44years(Barsua 23yrs, Kalta 44yrs and Taldih 42 yrs). The iron ore will be transported through rail from the railway siding at Barsua Valley. Inside the lease, ore is conveyed mainly by long distance conveyor. The existing beneficiation plant at Barsua has a capacity to process 2.5million TPA of iron ore from Barsua block. Under expansion programme, beneficiation facility at Barsua Valley will be enhanced to process additional 4.25 million TPA of ROM ore to be produced at Taldih block. Pelletisation facility will also be added alongside the beneficiation plant to produce pellets (2 million TPA) from the beneficiated concentrate. No wet beneficiation has been envisaged for the ore mined at Kalta. Regarding proposed facilities for handling 4.25 million TPA of ROM from Taldih block, after Primary crushing at Taldih, crushed ore will be conveyed by long distance belt conveyor (LDBC) from Taldih to Barsua Valley (approx. 9km) within 2886.391ha mine lease are (ML 130) and beneficiation, loading etc. will be installed outside the mine lease area at Barsua Valley over 33ha land. Ore beneficiation plant of Barsua mine having processing capacity of 2.5million TPA of ore consists of two stages of crushing followed by screening. Blending of ore is carried out to obtain desired proportion. The processing facilities planned for Taldih mine comprises of primary crushing plant, crushed ore stockpiles, long distance belt conveyor, beneficiation plant,

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product stockpiling and loading system, pelletisation plant etc. A pellet plant of 2million TPA capacity will be set up as a down stream facility in Barsua Valley based on the pellet grade fines produced mainly from Taldih mine.

- 5 The topography of the area is Hilly at an elevation above mean sea level ranging from 560m-860m. The present working depth of mine in the Barsua block is at 820m AMSL(Barsua Area-5) and 800m AMSL(Barsua Area-3); in the Kalta Block is at 696m AMSL(Kalta Block-A), 714m AMSL(Kalta Block-B), 782m AMSL(Kalta Block-C) and the Taldih Block is a virgin Block. The ultimate working depth of mine in the Barsua block will be 650m AMSL (Barsua Area-5) and 640m AMSL(Barsua Area-3); in the Kalta Block will be 648m AMSL(Kalta Block-A & Kalta Block-B) and 744m AMSL(Kalta Block-C) and in the Taldih Block, the ultimate working depth of mine will be 750m AMSL(Taldih Block-A), 660m AMSL(Taldih Block-C), 640m AMSL(Taldih Block-B) and 620m AMSL(Taldih Block-A). The groundwater table reported to varies between 404m-408m AMSL in the Barsua Block; 580m-586m AMSL in the Kalta Block and 587m-593m AMSL in the Taldih block. The mine working will not intersect the groundwater table. The peak water requirement of the project is estimated as 15100KLD, which will be obtained from the surface water. The Tantra Village with 170households comprising a population of 781people is in the core zone. Displacement of population and R&R has not been envisaged it being an expansion project without increase in lease area or land acquisition. It is estimated that 91.62million m3 of OB will be generated during expansion of mine, out of which, 42.58million m3 will be used for backfilling and the remaining will be disposed off in the form of external OB dumps. At the end of the mine life, there will be nine(9) external dumps, which include five(5) existing and stabilized dumps. Plantation will be raised in an area of 1658,803ha at the end of mine life and there will be no water body left during the post mining stage.
- 6. The public hearing of the project was held on 28.08.2009 for production enhancement of iron ore from 3.8MTPY to 8.05MTPY alongwith beneficiation plant capacity of 4.25 MTPY and pellet plant of 2 MTPY capacity over an area of 2486.391ha. The Indian Bureau of Mines had approved the mining plan of the project (ML-130 iron ore lease) on 28.07.2008 (covering Barsua, Kalta and Taldih iron ore mine) over an area of 2486.391ha. The capital cost of the project is Rs.1086Crores and the capital cost for the environmental protection measures is proposed as Rs.203Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs.71Lakhs. The proponent has stated that there is no court case relating to the project or related activity.
- 7. The Ministry of Environment and Forests has examined the application in accordance with the EIA Notification, 2006 and hereby accords environmental clearance under the provisions thereof to the above mentioned Integrated Barsua-Taldih-Kalta Iron Ore Mining(ML-130 lease), Beneficiation and Pelletisation Plant Project of M/s Steel Authority of India Limited for an annual production capacity of 8.05million tonnes of iron ore by the opencast mechanized method along with setting up of a beneficiation plant of

4.25million TPA (in additional to existing plant of 2.5million TPA) and setting up of a pelletisation plant of 2.0million TPA capacity involving total mine lease area of 2486.391ha, subject to implementation of the following conditions and environmental safeguards.

A. Specific conditions

- (i) The project proponent shall obtain Consent to Establish and Consent to Operate from the State Pollution Control Board, Orissa and effectively implement all the conditions stipulated therein.
- (ii) The environmental clearance is subject to grant of approval of the State Land use Department, Government of Orissa for diversion of agricultural land for non agricultural use.
- (iii) Necessary forestry clearance under the Forest (Conservation) Act, 1980 for an area of 2347.641ha is forestland involved in the project shall be obtained. Environmental clearance is subject to grant of forestry clearance.
- (iv) Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004, as may be applicable to this project.
- (v) Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.
- (vi) The project proponent shall ensure that no natural watercourse and/or drainage channels except first order channels Id1, Id2, Id3, Id4, Id5, Id6, Id7 and Id8 passing through the mine lease shall be diverted. The channels shall be so diverted that it finally meets its final natural course.
- (vii) The top soil shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation.
- (viii) The over burden generated during the mining operation shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time and its phase-wise stabilization shall be carried out. There shall be nine external over burden dumps. The project proponent shall carry out slope stability study through an expert organization like Central Institute of Mining and Fuel Research, Dhanbad for attaining the proposed height of dump of 60m in three lifts and submit report to the Ministry and its Regional Office, Bhubneswar within three months. Proper terracing of the OB dumps shall be carried out so that the overall slope of the dump shall be maintained to 27°. The over burden dump shall be

scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office located at Bhubaneswar on six monthly basis.

(ix) Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and over burden dumps to prevent run off of water and flow of sediments directly into the agricultural fields, the first order channels, the Samij Nallah, the Kurarhi Nala, the Karo River and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after the monsoon and maintained properly.

Garland drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed around the mine pit, mineral and over burden dumps to prevent run off of water and flow of sediments directly into the agricultural fields, the first order channels, the Samij Nallah, the Kurarhi Nala, the Karo River and other water bodies and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.

- (x) Dimension of the retaining wall at the toe of the over burden dumps and the OB benches within the mine to check run-off and siltation shall be based on the rain fall data.
- (xi) The water recovery and spill way system shall be so designed that the natural water resources are not affected and that no spill water goes into the nearby Karo River and other water bodies.
- (xii) The project proponent shall carry out conditioning of the ore with water to mitigate fugitive dust emission, without affecting flow of ore in the ore processing and handling areas.
- (xiii) The effluent from the ore beneficiation plant shall be treated to conform to the prescribed standards and the tailings slurry shall be transported through a closed pipeline to the tailing dam.
- (xiv) The project proponent shall take necessary safeguard measures to ensure that there is no leaching from the tailing pond.

- (xv) The decanted water from the tailing pond shall be re-circulated and there should be zero discharge from the tailing pond.
- (xvi) Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as crusher zone, loading and unloading point and all transfer points during handling of the ore. Extensive water sprinkling shall be carried out on roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- (xvii) Plantation shall be raised in an area of 1658.803ha including a 7.5m wide green belt in the safety zone around the mining lease, over burden dumps, around beneficiation plant, mine benches, around tailing ponds, pelletisation plant, roads etc. by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.
- (xviii)The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.
- (xix) Regular monitoring of ground water level and quality shall be carried out in and around the project area(mine lease, beneficiation plant, pelletisation plant and tailing ponds) by establishing a network of existing wells and installing new piezometers during the operation. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office Bhubneshwar, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.
- (xx) The groundwater and surface water in and around the mine including tailing ponds shall be regularly monitored at strategic locations for heavy metals. The monitoring stations shall be established in consultation with the Regional Director, Central Ground Water Board and the State Pollution Control Board.
- (xxi) Appropriate mitigative measures shall be taken to prevent pollution of the Karo River in consultation with the State Pollution Control Board.

- (xxii) Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the project area shall be carried out and records maintained.
- (xxiii) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water) required for the project.
- (XXIV)Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with the Regional Director, Central Ground Water Board.
- (xxv) Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operation and in transportation of mineral. The vehicles carrying the mineral shall be covered with a tarpaulin and shall not be overloaded.
- (xxvi)Mineral handling area shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
- (xxvii) Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed. Health records of the workers shall be maintained.
- (xxviii) Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.
- (xxix)Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and the wastewater generated during mining operation.
- (xxx) The R&R of the project affected people, if any shall be carried out as per the NPRR.
- (xxxi)Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring land use pattern and report submitted to MOEF and its Regional Office located at Bhubneshwar.
- (xxxii) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

- (xxxiii) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely elephant, sloth bear, peacock etc. spotted in the study area. Action plan for conservation of flora and fauna prepared shall be implemented in consultation with the State Forest and Wildlife Department. All the safeguard measures brought out in the Wildlife Conservation Plan so prepared specific to this project site shall be effectively implemented. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. A copy of action plan shall be submitted to the Ministry of Environment and Forests and its Regional Office, Bhubaneswar.
- (xxxiv) The critical parameters such as RSPM (Particulate matter with size less than 10micron i.e., PM₁₀) SO₂ and NOx in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The circular No. J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.
- (xxxv) A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.

B. General conditions

- (i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.
- (ii) No change in the calendar plan including excavation, quantum of mineral iron ore and waste should be made.
- (iii) Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10micron i.e., PM₁₀), SO₂ and NOx monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.

- (iv) Data on ambient air quality RSPM (Particulate matter with size less than 10micron i.e., PM₁₀), SO₂ and NOx should be regularly submitted to the Ministry of Environment and Forests including its Regional office located at Bhubneswar and the State Pollution Control Board / Central Pollution Control Board once in six months.
- (v) Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
- (vi) Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.
- (vii) Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.
- (viii) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.

Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.

- (ix) A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- (x) The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry of Environment and Forests and its Regional Office located at Bhubneswar.
- (xi) The project authorities should inform to the Regional Office located at Bhubneswar regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- (xii) The Regional Office of this Ministry located at Bhubneswar shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.

- (xiii) The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by email) to the Ministry of Environment and Forests, its Regional Office Bhubneswar, the respective Zonal Office of Central Pollution Control Board the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment and Forests, Bhubneswar, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board.
- (xiv) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
- (xv) The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector's office/ Tehsildar's Office for 30 days.
- (xvi) The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Bhubneswar by e-mail.
- (xvii) The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and Forests at http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bhubneswar.
- 8. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- 9. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

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- 10. 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 thereunder and also any other orders passed by the Hon'ble Supreme Court of India/High Court of Orissa and any other Court of Law relating to the subject matter.
- 11. Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.

(SATISH C. GARKOTI)
Scientist 'E'

Copy to:

- (i) The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
- (ii) The Secretary, Department of Environment, Government of Orissa, Secretariat, Bhubaneswar.
- (iii) The Secretary, Department of Mines and Geology, Government of Orissa, Secretariat, Bhubaneswar.
- (iv) The Secretary, Department of Forests, Government of Orissa, Secretariat, Bhubaneswar.
- (v) The Chief Wildlife Warden, Government of Orissa, Bhubaneswar.
- (vi) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- (vii) The Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment and Forests, A-3 Chandrashekharpur, Bhubaneshwar-751023.
- (viii) The Chairman, Orissa State Pollution Control Board, Parivesh Bhawan, A/118 Nilkantha Nagar, Unit-VIII, Bhubaneshwar-751012.
- (ix) The Member Secretary, Central Ground Water Authority, A2, W3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- (x) The Chief Controller of Mines, Indian Bureau of Mines, 2nd Floor, 'A' Block, Indira Bhavan, Civil Lines, Nagpur-440 102.

- (xi) The District Collector, Sundergarh District, Orissa.
- (xii) EI Division, Ministry of Environment & Forests, EI Division, New Delhi.
- (xiii) Monitoring File.
- (xiv) Guard File.

(xv) Record File.

(SATISH C. GARKOTI) Scientist 'E'