

# **PREFEASIBILITY REPORT**

OF

## **VYASANAKERE IRON ORE MINE**

**Village Vyasanakere, Taluka-Hosapete, Dist-Ballari, Karnataka**

**(Lease granted Area-347.22 Ha ( As per CEC 354.71 ha).,**

**Forest Area -347.22 Ha ( As per CEC 354.71 ha).**

**Lease valid up to 13.11.2022**

**Production Capacity (EC) -2.5 MTPA Iron Ore**

**PROJECT PROPONENT**

**M/s MSPL LIMITED**

**Baldota Enclave, Abheraj Baldota Road**

**Hosapete-583203, Karnataka, India**

**EIA CONSULTANT**

**SRUSHTI SEVA PRIVATE LIMITED**

**Harihar Niwas, Agresen Road, Near Adivasi Bhavan ,**

**Giripeth, Nagpur-440010 (Maharashtra)**

**Email: srspl15@gmail.com, Phone : 0712-2542426**

**NABET Accredited EIA Consultant**

**Certificate No NABET/EIA/1720/RA 0105 Valid upto 15.05.2020**

**April 2019**

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## ANNEXURE

- 1A Letter from Central Empowered Committee
- 1B. Letter from CEC regarding enhancement in Production Capacity
- 2. Approval Letter for Forest Diversion
- 3. Land use in tabular form

## **1. EXECUTIVE SUMMARY**

The project is a working mine for over 55 years, with granted lease area of 347.22 Ha (as per CEC 354.71 Ha), The present EC capacity is 2.5 MTPA which has been revised by Central Empowered Committee (CEC), appointed by Honorable Supreme Court, to production capacity 1.8 MTPA.

It may be noted that EIA/EMP approved vide letter No. J-11015/308/2005 – IA-II(M) dt 7<sup>th</sup> April 2006 for an area of 347.22 ha. and capacity of 2.5 MTPA. The Public Hearing was held on 14.06.2005 and Minutes of Public Hearing were included in the EIA/EMP document.

The company has been very conscious about environment management for last 30 years and has been consistently carrying out plantation within as well as surrounding areas of the lease. So far more than 19 lakhs saplings have been planted within and outside the mining lease.

As early as year in 1992 well before EIA Notification 1994 was promulgated, in order to reduce dust generated by movement of dumpers downhill and uphill, company installed conveyors on the slopes, with arrangements for unloading ore at the hill top and bringing it down by conveyors. At the bottom of the hill the ore is collected in trucks and taken to crushing and screening plant. This has reduced the movement of dumpers by more than 50%.

## 2. INTRODUCTION OF THE PROJECT / BACKGROUND INFORMATION.

- i) The Project is working Iron Ore Mine located in Ballari Hosapete region in the Northern part of Karnataka state in Gunda Reserved Forest of Hosapete Taluka of Ballari district. The present lease area, as determined by Central Empowered Committee constituted by supreme court is 354.71 ha, all of which is **Reserved Forest**.

The lease was renewed for 20 years from 14.11.2002 to 13.11.2022 over an area of 347.22 Ha.

- ii) The lease area was revised from 347.22 ha to 354.71 ha based on R & R plan prepared under the order of Honorable Supreme Court. The order issued by Central Empowered Committee was regarding permissible annual production of 0.91 MT is placed at **Annexure 1A**. This was subsequently revised to 1.8 MTPA as approved vide letter No. 2-75 / CEC / SC / 2015 – Pt. II dated 18.03.2016. **Annexure 1B**
- iii) The mine has been granted Environmental Clearance vide MoEF letter No. J-11015/308/2005 – IA-II(M) dt 7<sup>th</sup> April 2006 for an area of 347.22 ha. and capacity of 2.5 MTPA/ annum **Annexure 2. The Public Hearing was held on 14.06.2005 and Minutes of Public Hearing were included in the EIA/EMP document.**
- iv) The Mining Plan has been approved by the Indian Bureau of Mines vide letter No KNT/BLR/MP/Fe-267-SZ/984 dated 09.07.2013 under Rule 24 (A) of MCCR, 1960 **(Annexure III). Review & updatation of Mining Plan under Rule 16 (1) &17 (1) of MCR 2016 approved vide letter No. 279 / 143 / 90 / BNG / 1771 dated 07.11.2016. (Annexure IV)**

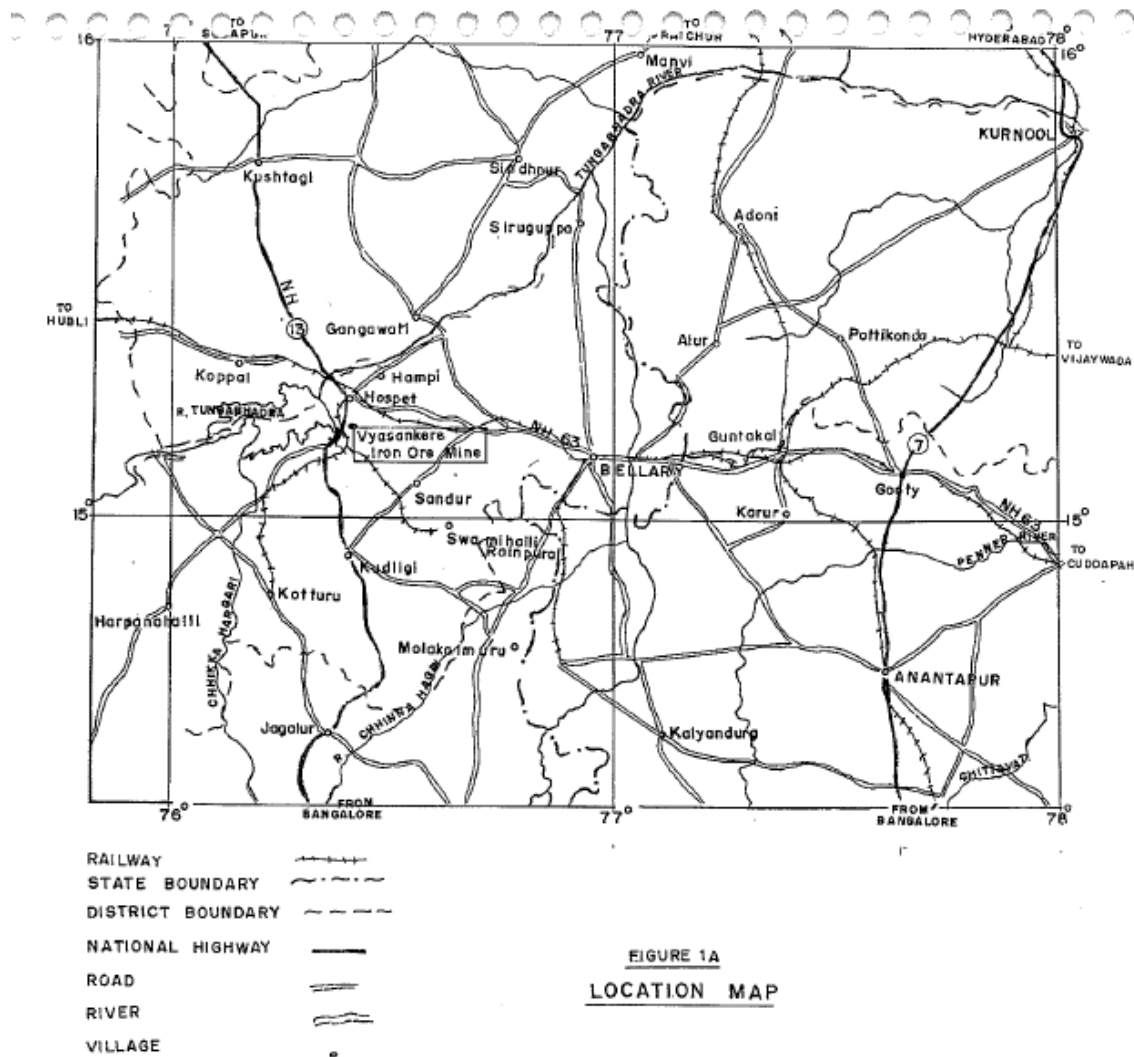
## 3. PROJECT DISCRPTION

- i) The project is mechanized opencast Iron Ore Mine with an area of 347.22 ha.
- ii) The lease area is located between following coordinates

Latitude 15<sup>0</sup>11'38.1"N – 15<sup>0</sup>12'57.3"N

Longitude 76<sup>0</sup>22'45.4"E – 76<sup>0</sup>24'33.3"E

The location map is placed at **Figure 1A**. The project boundary is shown at **Figure 1B** along with co-ordinates of all boundary pillars.



**Figure 1A Location Map**



- iii) The mine is mechanized opencast mine with capacity of 1.8 MT. (Annexure II). There are three working blocks between 629 mRL to 810 mRL.
- iv) The operation involves removing of overburden /waste material lying above the ore body by drilling and blasting. The ore is also removed similarly. The mine is worked three shifts round the clock.
- v) The water requirement on the project is calculated 430 Kpld. The water is sourced partly from tube wells in the lease area and the balanced from purchased from outside sources.
- vi) During the balance of lease period 20.60 MMT of excavation will be made out of which 11.60 MMT will be overburden / waste will be removed and disposed of on overburden dumps. The ore production will be 9.0 MMT.

#### **4.0 SITE ANALYSIS**

- i) The lease area is located on top of the NW-WSE trending narrow hill (ridge) in a Reserved Forest. It approachable by a Secondary road, Branching from Public road from Hosapete to Hubli. The distance is about 10 Km. A contour Map of lease area along with working is shown at **Figure 1 C**.
- ii) The existing Infrastructure include
  - 1. Workshop
  - 2. Store
  - 3. Electric substations
  - 4. Chemical laboratory
  - 5. Dispensary
  - 6. Water treatment plant
  - 7. HSD outlet,
  - 8. Canteen
  - 9. Mine office with computer sections
  - 10. First- Aid station
  - 11. Rest shelter
  - 12. Processing Plant
  - 13. Weigh Bridges etc.

All infrastructure is developed over the years suitable a large opencast mine.

iii) **Climatic Data:-**

- a) The climate of area is Tropical. The Metrological data was collected from monitory station located at the Tungbhadra Dam where daily records of temperature, Humidity, Rainfall are available since 1979. Unfortunately The station records show average velocity during the day. No data was available for plotting wind rose Diagram. Since April 2000 a weather station has been functioning at Vyasanakere mine itself. The data has been collected from Metrological station at Tungbhadra Dam upto year 2000 and from Vyasanakere mine name after. The summarised below:
- (b) The area has low annual rainfall with an average of 693 mm area 37 year period,1981-2017.
- (c) The maximum temperature recorded is usual below 43°C while minimum temperature recorded is rarely below 15°C.
- (d) The water table in the area is 500m RL This is based on Highest water level recorded at Tungbhadra Dam During and after Monsoon.
- (e) There are no perennial water courses in the lease area. A semi-Perennial water course exists outside lease at 650 m RL. The mine is likely to touch 730 m RL at lowest working level. This will be well above water table of the area and even above level of nearest semi-perennial water course.

**5.0 PLANNING BRIEF :**

The mine will be to worked for remaining years upto 13.11.2022. The working will continued in existing three blocks namely north block, block A and block B. Available reserves on more than 32.758 MT out of which just over 9.00 MT will be extracted.

**6.0 PROPOSED INFRASTCTURE:**

No new infrastructure is proposed during balance period. Existing infrastructure is described in para 4 (ii) above.



## **7.0 REHABITATION AND RESETTLEMENT PLAN:**

There were no project affected people as entire area is reserved Forest. There were no land outstees nor home outstees.

## **8.0 PROJECT SCHEDULE AND COST ESTIMATE:**

This does not arise.

## **9.0 ANALYSIS OF PROPOSAL:**

Since Mine is a working mine which will be closed in three and a half years, due to expiry of lease by 13.11.2022, the management would start implementation of closure plan for areas where no mineral will be left. It is expected that state may auction this lease area .

The present status of implementation for environmental measures proposed in approved EIA/EMP and Review and Updated of Mining Plan for balance period up to 13.11.2022 is given below.

1. **Land use** : Out of Lease granted area 347.22 ha , 339.151 Ha is already broken. Out of this broken area, 140.866 Ha is already reclaimed by planting around 1.9 million trees since 1976 to till now. Their growth is very satisfactory. Freshly planted trees re looked after by watering and other measures.
2. **Air Quality** : Air quality is being regularly monitored and prescribed parameters are well within prescribed limit. The air quality is not under pressure. The pollutants namely NO<sub>x</sub>, SO<sub>2</sub>, Lead, and Carbon, Monoxide are well below prescribed limits.
3. **Water Quality** : There are no water bodies within lease area or buffer zone. There are also no perennial water courses within lease area or buffer zone. Water only flow down the slopes during an after rains for very short time. A number of well-maintained drains are provided to guide the water from hilltop, where workings are to the bottom of the hill. These are collected in drain provided at the floor of the hill and guided to a main drain at that level. The water then flows to a seasonal nala at the

lower level. A number of bunds, toe walls, gully plugs, garland drain, and silt settling tanks have been constructed as prescribed by R&R plan approved by Honorable Supreme Court.

The monitoring of water shows that, all the parameters are well below the prescribed limits. The quantity of water used for washing of dumpers etc is treated before it is discharged to the main drain at the bottom of the hill.

4. **Noise Levels** : The noise levels are not beyond 90 dB(A) at operators position except for blast hole drills. The workers there are provided with approved ear plugs / ear mugs.
5. **Blasting vibrations** : The vibration levels are well below as prescribed by DGMS. There is no village within 3 km of the mine. Hence, they are not affected by the blasting.

Overall the mine has been very conscious for pollutants and the measures taken have kept the levels well below prescribed.

This mine is rated **Five star rating for sustainable development frame Work during 2016-17** assessed under star rating system from Indian Bureau of Mines, Ministry of Mines , Govt of India.

# CENTRAL EMPOWERED COMMITTEE

(CONSTITUTED BY THE HON'BLE SUPREME COURT OF INDIA

IN WRIT PETITION (CIVIL) No. 202/95 & 171/96)

11nd Floor, Chankya Bhawan, Chankyapuri, New Delhi 1100021, Tel. 26884921, 26884923, 24101926, FAX No. 24101925

File No. 2-61/CEC/SC/2012

Dated: 12<sup>th</sup> October, 2012

To

The Chief Secretary  
Government of Karnataka  
Bangalore

Sub: Preparation and implementation of the R&R Plans of the mining leases falling in Districts Bellary, Chitradurga and Tumkur.

Sir,

The CEC hereby gives its concurrence to the R&R Plans of the following mining leases prepared, through the ICPE, by the State of Karnataka:

S.No.	Name of the Mining Lease	ML No.	Permissible annual production of iron ore
1.	M/s MSPL	2416	0.91 MMT
2.	M/s Balaji Produce Company	2208	0.19 MMT
3.& 4.	M/s Vibhuti Gudda Iron Ore Mines & M/s Belagal Iron Ore Mines	2469 80	Combined annual permissible production of 0.064 MMT

It is requested that immediate action may please be taken for the implementation of the R&R Plans.

Yours faithfully,

  
(M.K. Jiwrajka)  
Member Secretary

Copy to:

- Principal Secretary (Forest), Government of Karnataka, Bangalore.
- Principal Secretary (Mines), Government of Karnataka, Bangalore.

- iii) Principal Chief Conservator of Forests, Karnataka Forest Department, Bangalore.
- iv) All Members and Additional Members of the Monitoring Committee with the request to undertake immediate follow up action for the implementation of the R&R Plan. It is also requested that a copy of the approved R&R Plan may please be provided to the concerned lessee and the IBM.
- v) Director General, Indian Council for Forestry and Education, Dehradun.
- vi) Controller of Mines (SZ), Indian Bureau of Mines, Bangalore.  
Secretary General, Federation of Indian Mines Industries.



**CENTRAL EMPOWERED COMMITTEE**  
Constituted by the Hon'ble SUPREME COURT OF INDIA

File No. 2-75/CEC/SC/2015-Pt.II

Dated: 18<sup>th</sup> March, 2016

To

The Chief Secretary  
Government of Karnataka  
Bangalore

**Sub: Enhancement of permissible production limit in respect of  
"Category-A" and "Category-B" mining leases.**

Sir,

Please refer to Government of Karnataka, Commerce & Industries Department letter No. CI 15 MMG 2016 dated 8<sup>th</sup> March, 2016 on the above subject. As recommended by the Technical Committee constituted by the Department of Mines & Geology for considering the increase in the permissible annual production of the mining leases, the CEC hereby approves the increased permissible annual production in the mining leases as per the details given below:

S.No.	Name of the Lease	Permissible Annual Production (in MMT)		Increase	Remarks
		Present	recommended		
1.	VESCO (ML NO. 2298)	0.59	1.1	0.51	Based on the road capacity, being minimum amongst all the three prescribed criteria.
2.	B. Kumar Gowda (ML No. 2516)	0.64	1.26	0.62	Based on the mineral resources, being minimum amongst all the three prescribed criteria.
3.	SMIORE (ML No. 2580/2678)	0.74	1.60	0.86	Based on the road capacity (being minimum amongst all the three prescribed criteria) the permissible annual production would have

2nd Floor, Chanakya Bhawan, Chanakya Puri, New Delhi-11 Tel : 2686 4921, 26864923, 24101926 Fax : 2410 1925

					come to 3.3 MMT. However, as the EC is for 1.6 MMT it is restricted to 1.6 MMT.
4.	R. Praveen Chandra (ML No. 2294)	0.35	0.75	0.40	Based on the road capacity, being minimum amongst all the three prescribed criteria.
5.	Zenith Transport Co. (ML No. 2547)	0.44	0.48	0.04	Based on the mineral resources, being minimum amongst all the three prescribed criteria.
6.	Mineral Enterprises Ltd. (ML No. 2348)	0.38	0.57*	0.19	Provisionally decided based on the dump capacity as per the earlier approved Mining Plan (being minimum amongst all the three prescribed criteria).
7.	MSPL Ltd. (ML No. 2418)	0.91	1.80	0.89	Based on the mineral resources, being minimum amongst all the three prescribed criteria.
8.	S.V. Srinivasalu (ML No. 2604)	0.08	0.10	0.02	Based on the dump capacity, being minimum amongst all the three prescribed criteria.
9.	Zeenath Transport Co. (ML No. 2239)	0.12	0.18	0.06	Based on the dump capacity, being minimum amongst all the three prescribed criteria.
10.	Mineral Enterprises Ltd. (ML No. 2388)	0.16	0.34	0.18	Based on the mineral resources, being minimum amongst all the three prescribed criteria.

\*provisional

2. The above approval is subject to the following conditions:

- (a) the State Government will ensure that the sum total of annual production from all the lessees does not exceed 30 MMT (25 MMT in District Bellary and 5 MMT in Districts Chitradurga and Tumkur);
- (b) in the event it is found that the sum total of annual production is exceeding 30 MMT then in that case the

lease wise permissible annual production of all the leases, including that of the present 10 leases, will automatically stand reduced on pro rata basis and in such a way that the actual production does not exceed 30 MMT; and

- (c) the State Government will ensure that the respective lessees are having all the requisite statutory approvals.

3. As per the letter dated 11<sup>th</sup> March, 2016 of M/s Mineral Enterprises Limited (ML No. 2346) the modified Mining Plan of the lease has been approved by the IBM on 11<sup>th</sup> March, 2016 and thereafter due to additional area available for dumps, the permissible annual production would become 1.0 MTPA. The State Government may please get the permissible annual production reviewed through the Technical Committee after taking into consideration the provisions of the approved Mining Plan and other relevant information. In the meanwhile the permissible annual production has been provisionally fixed as per the recommendations presently made by the Technical Committee / State Government on the basis of the earlier approved Mining Plan.

4. In the meeting held on 1<sup>st</sup> December, 2015 it was decided that in respect of manganese ore pertaining to ML No. 2580 / 2678 of SMIORE the details regarding assessed resources and dumps capacity are to be separately verified by the FIMI / ICFRE. After receipt of the observation of the ICFRE the permissible annual production of manganese in respect of the said lease same may please be got verified through the Technical Committee.

Yours faithfully,  
  
(P.V. Jayakrishnan)  
Chairman

Copy to:

- i) Principal Secretary (Mines), Government of Karnataka, Bangalore.
- ii) Principal Secretary (Forest), Government of Karnataka, Bangalore.
- iii) Principal Chief Conservator of Forests, Karnataka Forest Department, Bangalore.
- iv) All Members of the Monitoring Committee.
- v) Additional Director General, Indian Council of Forestry Research and Education, Dehradun. It is requested that

observations of the ICFRE in respect of manganese ore pertaining to ML No. 2580 / 2678 of SMIORE may please be provided to the CEC and the Department of Mines & Geology, Government of Karnataka.

- vi) Controller of Mines (SZ), Indian Bureau of Mines, Bangalore.
- vii) Secretary General, Federation of Indian Mineral Industries, New Delhi.
- ~~viii)~~ Concerned lessees.

A handwritten signature in black ink, appearing to read 'H. K. Srinivas', is written over the list item 'viii) Concerned lessees'.



CEC for 354.71 Ha.



FROM : MSPL LIMITED

FAX NO. : 08918394232333

Apr. 10 2006 04:38PM P1

No.J-11015/308/2005.(A.II (M)  
Government of India  
Ministry of Environment & Forests

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

Dated the 7<sup>th</sup> April 2006

To,  
Executive Director,  
M/s MSPL Ltd.,  
Co-operative Colony,  
Hospet-583 203,  
Karnataka

Subject: Vyasanakere Iron Ore Mining Project of M/s MSPL Ltd. located in village Vyasanakere, Tehsil Hospet, District Bellary of Karnataka environmental clearance reg.

Sir,

This has reference to your letter No. MSPL/EDR/M(E)/096 dated 29.07.2005 and subsequent letters dated 30.08.2005 and 19.12.2005 on the subject mentioned above. The Ministry of Environment and Forests has examined the application. It has been noted that the proposal is for enhancement of production of iron ore from 19,80,000 (1.98 million tonnes per annum) to 25,00,000 TPA (2.5 million tonnes per annum). Total mine lease area of the project is 347.22 ha which is a forestland. Area proposed for mining is 91.73 ha, an area of 40.15 ha is kept for OB dumps, 21.20 ha for mineral storage, 09.78 ha for infrastructure, 19.00 ha for roads, 138.72 ha for green belt, 02.72 ha for mineral separation plant and 13.92 ha for others (08.67 ha 7.5 m boundary under MMR 1961 and 05.25 ha is unbroken area). No ecologically sensitive area such as National park/ wildlife sanctuary/biosphere reserve etc. located in the core and buffer zone. The Daroji Bear Sanctuary is located at a distance of 12 km from the mine lease. About 80 households comprising a population of 300 people reported in the core zone. Displacement of population and R&R is not envisaged. The annual targeted production capacity of the mine is 2.5 million tonnes. About 6,350 TPD of mineral will be transported by road to a distance of 3 to 5 km away to railway siding and 35 km to direct/local consumers. Working is opencast by mechanised method involving drilling and blasting. Present working depth is 65 m bgl and ultimate working depth is 110 m bgl (730 m RL). The topography of the area is hilly and elevation above mean sea level is in the range of 515 m RL to 886 m RL. Water table in the core zone is at 470 m RL and in the buffer zone it is at 480 m RL. Working will not intersect ground water table. Average water requirement is 434 KLD, out of which 30 KLD will be met from ground water and remaining 404 KLD purchased from outside. It has been envisaged that about 1,05,000 m<sup>3</sup>/month of over burden will be generated. A total of 8.7 Mm<sup>3</sup> of OB has already been accumulated and another 12.60 Mm<sup>3</sup> of OB proposed to be generated throughout the mine life. Out of 12.60 Mm<sup>3</sup> of OB, 5.04 Mm<sup>3</sup> will be backfilled and remaining quantity will be dumped externally. It has been mentioned that backfilling will start from the year 2008-2009. Consent to Establish obtained from Karnataka State Pollution Control Board on 28.07.2005 & 30.07.2005 for enhancement of production capacity of mine from 19,80,000 TPA to

25,00, 000 TPA iron ore involving lease area of 347.22 ha. Indian Bureau of Mines (IBM) has approved mining plan on 25.04.2005. Public hearing held on 14.06.2005 Ministry of Environment & Forests granted renewal of mining lease for diversion of 347.20 ha forestland on 07.04.1987. Capital cost of the project is 9.64 crores.

2. The Ministry of Environment and Forests hereby accords environmental clearance to the above mentioned Vyasanakere Iron ore mining project M/s MSPL Ltd. for production capacity of 2.5 million tonnes per annum of iron ore by open cast manual method involving total lease area of 347.22 ha under the provisions of the EIA Notification 1994 and its subsequent amendments issued under Environment (Protection) Act, 1986 subject to implementation of the following conditions/safeguards.

**A. Specific conditions**

- (i) The mining operations shall not intersect groundwater table. Prior approval of the Ministry of Environment & Forests and Central Ground Water Authority shall be obtain for mining below water table.
- (ii) Top soil, if any shall be stacked properly with proper slope with adequate measures and should be used for reclamation and rehabilitation of mined out areas.
- (iii) Over burden shall be stacked at earmarked dump site(s) only and should not be kept active for long period. The maximum height of the dump should not exceed 15 m and over all slope of the dump shall not exceed 26°. Backfilling shall start from the year 2006 onwards. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests on six monthly basis.
- (iv) In critical areas use of geo textiles shall be undertaken for stabilization of the dump.
- (v) Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted particularly after monsoon and maintained properly.

Garland drain (size, gradient and length) shall be constructed for both mine pit and for waste dump 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 should be constructed at the corners of the garland drains and desilted at regular intervals.

- (vi) Dimension of the retaining wall at the toe of dumps and OB benches within the mine to check run-off and siltation should be based on the rain fall data.

....3/-



- (vii) Plantation shall be raised in an area of 345.22 ha including a green belt of 138.72 ha by planting the native species around ML area, mineral separation plant, OB dump sites, roads etc. in consultation with the local DFO / Agriculture Department. The density of the trees should be around 2000 plants per ha.
- (viii) 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.
- (ix) Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring should be carried out four times in a year – pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to MOEF, Central Ground Water Authority and Regional Director Central Ground water Board.
- (x) Permission from the competent authority should be obtained for drawal of ground water.
- (xi) Vehicular emissions should be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The vehicles should be covered with a tarpaulin and shall not be overloaded.
- (xii) The higher benches of the excavated void/ mine pit to be converted in to water body shall be terraced and afforested to stabilize the slopes. Peripheral fencing shall be carried out along the excavated area.
- (xiii) Consent to operate should be obtained from SPCB before enhancing the production capacity of the mine.
- (xiv) The project proponent should take all precautionary measures during mining operation for conservation and protection of endangered fauna such as Indian pangolin, leopard, sloth bear, wolf etc. spotted in the study area in consultation with the concerned forest officials. Action plan for conservation of endangered fauna should be prepared and submitted to the Ministry and its Regional Office within 3 months.
- (xv) Sewage treatment plant should be installed for the colony. ETP should also be provided for workshop and mineral separation plant wastewater.
- (xvi) Drills should either be operated with dust extractors or should be equipped with water injection system.
- (xvii) Blasting operation should be carried out only during the daytime. Controlled blasting should be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.
- (xviii) The proponent shall ensure that mining operations involve wet beneficiation.

...4/-

- (xix) 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.
- (xx) 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.

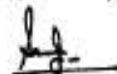
**B. General conditions**

- (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 RPM, SPM, SO<sub>2</sub>, NO<sub>x</sub> 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 (RPM, SPM, SO<sub>2</sub>, NO<sub>x</sub>) should be regularly submitted to the Ministry including its Regional office located at Bangalore 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 19<sup>th</sup> May, 1993 and 31<sup>st</sup> 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 coal dust and take corrective measures, if needed.

....5/-

- (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 project authorities should inform to the Regional Office located at Bangalore regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
  - (xi) 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 and its Regional Office located at Bangalore.
  - (xii) The Regional Office of this Ministry located at Bangalore 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) A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom and suggestion / representation has been received while processing the proposal.
  - (xiv) State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/ Tehsildar's Office for 30 days.
  - (xv) 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 7 days 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 may also be seen 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 Bangalore.
3. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
4. 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.
5. 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.

  
(SATISH C. GARKOTI)  
Additional Director (S)

...6/-

REGISTERED PARCEL

GOVERNMENT OF INDIA  
MINISTRY OF MINES  
INDIAN BUREAU OF MINES  
OFFICE OF THE CONTROLLER OF MINES (SOUTH ZONE)

FAX: (080) 23373287  
Tel: (080) 23375363/ 23375366-67  
E-mail: zo.bangalore@ibm.gov.in

29, Industrial Suburb, II Stage,  
Tumkur Road, Goraguntapalya,  
Yeswanthpur,  
Bangalore- 560 022  
Date: 11.01.2013

No. KNE/BLR/MS/Fe-198-SZ/685  
To M/s MSPL Limited,  
Vyasanakere Village (Post),  
Hospet Taluk, Bellary District,  
Karnataka State

Sub: Approval of Scheme of Mining including Progressive Mine Closure Plan in respect of your Vyasanakere Iron Ore Mine (ML No. 2416) over an extent of 347.22 Ha. in Vyasanakere Village, Hospet Taluk, Bellary District of Karnataka State, of M/s MSPL Limited submitted under Rule 12 (3) of MCDR, 1988.

Ref: Letter No. MSPL/IBM/MS2/2012-13 dated 03.01.2013 submitting five bound copies of the Scheme of Mining including Progressive Mine Closure Plan

Sirs,

In exercise of the power conferred by sub rule (4) of Rule 12 of Mineral Conservation and Development Rules, 1988, I hereby approve the aforesaid Scheme of Mining (including Progressive Mine Closure Plan). This approval is subject to the following conditions:

1. This Scheme of Mining (including Progressive Mine Closure Plan) is approved without prejudice to any other law applicable to the area from time to time whether made by the Central Government, State Government or any other authority.
2. The Scheme of Mining (including Progressive Mine Closure Plan) is approved without prejudice to any order or direction from any court of competent jurisdiction.
3. It is also clarified that the approval of your aforesaid Scheme of Mining (including Progressive Mine Closure Plan) does not in any way imply the approval of the Government in terms of any other provision of the Mines and Minerals (Development & Regulation) Act, 1957, or the rules framed there under and any other law.
4. It is further clarified that the approval of the Scheme of Mining (including Progressive Mine Closure Plan) is subject to the provision of Forest (Conservation) Act, 1980, Forest Conservation Rules, 2003 and other relevant statutes, orders and guidelines as may be applicable to the lease area from time to time.
5. Provisions of the Mines Act, 1952 and Rule & Regulations made there under including submission of notice of opening, appointment of manager and other statutory officials as required by the Mines Act, 1952 shall be complied with.

Contd.....2

-3-

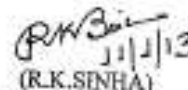
No. KNT/BLR/MS/Fe-198-SZ

17. Approval is strictly confined to the proposals contained within the mining leasehold demarcated as per lease sketch given by the joint survey team constituted by the CEC and duly authenticated by the State DMG. It does not convey approval to the proposals falling outside the Mining Lease boundary.

18. If anything is found to be concealed as required by the Mines Act in the contents of Scheme of Mining (including Progressive Mine Closure Plan) and the proposal for rectification has not been made, the approval shall be deemed to have been withdrawn with immediate effect, further at any stage, if it is observed that the information furnished in the document are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.

Encl: One copy of the approved Scheme of Mining  
Including progressive Mine Closure Plan

Yours faithfully,


  
(R.K. SINHA)

Controller of Mines (SZ)

Copy for kind information to:

1. S/Shri Dr. Moda Venkataiah/ S.Shivakumar, M/s MSPL Limited, Hospet-583 203, Bellary District, Karnataka State
2. The Chief Controller of Mines, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur- 440 001.
3. The Director, Department of Mines & Geology, Government of Karnataka, Khanija Bhavan, Race Course Road, Bangalore-560 001, Karnataka State along with a copy of approved Scheme of Mining (including Progressive Mine Closure Plan).
4. The Dy. Director of Mines Safety, Bellary sub-Region, 31, Infantry Road, Cantonment, Bellary - 584 104, Karnataka state along with a copy of approved Scheme of Mining (including Progressive Mine Closure Plan).
5. The Regional Controller of Mines, Indian Bureau of Mines, Bangalore, along with a copy of approved Scheme of Mining (including Progressive Mine Closure Plan) for further follow up.

Encl: As above.

  
(R.K. SINHA)  
Controller of Mines (SZ)



By Mail/SPEED POST



**GOVERNMENT OF INDIA  
MINISTRY OF MINES  
INDIAN BUREAU OF MINES  
OFFICE OF REGIONAL CONTROLLER OF MINES**



FAX : 080- 23371027 / 23373287  
Tel : 080-23371027 / 23375366 / 67  
Email ID: ro.bangalore@ibm.gov.in  
rcombng@rediffmail.com

29, Industrial Suburb, II Stage,  
Tumkur Road, Gorguntapalya,  
Yeshwantpur,  
Bangalore- 560 022.

No. 279/143/90/BNG / 1767  
To:

Dated: 04/11/2016

✓ M/s MSPL Limited  
Baldota Enclave  
Abberaj Baldota Road  
Hosapete - 583 203.  
Ballari Dist.

Sub : Approval of **Review and Updation of Mining Plan with Progressive Mine Closure Plan** in respect of **Vyasanakere Iron Ore Mine (ML No.2416 ) of M/s MSPL Limited** over an area of 354.71 Ha.( as per CEC Sketch ) located in Vyasanakere Village, Sandur Taluk, Ballari District, Karnataka State under Rule 17(1) of MCR, 2016 - Private /Cat -A-FM / Forest / Non-Captive.

Ref : 1. Your letter No. MSPL/IBM/SoM/2016-17 dated. 23/09/2016  
2. This office letter of even number dated. 07/10/2016  
3. Your letter No. MSPL/IBM/SoM-3/2016-17 dated. 21/10/2016.

Sir,

In exercise of the power conferred under Rule 17 of Minerals (Other than Atomic and Hydrocarbon Energy Minerals) Concession Rules, 2016, vide Gazette Notification No. S.O.1857 (E)dttd.18/05/2016 issued by Controller General IBM, under F. No. T-43004/CGBM/MM (DR)/2015, I hereby approve the **Review and Updation of Mining Plan with Progressive Mine Closure Plan** in respect of **Vyasanakere Iron Ore Mine (ML No.2416 ) of M/s MSPL Limited** over an area of 354.71 Ha.(as per CEC Sketch ) located in Vyasanakere Village, Sandur Taluk, Ballari District, Karnataka State under Rule 17(1) of MCR, 2016. This approval is subject to the following conditions:

1. The Review and Updation of Mining Plan is approved without prejudice to any other laws applicable to the mine from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
2. The proposals shown on the plates and /or given in the document is based on the lease map/Sketch submitted by the applicant /lessee and is applicable from the date of approval.
3. It is clarified that the approval of your aforesaid Review and Updation of Mining Plan does not in any way imply the approval of the Government in terms of any other provisions of the Mines and Minerals (Development and Regulation) Act 1957 or the Mineral Concession Rules, 2016 and any other laws including Forest Conservation Act, 1980, Environment (Protection) Act,1986 or the rules made there under, Mines Act, 1952 and Rules & Regulations made there under.
4. Indian Bureau of Mines has not undertaken verification of the mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the leasehold shown on the ground with reference to lease map& other plans furnished by the applicant/ lessee.
5. At any stage, if it is observed that the information furnished, data incorporated in the document are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.
6. Next Financial Assurance shall be due for submission on 1/04/2022
7. The execution of Review and Updation of Mining Plan shall be subjected to vacation of prohibitory orders / notices, if any.

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-2-

No. 279/143/90/BNG

8. The Approval of Review and Updatation of Mining Plan is strictly confined to the proposals contained within the mining leasehold demarcated as per lease sketch given by the joint survey team constituted by the CEC and duly authenticated by the State DMG. It does not convey approval to the proposals falling outside the Mining Lease boundary.
9. The Approval of Review and Updatation of Mining Plan is without prejudice to the final order of the Hon'ble Supreme Court order dtd.18/04/2013 in W.P. No. 562/2009 and interim orders passed by the Hon'ble Supreme Court from time to time in the said W.P. Nos. 25910/2009 and 26083/2009.
10. The Approval Review and Updatation of Mining Plan is subject to the condition that mining operations and other allied activities shall not be extended in unbroken forest area in compliance of the Hon'ble Supreme Court order dtd. 18/04/2013 in W.P.No. 562/2009.
11. The contents of Circular No: 2/2010 issued by the Chief Controller of Mines, IBM, Nagpur vide his letter No.11013/3/MP/90- CCOM Vol-VII dated 06/04/2010 shall be complied with.
12. A copy of Environment Impact Assessment and Environment Management Plan as approved by the MOEF, New Delhi in terms of Hon'ble Supreme Court order dtd. 20/04/2012 shall be submitted to this office along with a copy of their approval letter, within one month of the date of such approval.
13. Environmental Monitoring Cell of the company shall continue monitoring ambient air quality, dust fall rate, water quality, soil sample analysis and noise level measurements on various stations established for the purpose both in the core zone and buffer zone as per Department of Environment guidelines and keeping in view IBM's circular No.3/92, season wise every year or by engaging the services of an Environment Laboratory approved by MOEF/CPCB. The data so generated shall be maintained in a bound paged register kept for the purpose and the same shall be made available to the inspecting officer on demand.
14. In case the mining lease falls within a radius of 10 kms of National Park/ sanctuary, recommendations of NBWL have to be obtained as per the Order of Hon'ble Supreme Court in I A No. 460/2004.
15. A yearly report shall be submitted to this office before 1<sup>st</sup> July of every year setting forth the extent of protective and rehabilitative works carried out as envisaged in the approved mine closure plan.
16. The Review and Updatation of Mining Plan is approved for proposals contained therein and as applicable from the date of approval of the document for the mining activities to be carried out within the mining lease hold.
17. The Review and Updatation of Mining Plan is approved for total Mineral Reserves of 35.914 Million Tonnes of Iron ore and annual production capacity as under.

Year	Iron ore( Million Tonnes)
2017-18	1.80
2018-19	1.80
2019-20	1.80
2020-21	1.80
2021-22	1.80

Encl: One copy of the Review and Updatation of Mining Plan with Progressive Mine Closure Plan.

Yours faithfully,



(J.R. Chaudhary)

Regional Controller of Mines  
Indian Bureau of Mines.

Copy for kind information to:

1. The Director of Mines & Geology, Govt. of Karnataka, Bangalore, along with a copy of the approved Review & Updatation of Mining Plan.
2. The Director of Mines Safety, Directorate General of Mines Safety, Bellary Sub- Region, 31, Infantry Road, Cantonment, Bellary - 584104.
3. The Controller of Mines (SZ), Indian Bureau of Mines, Bangalore.
4. Sri. S.Shivalakumar, AGM (Expl) & Qualified Person, M/s MSPL Limited Baldota Enclave, Abheraj Baldota Road, Hosapete- 583203, Ballari District.
5. Mine file / Guard file

Regional Controller of Mines  
Indian Bureau of Mines.