

Scrutiny comments in respect of (mining part) Mauli Iron Ore mining lease, over an area of 32.83Ha non-forest land, A-category fully mechanized mine, situated in Redi-village, Vengurla-Taluka, Sindhudurg-District of Maharashtra-State for approval in Modification in Mining Plan under rule 17(3) of MCR, 2016 for approval period of 2017-18 to 2018-19 of M/s New India Mining Co.Pvt Ltd.

Cover Page- The expiry of mining lease period should be indicated.

General- Page-1, It should be discussed in brief regarding date of first grant of mining lease & subsequent renewal periods & extension of lease period as per MMDR amendment act, 2015 with supporting documents. Copy of EC granted may be attached.

Page-4, As per form I&IX, type of land with survey number of lease area should be given. The existing surface features with in 60m & 500m should be discussed in brief.

Page-6, The co-ordinates of lease boundary pillars should be given in tabular form. It should be discussed in brief regarding any survey number wise area either addition/deletion after DGPS etc. The name & contact details of authorized person, who has conducted the DGPS survey should be given.

The surface right of lease area presently held with lessee or not, is not discussed. The EC limits & nearest distance of NP/WLS/ESZ should be discussed.

Details of approved MP/SOM:- The production & development achieved & deviation in change of place of working & waste dumping should be discussed, clarified & justified with supporting documents in previous plan period/lapsed block period.

The mine common boundary workings has been done in past with adjacent lease of Reddy mine should be discussed. The revised copy of common boundary working permission under 111 of MMR, 1961 should be enclosed. The production achieved during 2015-16 & 16-17 should be submitted based upon annual/monthly return submitted to IBM only.

The proposal for the year 2017-18 & 2018-19 in not required in review chapter. It should be discussed in brief regarding discontinuance of mining operation in present plan period with justified reason. The review chapter should be discussed about previous plan period proposals up to 2016-17.

v) The sub-grade, mineral rejects, dumps recovery if any in previous plan period should be given up to 31.3.2017.

vii) A feasibility report should be submitted in support of the reserves estimated under UNFC. The report should be suitably linked to the reserves estimated with latest economic parameter mentioning viability of project should be concluded. The intrinsic cash flow of project should be given in tabular form.

Geology and Exploration:-

i) Strike of the formation should be given in whole circle bearing under the heading local geology of the lease area.

ii) Under geology of the lease area number of ore bodies present with dimension and structure of the litho units needs to be discussed.

iii) Details of lumps and fines ratio in the ROM based on sieve test conducted/ screening of ROM for separation of lumps and fines done in the past can be discussed under the local geology.

- iv) Pit dimension and area given at page no-15 need to be rechecked and corrected.
- v) Under the heading exploration already carried out, details of area explored under different level of exploration and remaining mineralized area to be explored should be discussed.
- vi) Reserves/resources need to be estimated grade wise separately for lumps and fines.
- vii) Reserves may not be estimated under G-1 and G-2 level below the proved depth. Accordingly reserves/resources need to be re-estimated.
- viii) Lateral extension from the extreme borehole cannot be considered for estimation of reserves.
- ix) Without having proper exploration data reserves may not be estimated under proved and probable category, in some of the sections it is observed that reserves are estimated under proved and probable category without having exploration data and this cannot be considered.
- x) Reserves/resources are not estimated properly as per the UNFC classification. In some section reserves/resources are estimated under G-3 level even though having exploration data and in some sections under G-1 and G-2 where exploration is not carried out in the regular grid pattern as per Minerals (Evidence of Mineral contents) Rules 2015.
- xi) Why reserves/resources are not estimated from the sections 2P-2P', 6P-6P', 10P-10P', 14P-14P', 18P-18P', 22P-22P' 26P-26P', 30P-30P' and 34P-34P' needs to be discussed.
- xii) Detailed calculation of estimation of reserves/resources as per UNFC classification should be given grade wise showing sectional area, area of influence, bulk density and recovery factor etc.

Mining:-Page-38, 39,40- The existing pit dimension with number of benches in ore & waste should be given as on 01.4.2017.

Page-40, The year wise proposed ROM production quantity should be given in tonnage & grade of ore/mineral rejects also. The above threshold value & below cut-off grade should be given as mineral rejects. The cut-off grade & threshold value of minerals should be discussed as per IBM circular 2009. {Hematitic iron ore-Fe%-45% (Min) & Hematitic Siliceous ore-Fe%-35 % (Min)}.

The calculation of section wise & level wise annual proposed production quantity with grade of ore should be given in tabular form. The year wise proposed quantity of siliceous & hematite ore should be given separately.

Page-42, Para-C, Dump re-handling (For purpose of recovery of minerals)- The existing quantity of dumps with in lease area & tentative grade should be given. The year wise dumping & backfilling proposal with quantity & location should be given separately in tabular form.

The annual handling of waste dump & recovery of ore, if any should be discussed with justified reason. The stripping ratio of insitu excavation & with dump handling should also be discussed. Page-38, 41-Instead of referring in plate 8A to 8B & plate no.12 same should be discussed in text.

The bulk density considered for ore and waste also needs to be indicated. The recovery of ore should be discussed and justified in plan & conceptual period. The optimum/overall pit slope should be discussed & justified based on scientific study done etc

The mine workings done with in 7.5m of statutory barrier in past in adjacent lease area of reddy mine should be discussed & common boundary working permission under rule 111 of MMR, 61 & present proposal should be discussed. The abstract of slope stability study done, if any should be discussed & copy should be enclosed.

Page-43, adequacy and optimization of HEMM to achieve total annual handling quantity should be discussed. The breakup of hired & own HEMM used in mine should be discussed & given separately. The proposed mine workings/ dump recovery should be 100m away from existing pit/dump edge as per DGMS guideline if any.

Page-48, The copy of hydrological study should be enclosed in further submission, if any & abstract should be discussed in text.

Page-49-51, the quantity of mineral rejects generation & their utilization should be discussed properly. It should be discussed in brief regarding utilization of mineral reject, (-50%Fe ore) because as per buyers specification mineral reject in not desired for use.

Page-56, The organization chart & appointment of statutory manpower/employment potential as per MCDR, 88& MMR-1961 should be discussed.

Page-58, PMCP-The existing land used details should be given as on 01.4.2017 & proposed plan period/lease period should be up to 22.4.2020. It needs correction. Page-74,75 modified the proposals up to 22/4/2020.

Monitoring schedule of all environmental components should be given with respect to permissible limits & actual parameter in tabular form. The safety & protective measures for waste dump/collapsed area should be discussed.

The organization chart for disaster management plan should be given with name, designation & contact numbers of authorized person, their duties and responsibility.

Para-8.6, Financial assurance-Page-80, Land used pattern should be mentioned as on 01.4.2017 and plan period up to 22.4.2020. Modified the proposals up to 22/4/2020. The total amount of financial assurance as per MCDR, 2017 should be calculated & discussed.

The copy of original valid bank guarantee of extended period for the A-category mine should be submitted in further submission in the form of Annexure.

All plan and section, text & tables should be modified based upon above scrutiny points and should be duly signed by RQP or authorised persons in further submission.

Plan & sections:- DGPS plan- It should be mentioned about the path row of the satellite and date of pass of DGPS survey. The soft copy of full set of auto generated files of super imposed output or text file etc. should be enclosed in further submission.

General:- i) The DGPS Readings of common boundary pillars with Redi mine (94.7060ha) of M/s Gogte minerals are not matching. ii) Signature of the surveyor and certificate number is not there on surface plan.

Surface Plan: The nalla, river, PWD roads, power line & their statutory limit should be shown properly. The plan should be signed by a certified surveyor with date & place. The surface features outside the lease area is not required, it needs correction. The common boundary working co-ordinates should be same as adjacent lease.

Geological plan and cross sections:- i) On Geological plan RL's, Proposed and drilled boreholes are not properly visible so font size may be increased. ii) Lithology shown on geological plan and cross sections are not matching. iii) The boreholes which are completely above the profile can be removed and boreholes which are partly above the profile should be shown in dotted line. iv) Color codes given for the different litho units should be same both on Geological plan and Geological cross sections. vi) On some sections geology is not shown boundary to boundary. vii) Bench profiles are not matching on some of the cross sections. viii) The area explored under different level of exploration and UNFC codes are not properly marked on xcv Geological plan and geological cross sections. ix) UPL is not shown and not indexed properly on geological cross sections.

Production & development plan & section-The plan & section should be updated & modified as discussed in field & text. The UPL should be modified based upon above scrutiny. The remaining plan & section of five year block period should be given.

Financial Assurance Area Plan- The plan & section should be updated & modified based on above scrutiny. The backfilled area on mineral exhausted pit should be given separately. The land used details should be given specifically as table & text.

Annexure:

1. The latest chemical analysis report of Ore/ Mineral rejects/Waste from an NABL accredited Laboratory of proposed mine workings should be submitted in the form of annexure. The enclosed analysis report is old i.e.21/7/2011 without having location of sample etc.
2. The latest copy of resolution of Board of directors for nominating the owner & address proof of other partner should be enclosed in the form of annexure. The enclosed copy is dated 14.10.2013.
3. Latest quarterly monitoring report on air, water & noise should be enclosed as per category of the mine for last 2-3 quarters.
4. The copy of original valid BG of extended period as per MCDR, 2017 should be submitted in the form of annexure.
5. The further submission of document should be properly binding having sufficient strength and the plates are properly folded so that they can be accessed easily.
