

SCRUTINY COMMENTS ON EXAMINATION OF MODIFICATION IN APPROVED MINING PLAN & PROGRESSIVE MINE CLOSURE PLAN FOR SARAIYA LIMESTONE MINE OF M/S STEEL AUTHORITY OF INDIA LTD., OVER AN EXTENT OF 275 HECTARES, LOCATED IN SARAIYA VILLAGE, UNDER BHAWNATHPUR TALUKA, GARHWA DISTRICT OF JHARKHAND STATE, SUBMITTED UNDER RULE 17(3) OF MCR, 2016.

(1) The DGPS surveyed map/report has not been submitted along with the document in compliance to CCOMs circular No.2/2010, which should be submitted.

(2) In the front cover, it is found that, the document has been submitted under Rule 17(3) of MCR, 2016 for modification in the approved mining plan, which is not required as the mining plan approved in the last occasion has already lapsed, thereby instead of submitting modification in the approved mining plan, the **Review of Mining Plan**, under Rule 17(2) of MCR, 2016 should be submitted. Accordingly, corresponding changes may also be made in other places of the document.

(3) (i) In the consent letter / undertakings / certificate from the nominated owner, the consent is stated to be given for modification in mining plan/Scheme of mining, instead the consent should be given for preparation of Review of Mining Plan, under Rule 17(2) of MCR, 2016. (ii) The nominated has requested to the Regional Controller of Mines, for further correspondence with the recognised person Ms. Subhasmita Das but the correspondence address of Ms. Das is not in complete form. Besides, as per the requirement, atleast five years supervisory experience in a mine in favour of Ms. Dashas not been enclosed. It is also found that, two other names viz. Shri S. Basak & Shri MKTP Dutta are qualified persons as indicated in the consent letter but five years supervisory experience in a mine in favour of both the persons have also not been enclosed.

(4) Shri Kalyan Maity has been signed the document in his capacity Director (RM & Logistics) of M/s Steel Authority of India Ltd., but the ID proof submitted in respect of Shri Maity as Executive Director (RMD) as per the annexure-I, which is not proper. Therefore, ID proof of Shri Maity as Director (RM & Logistics) should be submitted.

(5) The M. Sc. Tech (Applied Geology) certificate in respect of Ms Subhasmita Das has been enclosed as so called annexure-IV(C) but the minimum supervisory experience of five years as required for preparation of mining plan/scheme of mining has not been enclosed. Besides, I.D proof in favour of Ms Das also not submitted. Likewise, M. Sc. Tech (Applied Geology) certificate in favour of Shri S. Basak and B.Tech (Mining Engg) certificate in favour of Shri MKTP Dutta has been enclosed as annexure-IV(A) & IV(B) respectively but five years supervisory experience in a mine and ID proof of both the persons have also not been enclosed.

(6) The copy of the Form-J enclosed as annexure-VII is not clearly legible; thereby a fresh legible copy of the same should be submitted.

(7) The excavation planning for the period from 2016-17 to 2019-20 has been computed & enclosed as annexure-X but the length, width of benches proposed in topsoil, overburden & Limestone has not been furnished, which may be submitted. Besides, the location co-ordinates & the cross sections considered for the purpose is missing, which should also be furnished by adding more columns in the tabular annexure. Moreover, the grade of limestone has been furnished in 6th column of the above referred annexure but an authenticated chemical analysis report in support of such grades has not been enclosed. In addition to the above, the percentage recovery of limestone also not given. Accordingly, necessary corrections/modifications may also be made in connected paras in the text & relevant plates.

(8) The ambient air quality analysis, noise level analysis & water analysis report has been enclosed as annexure-XII are found to be very old, analysed during 20.08.2011 & 21.08.2011, which is not acceptable, instead, the same should be replaced by a fresh reports either from a NABL accredited laboratory or from a Govt. Laboratory. Besides, a valid NABL accreditation certificate issued in favour of the analytical laboratory may also be submitted.

(9) Litho logs for the already drilled boreholes are enclosed as annexure-XVIII but the holes are coring or non-coring type has not been mentioned. Moreover, no photograph of the borehole logs has been submitted, which should be enclosed. Besides, no Form J for drilling the boreholes has been submitted.

(10) Authenticated land schedule of the lease area has not been enclosed along with the document, which should be submitted.

(11) No photographs of the lease area has been submitted, thereby few coloured photographs in support of existing quarries, existing exploration, waste dump, afforestation & boundary pillars should be submitted

(12) In 2nd para of the introduction chapter, the name of Saraiya lease is missing, which should be furnished for more informative. (Page No.1)

(13) The address of the qualified persons furnished in the para under reference is not in complete form; thereby the same should be revised suitably. [Para 1.0(e)]

(14) As per the enclosed annexure-XIX, the validity of the lease has been extended upto 31.03.2020, thereby the expiry of the lease period mentioned in the para under reference should be revised accordingly. [Para 2.0(a)]

(15) The GPS co-ordinates of Saraiya lease is furnished in tabular form in page No. 6 & 7 but it is not known whether these GPS co-ordinates taken from the lease boundary pillars or not should be specified. If these co-ordinates are not belongs to the lease pillars, then pillar co-ordinates of all the lease boundary pillars should be furnished. (Page No. 6 & 7)

(16) The reference for mining plan approved on 03.08.2011, under Rule 24A of MCDR, 1960 has been given but the validity period of such approval is missing, which should be furnished. Besides, approval status of mining plan & scheme of mining after the commencement of MCDR,1988 & before the approval of mining plan under Rule 24A of MCR, 1960 should be furnished. In addition to the above, the approval status and validity period of the scheme of mining, dated 11.10.2012 may also be submitted.(Para 3.1)

(17) During the year 2012-13, there was a proposal to drill 3 nos. of boreholes in the lease area & in **actual practice** no such borehole was drilled but the reasons for not drilling the earlier proposed boreholes also not given, which should be furnished in remarks column for more informative. [Para 3.3(a)]

(18) The status of violation letter, show-cause notice issued by IBM & the compliance submitted by the applicant/lessee thereof during the last five years should be furnished. Besides, the copies of such letters may also be enclosed as annexure to the document for ease in monitoring. (Para 3.3 at page No. 10)

(19) A mention has been made in the para under reference that, the mining plan for Saraiya lease was approved for the period from 01.04.2006 to 31.03.2026, which appears to be not correct, thereby please verify the validity status of the mining plan and para may be revised. Necessary corrections may also be made in other relevant paras in the document accordingly. (Para 3.5)

(20) In the introduction chapter, it is mentioned that, the commencement of the mining operations was in the year 1986, instead the actual date of opening of the mine should be furnished. Accordingly, the year of commencement of mining operations furnished at any other places of the document may also be revised.

(21) The location of proposed boreholes are stated to be depicted on the plate No.03 but the same is missing in this para, thereby the year wise proposed boreholes status should also be furnished in the para under reference in tabular form indicating the grid pattern, depth of the bore holes & location co-ordinates of such holes for ease in monitoring. [Para 1.0(g)]

(22) As discussed in para 1.0(e)(ii), 94 boreholes were drilled by M/s Hindustan Steel Ltd., during the period 1962-1965 and probably considering such old boreholes, no exploration during the ensuing 4 year period has been proposed, which is not correct. For information, the boreholes drilled before 50 years cannot be hold good under UNFC norms. Therefore, the entire non-forest portion of the lease area should be proposed under exploration in the form of coring boreholes and the year wise proposal for the same should be furnished and the para may be revised accordingly. [Para 1.0(i)]

(23) The resources & reserves have been computed based on the boreholes drilled during 1962-1965, while UNFC was not in force, thereby the exploration done before 50 years cannot be considered under G1, G2 & G3 scale of exploration. Therefore, the reserves & resources should be computed based on the existing quarries available in the lease area and the reserves/resources estimated on Table-1.3, 1.4 & 1.5 should be revised accordingly. Besides, the grade of the limestone claimed in Table No. 1.5 & other places of the document has no authenticity unless supported by a valid chemical analysis report. [Para 1.0(k)]

(24) In 1st line of the para under reference, a mention has been made about Bhawanathpur group of mines comes under category-A (OTFM), which is not correct, instead the category status of Saraiya Limestone mine only need to be furnished as the document has been submitted only for Saraiya lease. At many other places in the document, Bhawanathpur group of mines has been referred and the same should be revised specific to Saraiya lease. Besides, the status existing method of mining has been discussed in the para but nothing has been given about the existing status of quarries, existing status of dump, reclamation, rehabilitation and plantation etc. and the same may be discussed. In addition to the above, if the existing quarries are proposed to be developed /extended, the same may also be mentioned. If the proposed workings are in the virgin area, the reasons for the same may also be furnished with valid reasons. In the light of the above, the para may be revised. [Para 2.0(A)(a)]

(25) The recovery percentage of Limestone is missing in the table, which should be furnished by adding one more column in the table for ease in monitoring. [Table No. 2.1]

(26) The name of the quarry(s) / location co-ordinates of the proposed workings should be furnished indicating the direction of advancement of quarry faces. In the light of the above, the information/data furnished in tabular form in the referred para may also be revised. [Para 2.0(c)]

(27) Under the heading **Employment Potential**, a full time Mining Engineer holding degree in mining engineering & a geologist holding M.Sc. degree in geology as required under Rule 42 of MCDR, 1988 and a 1st class mine manager as required under MMR, 1961 has not been proposed under employment. Besides, the labour requirement on account of skilled, semi-skilled & un-skilled also not furnished. In the light of the above, the para may be revised suitably. [Para 7.0(b)]

(28) Quarry wise extent of area proposed to be degraded in each year of the ensuing 4 year period should be furnished. Besides, quarry wise reclamation, rehabilitation, restoration & afforestation for each year may also be furnished. All such proposals should be furnished in tabular form and the areawhere land to be degraded should be mentioned. It should also be described in the table whether forest area exists in such locations and relevant clearances have been obtained from the competent authority. Existence of such forest location and clearance thereof, if any, should be shown on the same year-wise development/production/reclamation plans. (Para 8.3.1)

(29) Dimension (L x B x D) of the void available for backfilling has not been furnished in 3rd row of the tables given in the para under reference, which should be furnished for each year and the name of the quarries linked in the void formation may also be furnished. Even if, the backfilling is not proposed, the dimension of the quarries made during each year of the modification period is required to be furnished. (Para 8.3.5)

(30) The names & contact number of the person responsible during the emergency should be furnished. Besides, nearest fire stations, hospitals and police station is required to be mentioned for more informative. (Para 8.4)

(31) All the plan & sections submitted along with the modification document certified by the qualified person mentioning that, the plans and sections are prepared based on the lease map authenticated by the State Govt. of Jharkhand.

(32) The lease area plan of Saraiya lease has not been submitted along with the document, which should be furnished. Besides, **a copy of the lease area map duly authenticated by the competent authority of State DMG, Jharkhand** may also be submitted.

(33) DRG. No.1 (Key Plan): The details of the deficiencies found on the plate are as follows: (i) The metalled road shown both in index & also on the plan portion of the plate is for village road or for public road should be specified. If the road is public road, to which important places both end of the road leads to may also be indicated. (ii) The index reference given for un-metalled road is not matching with that of the plan. (iii) Direction of flow of River/nala is missing on the plan portion of the plate, which should be furnished. (iv) The index reference given for railway line is not matching with that of the plan. (v) The forest density of the reserved forest/protected forest marked both in index & on the plan is missing, which may be furnished. (vi) Population of villages falling within 5km radius of the lease area has not been given, which should be furnished. (vii) The monitoring stations for air, noise & water has not been indicated in the index as well as on the plan portion of the plate. (viii) 25cm long scale also not marked on the plate. In the light of the above, the plate may be revised accordingly.

(34) DRG No. 02 (Surface Plan): (i) Pillar co-ordinates of 19 lease pillars has been furnished in tabular form but the co-ordinates for pillar No. 20 is missing, which should be given. (ii) Index reference for certain features has been given, which are not to be seen within the lease area and all such references should be erased. (iii) Certain features such as boreholes & quarries etc., outside the lease area has been marked on this plate, which are uncalled for and must be erased. (iii) In south eastern part of the lease area, a portion has been marked as **proposed surrender area** but the surrender was not accepted by the State Govt. of Jharkhand as on date, thereby the same should be erased for clarity. (iv) In the consent letter from the applicant, the names of three qualified persons have been given and in the certificate of the qualified person, the same three persons also signed but in the text part as well as on the plates, only one person has been signed, thereby the document should be invariably signed by all the three persons. (v) At least three permanent ground control points situated outside the lease area should be selected and latitude & longitude of these ground control points may be furnished. Moreover,

these ground control stations need to be linked with the boundary pillars. (vi) The date of survey is missing on this plate, which should be mentioned. (vii) In southern side of the lease area, the 7.5m barrier zone has been excavated in between the boundary pillars 13 & 14, which should be reclaimed and photographs in support of such reclamation may be submitted. (viii) It is suspected that, the 7.5m barrier zone of the entire lease area has been marked as **protected forest**, which should be checked and corrected. In the light of the above, all other relevant plates may also be revised.

(35) DRG No. 03 (Surface Geological Plan): Ultimate Pit Limit (UPL) has not been marked on this plan and it is not understandable, what is mineable, thereby the same should be depicted. Accordingly, all the geological sections submitted along with the document may also be revised.

(36) DRG No. 05 (Pit Development Plan 2016-17): (i) The excavation planning for all the 4 years has been proposed over the Jungle Jari land, which is not permitted, thereby the location of the proposed excavation site should be revised and the planning should be made in the non-forest mineralised land available within the leasehold area. (ii) 7.5m safety barrier zone all along the lease boundary has not been marked, which should be drawn. (iii) Storage of mineral rejects and sub-grade ore has been proposed in a single stack, instead the same should be proposed in different locations over the non-mineralised area. (iv) Dump sections has not been drawn due to which the advancement direction of the dump is not known. Besides, garland drain for the proposed dump is not to be seen on the plan, which should also be depicted. (v) The proposed plantation for the year 2016-17 is not to be seen on the plan and also on the development sections, which should be given. Accordingly, the plate submitted showing the development plan & sections for the years 2017-18 to 2019-20 and other relevant plates may also be revised.

(37) DRG No. 14 (Conceptual Plan): The backfilling & plantation shown on the plan is found to be entirely on Jungle Jhari land and per the provisions no such activities should be undertaken unless forest clearance is obtained from the competent authority, thereby the plate may be revised suitably. Besides, the plate submitted for conceptual sections may also be modified accordingly.

(38) DRG No. 16 (Environment Plan): All the existing features available within 500m radius of the lease area has not been marked, which should be depicted and the plate may be revised accordingly.

(39) DRG No. 17 (Reclamation Plan): All the existing & proposed activities within the Saraiya lease only need be depicted & rest of the things should be removed and the plate may be revised accordingly.
