

# भारत सरकार GOVERNMENT OF INDIA खान मंत्रालय MINISTRY OF MINES भारतीय खान ब्यूरो INDIAN BUREAU OF MINES क्षेत्रीय खान नियंत्रक के कार्यालय OFFICE OF THE REGIONAL CONTROLLER OF MINES



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No. MS/FM/35-ORI/BHU/2018-19

दिनांक / Date: 21.12.2018

To

Shri Gokul Chandra Nag, M/s Radha Raman Minerals, Plot No-N4/86, Anand Bhawan, IRC Village, Nayapali, Bhubaneswar, Odisha-751015.

Sub: Review of Mining Plan of Baidyanathpur, Mangartoli & Kusumatoli Limestone & Dolomite Mine over an area of 64.00 ha in Sundargarh district of Odisha of M/s Radha Raman Minerals submitted under Rule-17 (1) of MCR, 2016.

Ref: - i) Your letter no. nil dated 30.11.2018 received on 04.12.2018.

- ii) This office letter of even no. dated 04.12.2018.
- iii) This office letter of even no. dated 04.12.2018 addressed to the Director of Mines, Govt. of Odisha, copy endorsed to you.

Sir.

This has reference to the letters cited above on the subject. The draft Review of Mining Plan along with Progressive Mine Closure Plan has been examined in this office based on site inspection carried out on 13.12.2018 by Shri Dayanand Upadhyay, Sr. Assistant Controller of Mines. The deficiencies observed are enclosed herewith as *Annexure-I*.

You are advised to carry out the necessary modifications in the draft Review of Mining Plan in the light of the contents vide Annexure-I and submit three (3) firm bound and two (2) soft copies of the document text in CD in a single MS Word file (the drawing/plates should be submitted in Auto CAD compatible format and JPG format in resolution of 100x100 pixels on same CD) with financial assurance under Rule 27 of MCDR' 2017 within 15 (fifteen) days from the date of issue of this letter for further necessary action. If the total page of annexures exceeds 50 (Fifty) then it should be submitted as separate volume. But reference of these annexures must appear in the Review of Mining Plan document. The plates are also to be submitted in separate volume.

The para-wise clarifications and the manner in which the deficiencies are attended should invariably be given while forwarding the modified copies of the Review of Mining Plan. It may be noted that no extension of time in this regard will be entertained and the Review of Mining Plan will be considered for rejection if not submitted within above due date . It may also be noted that if the deficiencies are not attended completely, the submission would be liable for rejection without further correspondence.

भवदीय/ yours faithfully,

क्षेत्रीय खान नियंत्रक / Regional Controller of Mines

Copy for kind information and necessary action to:

1. Shri Chandrabhanu Dash, Qualified Person, Geo Consultants Private Limited, Plot No-853, Gobind Prasad (Medical Lane), Mahavir Nagar (Infront of Radhika Complex/Reliance Fresh), Laxmisagar, Bhubaneswar-751006, Odisha.

(HARKESH MEENA) क्षेत्रीय खान नियंत्रक / Regional Controller of Mines Scrutiny comments on examination of Review of Mining Plan of Baidyanathpur, Mangartoli & kusumatoli Limestone & dolomite Mine, over an area of 64.00 Ha of M/s Radharaman Minerals in Sundargarh district of Odisha State.

GENERAL

- i) Chapter "Introduction": A brief review of present status of Mining lease after declaration of lapsing by State Govt. has not been furnished. Proof of subsistence of mining lease should be submitted.
- ii) Page-2, the status of environment clearance, consent to operate, production carried out in past etc have not been furnished.
- iii) Page-3, the copy of registration of proprietorship firm of M/s Radharaman Minerals has not been submitted.
- iv)Para-2, Page-4, Chapter "Location and Accessibility" has not been furnished as per IBM Manual Appraisal MP 2014.
- v) All the annexure to be properly indexed/ numbered/ paged and signed by qualified person. All the certificates should bear dated signature.

# **GEOLOGY:**

- i) Page-13, shape and size of ore deposit has not been described in terms of dip, strike and thickness of ore body.
- ii) Page-14, the details of exploration carried since inception of mining operation to be given in tabulated form i.e. year, BH number, Location (Coordinate), nature of BH (Core/DTH), Depth (max-Min), mineralized/non-mineralized, Inclination etc. The relevant forms for intimation of borehole and borehole logs to be submitted as annexures.
- iii) Page-14, the expenditure incurred in various prospecting operation has not been furnished.
- iv)Para-e, page-14, The details of total lease area explored under UNFC have to be furnished in the tabular format provided below.

Item of Information	Lease area ex Total lease a	Remarks/ comments				
	G1 Level	G2 Level	G3 Level	Explored and found non- mineralized with level of exploration (Remarks)	Un-explored lease area	not carrying out th exploration as pe UNFC norms
	A	В	С	D	Е	F
Area as per level of exploration						
No. of BH drilled						
No. of BH considered for Resource			1-14			
Meterage drilled						
Grid Interval						
Scale of Mapping						
Reserve estimated aft	er above explo	ration as on da	ted:			
Remaining Resource	after above ex	ploration as on	dated:			

v) Page-16, Table-A1.1, the proposed bore holes have not been described with core/non-core drilling. All the drilled and proposed BH to be depicted on the Geological section along with mRL and its actual and proposed depth for better referencing. The details of the proposed boreholes have to be furnished in following tabular format.

Ye ar	- I Tronuing	Collar		Meterag e	Inclination	Forest/ Diversified	Surface right/	Purpose of bore	
				DTH	×		forest/non fores	non surface	holes
								right	

- vi) Level of exploration marked in the geological plan on the basis of exploration has not been indicated as per guidelines of Minerals Evidence of Mineral Contents Rules 2015. Accordingly the G1/G2 level of exploration should be re-defined.
- vii) Page-16, Para-J, reserve/resources estimated in last approved scheme of mining plan is not matched with the instant document. The reason of deviation may be furnished.
- viii) Page-21& 23, the reserve and resources estimated is not as per the provision of MEMC Rules 2015. The blocked mineral reserve under 211/222 category not depicted. The grade of limestone has not been furnished.
- ix) Page-23(a0 & 23(b), the UNFC has not been furnished in calculation table for geological and mineable reserve/resources.
- x) All the previously drilled borehole logs should be enclosed with the document. The lithology shown in the borehole log should match with the lithology shown in geological sections.
- xi)As per guideline of "IBM manual on appraisal of Mining Plan 2014" at least 10% of total samples to be analysed in accordance to BIS and reports form NABL accredited/Government Laboratory.
- xii) Reporting of Mineral Resources in the format prescribed in Part IV-A of Minerals (Evidence of Mineral Contents) Rules, 2015 to be submitted.

#### MINING:

Existing and proposed method of mining has not been described properly. Justification for site selection of next five year for mining should be furnished. Further direction of advance, RL of benches at end of each year should be indicated. The details of existing quarry in terms of size and shape and location has not been furnished in Para-(a). In table-A2.1, tentative excavation has not been furnished with grade of saleable ore and mineral reject. Excavation schedule as furnished at page-31(a) has not been depicted with number of benches considered with their top and bottom RL.

It has been observed that mineral stack yard and top soil stack are proposed within ultimate pit limit. It may be modified and proposed outside UPL. The quantity of Sub-grade to be generated during conceptual period and its future utilization and planning may be furnished. Conceptual mining plan, cumulative waste generation and top soil generation and protective measures have not been described properly.

The above point should be rectified with due justification.

# Stacking of mineral reject/ sub grade material and disposal of waste:

i) It has been observed that generation mineral reject proposed from ROM production but its location of stacking not shown in development plan.

ii) All existing Sub-grade dumps and waste dumps may describe with its location along with mRL in text. The top mRL of all above to be depicted clearly on plans.

iii) Further, Build-up of dumps from year to year to be mentioned in text w.r.t. designed capacity of dumps, bottom and top mRL of individual terrace, dump slope, individual terrace height and slope with description of method & manner of disposal of waste should be mentioned.

iv) The proposal given for construction of retaining wall, garland drain to be given in view of

proposed spread of the waste dump/mineral reject and mineral stacks.

v) Specific proposal for stabilization of slope of dumps, by plantation, coir matting etc. should be given.

# Progressive Mine Closure Plan:

i) Page-51, Human settlement has not been furnished with population distribution pattern around mines area, male female ratio, literacy etc.

ii) Page-54, year wise plantation covering number of saplings to be planted, location and area

covered may be furnished.

- iii) The amount of financial assurance should be calculated as per rule 27(1) of MCDR-2017 and submitted accordingly.
- iv)Updated air, water, noise, ground vibration and soil data with analysis from laboratory done at specified periodicity for last one year to be enclosed.
- v) Under impact on land, cumulative land degradation at present, at the end of proposal period and at the end of conceptual period may be given referring to conceptual mining plan given in scheme of mining.
- vi)The location and schedule of environment protective measures to be given in text and all the monitoring station should be furnished with their coordinates.

### Plates(General):

- i) All plans and sections shall show a scale of the plan at least twenty five centimeters long and suitably subdivided. All plans & sections prepared shall follow the sign conventions mentioned under MMR 1961.
- ii) Wind direction may show through wind rose diagram in key plan and environmental plan.
- iii) All plans and sections should be signed with date by certified Surveyor, Qualified Person, Mine Manager and Mining Geologist.
- iv) Magnetic Meridian and date of observation of should be given on all relevant plans.

v) The Latitude, longitude of all corner pillars has not been furnished.

vi)DGPS plan duly certified by State Govt. has not been furnished. Lease plan as submitted is not legible.

#### Surface Plan:

- i) Latitude, longitude of all corner pillars with UTM co-ordinate may be depicted on the surface plan.
- ii) Few pillars may be correlated with some permanent ground features giving distance and direction. Different land use may be shown with colour codes.
- iii) Forest & Non forest area, Surface right acquired area etc. should be marked clearly over a Surface plan.

#### Geological Plan & Section:

i) The structural features like dip, strike etc not shown in geological plan.

- ii) The UNFC has not been correctly depicted in geological plan. The reserves/resources under different codes may be marked on geological plan and sections in different colour codes.
- iii) mRL of bore holes have not been marked in plan and section. Plan and section should be on same scales.
- iv) Litho units and lithological contacts are not shown in quarry. It should be verified from bore holes data and modified accordingly. The Insitu ore shown in section should be rechecked form bore holes data.

# Year wise development plan:

- i) UPL should be marked in development plan.
- ii) The location of mineral reject has not been shown. Yearwise wise progress of sub grade and waste dump may show clearly with different colour.
- iii) Each year development proposal to be shown in different color.
- vii) Development Plan and section should be on same scales.

# **Environment plan:**

- i) The Environment Plan as prepared should be satisfied the provision as laid down rule 32(5)(b) of MCDR2017.
- ii) The proposed and existing environment protective measures to be shown in environment plan. The drainage pattern of the lease area also to be shown on the plan.

#### **Reclamation Plan:**

Proposals of land restoration/reclamation/rehabilitation, afforestation, waste dump management, etc should be depicted in Reclamation Plan yearwise with different colour codes.

#### Conceptual plan:

Conceptual plan may be prepared considering mineralization as revealed from the borehole logs. One longitudinal section may also be submitted. Direction of run off from the area based on surface contours may be shown on the plan and the sections.