

MCDR INSPECTION REPORT

1.0 GENERAL

SN	Particulars	Details
1	Name of inspecting office & designation	Suresh Prasad,DCOM
2	Date of inspection	03.06.2017
3	Name of the Mine	Curpem Iron Ore Mine
4	Total Lease Area (Ha) with breakup of Non-forest and forest land	87.6469 Ha
5	Minecode	30GOA02036
6	IBM Registration Number under rule 45 of MCDR, 1988	
7	Name of the lessee, Address, phone, email and fax number	Sesa Resources Limited Registration No. IBM/5456/2011 Sesa Ghor, 20 EDC Complex, Patto, Panaji (Goa) - 403 001
8	Village	Curpem & Sulcorna
8	Taluka/Mandal /District	Sanguem , South Goa,
10	State	
11	Post office & PIN	vaddem
12	Nearest police station	
13	Nearest Railway station	Margao
14	Date of Grant of Mining Lease	
15	Date of Execution	
16	Date of opening of Mine	
17	Date of first Renewal, if applicable and its period & expiry	
18	Date of second Renewal, if applicable and its period & expiry	16.03.2015 renewed, till 21.11.2027.
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	na
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Mr.Kishore Kumar Rajagopal Sesa Resources Limited Registration No. IBM/5456/2011 Sesa Ghor, 20 EDC Complex, Patto, Panaji (Goa) - 403 001, 2 nd June 2015, Kishore.Kumar@vedanta.co.in Ph. no. +91-832 2460600
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr. Joseph Coelho, 10.08.2016, Joseph.Coelho@vedanta.co.in , Mob no.+919765565523

22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Mr. Prakash Chandra, Prakash.Chandra@vedanta.co.in, Mob No. +91765930525, D.O.A. -25.02.2016

23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr. Prakash Chandra, B.E. in mining engineering, Prakash.Chandra@vedanta.co.in, Mob No. +91765930525, D.O.A. -25.02.2016
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	yes
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	On account of the change in the leasehold area and reduction in production capacity, Modification to the Approved Mining Plan for the period from 2013-14 to 2017-18 was approved vide Letter No. MMP/MECH-50/GOA/2015-16 dated 12.11.2015. Subsequently modification to the modified approved plan was approved by IBM vide letter no. MMP/MECH-50/GOA/2015-16 Vol.I dated 10.05.2016.
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	--
27	Mineral(s) granted in lease and proved for mining	Iron Ore
28	Method of Mining(Opencast, Underground)	Opencast
29	Category (Fully Mechanised, Others or Manual)	Fully Mechanised
30	Captive/Non Captive	Non Captive

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. –
Exploration

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	nil	nil	

1b	Exploration over lease area for Geological axis 1 or 2.	nil	nil	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	nil	nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2		na	
1e	Balance reserves as on 01.04.2017...			
1f	General remarks of inspecting officer on geology, exploration etc.	No exploration proposed in the assessment year.		

2.0 Development

SN	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	As per Plan	As per Plan	
2b	Separate benches in topsoil, overburden and mineral (Rule 13)	yes	yes	
2c	Stripping ratio or ore to OB ratio	1:4.39	1:0.457	
2d	Quantity of topsoil generation in m3	0	0	
2e	Quantity of overburden generation in m3	386800Tonnes	9144 Tonnes	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Development & ROM production lagging with respect to proposal.		

3.0 Exploitation

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	1	1	
3b	Quantity of ROM mineral production proposed	88098Tonnes	19996 Tonnes	
3c	Recovery of salable/usable mineral from ROM production	100%	As per proposal	
3d	Quantity of mineral reject generation	nil	nil	
3e	Grade of mineral reject generation and threshold value declared	na	na	
3f	Quantity of sub-grade mineral generation	nil	nil	
3g	Grade of sub-grade mineral generation	na	na	

3h	Manual / Mechanised method adopted for segregating from ROM	Dry screening	yes	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Dry screening	yes	
3j	Provision of drilling & blasting in mineral benches	nil	na	
3k	Provision of mining machineries in mineral benches	yes	yes	

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	yes	yes	
3m	Total area covered under excavation/pits		11.9649	
3n	Ore to OB ratio for the pit/mine during the year	1:4.39	1:0.457	
3o	Total area put in use under different heads at the end of year	Pit- Waste/reject Others-plantation	11.9649ha 10.0215ha 2.9476ha	
3p	Production of ROM mineral during last five-year period, as applicable	Yr-2012-13 Yr-2013-14 Yr-2014-15 Yr-2015-16 Yr-2016-17	36317 Tonnes 0 0 0 19996 Tonnes	
3q	General remarks of inspecting officer on method of mining etc.	Mines was not operated for the period 2013-14 to 2015-16.		

4.0 Solid Waste Management-Dumping

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	yes	yes	
4b	Location of topsoil, OB & mineral reject dumps	nil	nil	
4c	Number of dumps within lease area and outside lease area		Within the lease area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	on existing dump	yes	
4e	Number of active & alive dumps	1	1	
4f	Number of dead dumps			

4g	Number of dumps stabilised		nil	
4h	Whether Retaining wall or garland drain all along dumps are there		yes	
4i	Length of Retaining wall or garland drain all along dump	Garland drain available	Garland drain available	
4j	Number of settling ponds	three	three	
4k	Specific comments of inspecting officer	Garland drain passing through the toe of the waste dump without protecting wall which may lead the wash out of waste materials through water channel.		

5.0 Solid Waste Management-Backfilling

SN	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	nil	nil	
5b	Area under backfilling of mined out area	nil	nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	nil	nil	
5d	Total area fully reclaimed & rehabilitated	nil	nil	
5e	General remarks of inspecting officer on backfilling, reclamation etc	No proposal of backfilling for the assessment year.		

6.0 Progressive Mine Closure Plan

SN	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2). Details should be given in the format as given in Annexure-20.	yes	yes	
6b	Management of worked/mined out benches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of	Ni Cumulative-	Ni 3.0776ha 200nos. 86960 nos.	

	plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year		Nil -	
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	NA Nil NA	NA Nil NA	

6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	Nil	nil	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Yes	Yes	
6f	General remarks of inspecting officer on PMCP compliance & progressive	Area was not matured for backfilling.		

7.0 Mineral Conservation

SN	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Dry Screening	Dry Screening	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanised	Mechanised	
7c	Different grade of mineral sorted out at mines	Above THL	Above THL	

7d	Any beneficiation process at mines	Dry Screening	Dry Screening	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	satisfactory		

8.0 Environment

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	nil	nil	
8b	Concurrent use or storage of topsoil	nil	nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	yes	yes	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Nil	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Yes	Yes	
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	

8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	Washout Solid waste accumulated as silt in the pit bottom.
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9.0 Compliance of Rule 45

S. N.	Item	COMMENTS	Remarks
	Status of submission of Monthly and Annual returns	M.R. Submitted upto - A.R. submitted upto-	

S. N.	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	Yes	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Mines were not operated in the year 2015-16. Whereas annual returns for the year 2016-17 was not submitted till DOI.		
9d	Scrutiny of Annual return on afforestation			
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)			
9f	Scrutiny of Annual return on ROM stock and/or graded ore			
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost			
9i	Scrutiny of Annual return on fixed assets			

9k	Scrutiny of Annual return on mining machineries	Mine was not operated in the year 2015-16. Whereas annual returns for the year 2016-17 was not submitted till the inspection date.	
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10- Details of violations observed during current inspection and compliance position of earlier violation pointed out:-

Rule	Nature of Violation observed
37(1), 37(2) & 37(6)	<p>Every holder of a prospecting licence or mining lease shall take steps so that overburden, waste rock, rejects and fines generated during prospecting or mining operations shall be deposited and disposed in such they are not allowed to flow away and cause land degradation or pollution of surface water bodies and ground water.</p> <p>(i) Whereas It was observed during the inspection that the drainage channel passing through the toe of the overburden dump without securing retaining wall. This may result in escape of wash-off material therefrom in harmful quantities which may cause the degradation of environment.</p> <p>(ii) It was also observed that the substantial quantity of wash-off material accumulated at the pit bottom which may pollute the water bodies and cause degradation of environment.</p>

S.Prasad

DCOM