INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

Review and updation of Mining Plan REPORT

Goa regional office

Mine file No : GOA/Fe/180 Mine code : 30GOA02035

(i) Name of the Inspecting : KQ2) KALMATA M.K.

Officer and ID No.

(ii) Designation : Senior Mining Geologist

(iii) Accompaning mine : Shri Mohan M.sardar and Shri Leo Christy.A, QP's.

Official with

Designation

(iv) Date of Inspection : 18-OCT-17

(v) Prev.inspection date :

PART-I : GENERAL INFORMATION

(a) Mine Name : SIGAO

(b) Registration NO. :

(c) Category : A Mechanised

 $\text{(d)} \qquad \text{Type of Working} \qquad \qquad : \quad \text{Opencast} \\$

(e) Postal address

State : GOA

District : SOUTH GOA

Village : SIGAO

Taluka : SANGUEM

Post office : COLLEM

Pin Code : 403410

FAX No. : 0832-2513813 (hq)
E-mail : svs@vmsalgaocar.com
Phone : 0832-2612267,2512111(hq)

(f) Police Station : SIGAO

(g) First opening date : 08-JUN-53

(h) Weekly day of rest : SUN

2. Address for : Village : Sigao, correspondance : P.O. MOLLEM-403410

Tq. Sanguem, Dist. S.Goa, Goa

3. (a) Lease Number : GOA0377 (b) Lease area : 84.7

(c) Period of lease

(d) Date of Expiry : 31-MAR-20

4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : V.M. SALGAOCAR & BROTHERS LIMITED

Salgoacar House, P.B.No. 14 Fr. Gomes Road, Vascoda-gama SOUTH GOA GOA Phone:0832-2512111, 2513808

FAX :0832-2513813

Owner : SHIVANAND V. SALGAOCAR

V.M.Salgaocar&BroPvtLtd., Salgaocar House,Francisco Luis Gomes Rd.,VascodaGam

SOUTH GOA GOA

Phone: 512111(Off.) 51 FAX : 0832-513813

Agent : B.R.JAYANTH

M/sV.M.Salgaocar & Brothers Pvt.Ltd Surla office Po-Sanquelim NORTH GOA GOA

Phone: FAX :

Mining Engineer

Name : M. RAMESH BABU, Full Time

Qualification : B. E. (MIN. ENGG.), GVIT, KGF, B'LORE UN

Appointment/: 01-NOV-02 08-MAY-03

Termination date

Mining Engineer

Name : T. KARTHIKEYAN, Full Time

Qualification : B.E.(Mining), IInd Class Mine Manager's

Appointment/: 03-JAN-01 01-NOV-02

Termination date

Mining Engineer

Name : VENKATESH M. CHALIGERI, Full Time

Qualification : B.E. (Mining), GVI Engg.Coll., KGF, Banga

Appointment/: 08-MAY-03 01-JUN-04

Termination date

Mining Engineer

Name : K.V. SURENDRA, Full Time

Qualification : Dip. in Mining & Mine Surv., Ist Class M $\,$

Appointment/: 01-JAN-00 27-NOV-02

Termination date

Mining Engineer

Name : VINOD KUMAR THAKUR, Full Time

Qualification : B.E (MININGO Appointment/ : 07-JAN-07

Termination date

Mining Engineer

01-JUN-04

Appointment/ : Termination date

Mining Engineer

Name : CHATURSINGH PAIKARA, Full Time

Qualification : B.E

Appointment/ : 15-SEP-10

Termination date

Geologist

Name : E. KUPPUSAMY, Full Time

Qualification : M.Sc. (Geology), Univ. of Madras, Madras

Appointment/ : 16-MAY-01 02-MAY-03

Termination date

Geologist

Name : D.N.SUBRAMANYAM, Full Time

Qualification : M.SC (GEOLOGIST)

Appointment/ : 21-NOV-05

Termination date

Geologist

Name : SUNANDO SEN, Full Time

Qualification : M.Sc. (GEOLOGY)

Appointment/ : 02-MAY-03 21-NOV-04

Termination date

Manager

Name : RAJU T. SALGAOCAR

Qualification : Dip. in Mine & Mine Surveying

Appointment/ : 27-NOV-02

Termination date

6.	Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	31-OCT-02
	Plan/Scheme of Mining		Modif.approved Mining Scheme	13-JUL-05
			Renewal under rule 24 MCR1960	18-JUN-07
			Modif.of approved Mining Plan	24-FEB-09
			Modif.of approved Mining Plan	28-DEC-10
			Modif.of approved Mining Plan	28-AUG-12
			Mining Scheme rule 12 MCDR1988	03-SEP-15
			Modif.approved Mining Scheme	02-MAY-17

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks	
1a	Backlog of previous year	`Nil	Nil		
1b	Exploration over lease area for geological axis 1 or 2		Nil		
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	NA		
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil		
1e	Balance reserve as on 01/04/20		In '000' tons Reserves - 4512 Resources- 334		
1f	General remarks of inspecting officers on geology, exploration etc		The mine was not due to abeyance o Environmental Cle of Sigoa Iron ore So no exploration proposed and carr in the year 2016-	n arance mine. was ied out	

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	and E- 140 to	Nil	Mine was not working.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	yes	Nil	Mine was not working
2c	Stripping ratio or ore to OB ratio	1:5.25	Nil	Mine was not working
2d	Quantity of topsoil generation in m3	Nil	Nil	

2e	Quantity of overburden generation in m3	16800	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		The development was not carried out as per the proposal due to mine was not woking since the EC was kept in abeyance.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	02	Nil	
3b	Quantity of ROM mineral production proposed	8000 tons	Nil	
3c	Recovery of sailable/usable mineral from ROM production		Nil	
3d	Quantity of mineral reject generation	Nil	Nil	
3e	Grade of mineral rejects 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	Nil	Nil	No processing was proposed in the mines
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	

3j	Provision of drilling and blasting in mineral benches	No	No	
3k	Provision of mining machineries in mineral benches	Yes	No	
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Nil	
3m	Total area covered under excavation/pits		Nil	Area coverd by old pit is about-19.3230Ha.
3n	Ore to OB ratio for the pit/mine during the year.	1:5.25		
30	Total area put in use under different heads at the end of year		Nil	Area under minimng-19.32ha, OB dump - 22.64ha and roads-0.922ha.
3p	Production of ROM mineral during the last five year period as applicable	2013-14 and 2014-15-Nil 2015-16 6000 tons 2016-17 8000 tons.	No production from 2013- 14 to 2016-17.	the mine was not working due to EC was kept in abeyance.
3q	General remarks of inspecting officers on method of mining etc.		The mine was not working due to EC was kept in abeyance.	

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)			
4b	Location of topsoil, OB and mineral reject dumps			Mine was not working due to want of EC.

4c	Number of dumps within lease area and outside of lease area	One	Nil	Three old dumps are exist with in the lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Within UPL	Nil	
4e	Number of active and alive dumps.		Nil	
4f	Number of dead dumps.	Nil	Nil	Three old dumps are exist within lease area.
4g	Number of dumps established.		Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	Nil	Nil	Old retaing walls and Garland drains are there around the dumps
4i	Length of Retaining wall or garland drain all along dumps	Nil	Nil	Old retaing walls and Garland drains are there around the dumps
4j	Number of settling ponds	Nil	Nil	
4k	Specific comments of inspecting officer on waste dump management		The mine was not working and no waste dump was formed.	

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of 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 mineral out area (Rule 32)	Nil	Nil	

5d	Total area fully reclaimed and rehabilitated	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.		No backfilling was proposed.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Before Ist july oe every year	Mine was not working and report on PMCP was not submitted.	
6b	Area available for rehabilitation (ha) .	Nil	Nil	
6c	afforestation done (ha).	0.625Ha	0.5Ha	
6d	No. of saplings planted during the year	1000	Total 2200 saplings were planted inthe year 2016-17 in entire sigoa mine (Three leases)	
6e	Cumulative no .of plants		5490 for entire Sigao mine.	
6f	Any other method of rehabilitation	Nil	Nil	
6g	Cost incurred on watch and care during the year	Nil	Nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Nil	Nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	Nil	

6q	of inspecting officers on PMCP compliance and progressive closure		operations were taken place up to 2016-17 except plantation. The mine was not working due to EC was kept in	
6p	Compliance of environmental monitoring (core zone and buffer zone) General remarks	Nil	Nil No progressive closure	Mine was not working.
60	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Nil	Nil	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Nil	Nil	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Nil	Nil	
61	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Nil	Nil	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestati on on backfilled area	Nil	Nil	

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks

7a	ROM Mineral dispatch or grade-wise sorting within lease area	yes	Nil
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Nil	Nil
7c	Different grade of mineral sorted out at mines.	Nil	Nil
7d	Any beneficiation process at mines .	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Mine was not working due to EC was kept in abeyance.

Environment:

Sl.No.	Item	Propasals	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	Nil	
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 and additional plantation done (Rule 41)		About 5490 saplings were planted in the Sigao mine.
8g	Survival rate		70%
8h	Water sprinkling on roads to control airborne dust	Nil	Mine is not working
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		Lessee is regularly submitting monthly and annual returns combindly for all the three leases as Sigao mine.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	and Geologist- Shri Mohan	The details are shown for Sigao iron ore mine.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	mining-56.23 ha, Reclaimed- 11.984 ha, waste	The land use details are combindly given for Sigao iron ore mine.	
9d	Scrutiny of Annual return on afforestation	2200	Plantation was made in all the three leases.	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil	Nil	Mine is not working
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Nil	Nil	Mine is not working
9h	Scrutiny of Annual return on fixed assets		Combindly for Sigao iron ore mine.	
9k	Scrutiny of Annual return on mining machineries	Yes	Nil	Mine is not working.

Details of violati violation pointed	ations observed during current inspection and compliance position of ed out			
Violat	ion observed		Sho	ow couse position
Rule NO.	Issued on	Compliance on	Rule NO	. Issued on Compliance on

Date: (KALMATA M.K.)

Indian Bureau of Mines