

INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/KJR/MCDR-62/BBS

Mine code : 30ORI08026

- (i) Name of the Inspecting : RAM) RAMKISHAN R
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri Ajit Patra, Mines Manager
Official with
Designation
- (iv) Date of Inspection : 25/08/2019
- (v) Prev.inspection date : 11/04/2018

PART-I : GENERAL INFORMATION

1. (a) Mine Name : JILLING LANGALOTA
- (b) Registration NO. :
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : ORISSA
District : KEONJHAR
Village : JURURI & BANSPANI
Taluka : BARBIL
Post office : JAJANG
Pin Code : 758052
FAX No. : 06767 275367,279218
E-mail : EMI.BRBL@RME.SPRINTRPG.EMS
Phone : 06767 275457,275512,275240
- (f) Police Station : BAMEBARI
- (g) First opening date : 01/10/1954
- (h) Weekly day of rest : SUN
2. Address for : VILL. JORUDI
correspondance : PO. JAJANG, DIST.KEONJHAR
ORISSA.PIN:758052
3. (a) Lease Number : ORI0093
- (b) Lease area : 456.1
- (c) Period of lease : 50 yrs/As per section 8A of MMR Act 1957 (as amended up to
March 2015)
- (d) Date of Expiry : 31/03/2020
4. Mineral worked : MANGANESE ORE Associated
IRON ORE Main

5. Name and Address of the

Lessee : ESSEL MINING & INDUSTRIES LTD.
 INDUSTRY HOUSE 10 CAMAC
 STREET KOLKOTA-700017
 KOLKATA WEST BENGAL
 Phone:
 FAX :

Owner : Essel mining & Industries Ltd
 Barbil KEONJHAR ORISSA
 Phone: 06767-30437, 30
 FAX : 06767-30367

Agent : RAVINDRA GAJANAN SATHE
 KASIA IRON & DOLOMITE MINES
 M/S ESSEL MINING &
 INDUSTRIES LTD KASIA, PO-
 BARBIL, KEONJHAR KEONJHAR
 ORISSA
 Phone:
 FAX : 06767 275367

Geologist

Name : P.K.PARIDA, Full Time
 Qualification : M.SC GEOLOGY
 Appointment/ : 20/06/2004
 Termination date

Manager

Name : AJIT KUMAR PATRA
 Qualification : B. E. MINING
 Appointment/ : 13/12/2011
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	30/05/2002
		Renewal under rule 22 MCR1960	06/06/2005
		Modif.of approved Mining Plan	23/10/2007
		Mining Scheme rule 12 MCDR1988	17/04/2009
		Modif.approved Mining Scheme	13/09/2011
		Mining Scheme rule 12 MCDR1988	13/06/2014
		MP modif under 17(3) MCR 2016	18/05/2018
		FMCP under 23C(1)	28/08/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	69 nos of boreholes were proposed during the plan period i.e. 2018-19.	69 nos of boreholes were drilled during the year 2018-19.	Nil
1b	Exploration over lease area for geological axis 1 or 2	69 nos of boreholes were proposed during the plan period i.e. 2018-19 to 2019-20. for geological axis G1/G2 level	69 nos of boreholes were drilled during the year 2018-19.	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No such proposal.	Drilling was carried out by In house equipment.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	253.95 ha was the unexplored area for which 69 nos of boreholes were proposed to bought area under G1/G2 lwwl.	exploration was carried out as per the proposal.	Nil
1e	Balance reserve as on 01/04/20	As per the approved document as on 18.05.2018 the iron ore reserves are 32.62 mil.t. and resources are 82.88 mil.t.	due to addition/depletion over the period the iron ore reserves as on 01.04.2019 are 45.67 mil.t. and resources are 33.44 mil.t.	Nil
1f	General remarks of inspecting officers on geology, exploration etc		exploration is carried out as per the proposal.	Nil

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	2 quarries were proposed called as Jajang-Langalota Block, Gangai-gora Block are proposed for development during the year 2018-19.	development is carried out in Jajang-Langalota Block, Gangai-gora Block	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	no top soil generation is envisaged during the year and seperate dumping of OB and mineral are proposed.	seperate dumping of OB and mineral are carried out.	Nil
2c	Stripping ratio or ore to OB ratio	1:0.09 t/cu.m.	1:0.047 t/cu.m.	stripping ratio is less violation observed and communicatd to lessee dated 06.09.2019
2d	Quantity of topsoil generation in m3	Not applicable	Nil	Nil
2e	Quantity of overburden generation in m3	582000 cu.m.	296807 cu.m.	violation observed and communicated dated 06.09.2019
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		development is carried out by opencast minng method in 2 quarries.	Nil

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	2 quarries were proposed called as Jajang-Langalota Block, Gangai-gora Block are proposed for production during the year 2018-19.	production is carried out from 2 quarries.	Nil
3b	Quantity of ROM mineral production proposed	6.27 mil.t.	6.27 mil.t.	Nil
3c	Recovery of sailable/usable mineral from ROM production	5.89 mil.t. of saleable ore and 0.38 mil.t. of mineral reject	5.75 mil.t. of saleable ore and 0.51 mil.t. of mineral reject	Nil
3d	Quantity of mineral reject generation	0.38 mil.t. of mineral reject	0.51 mil.t.	Nil
3e	Grade of mineral rejects generation and threshold value declared.	+45%-54% Fe	+45%-54% Fe	Nil
3f	Quantity of sub grade mineral generation.	NA	Na	Addressed in mineral rejects.
3g	Grade of sub grade mineral generation	NA	Nil	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised.	Mechanised.	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed.	Not applicable	Nil

3j	Provision of drilling and blasting in mineral benches	deep hole drilling and blasting is proposed in mineral benches.	deep hole drilling and blasting is carried out in mineral benches.	Nil
3k	Provision of mining machineries in mineral benches	shovel and dumper combination is proposed for excavation and hauling.	shovel and dumper combination is deployed for excavation and hauling.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	9 m bench height is proposed.	maintained.	Nil
3m	Total area covered under excavation/pits	154.055 ha at the end of plan period i.e. 2019-20.	154.055 ha	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:0.09 t/cu.m.	1:0.047 t/cu.m.	Nil
3o	Total area put in use under different heads at the end of year	total area put to use at the end of plan period i.e. 2019-20 is 304.163 ha.	304.163 ha	Nil
3p	Production of ROM mineral during the last five year period as applicable	2014-15: 6.16 mil.t 2015-16: 6.22 mil.t 2016-17: 6.11 mil.t. 2017-18: 5.89 mil.t 2018-19: 6.27 mil.t	2014-15: Nil 2015-16: Nil 2016-17: Nil 2017-18: 0.44 mil.t 2018-19: 6.27 mil.t	the mine operations were suspended during the periods from 2014 to 2017 by forest department.
3q	General remarks of inspecting officers on method of mining etc.		production is carried out by opencast mining method and production planned from 2 quarries.	Nil

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	no topsoil generation is envisaged and seperate dumping in OB and mineral rejects are proposed	seperate dumping in OB and mineral rejects are caried out.	Nil
4b	Location of topsoil, OB and mineral reject dumps	waste generated from mine workings during the plan period is proposed to be dumped in 2 nos of dumps called as Dump No-6 & Jilling Waste Dump. mineral rejects generated are proposed to be temporarily stacked and blended with high grade ore.	waste generated from mine workings during the plan period is dumped in Dump No-6 & Jilling Waste Dump. mineral rejects generated are temporarily stacked and blended with high grade ore.	Nil
4c	Number of dumps within lease area and outside of lease area	2 no of dumps within lease area are proposed during the year 2018-19 for dumping of waste.	2 nos. within lease area.	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	beyond UPL	beyond UPL	Nil
4e	Number of active and alive dumps.	2 nos of dumps were proposed for waste dumping.	2 nos	Nil
4f	Number of dead dumps.	No such proposal.	Nil	Nil
4g	Number of dumps established.	No such proposal.	Nil	Nil

4h	Whether Retaining wall or garland drain all along dumps are there.	retaining wall and garland drain are provided all along the dump.	retaining wall and garland drain are provided all along the dump.	Nil
4i	Length of Retaining wall or garland drain all along dumps	retaining wall and garland drain already constructed, so new proposal given	Not applicable	Nil
4j	Number of settling ponds	Not applicable	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management		waste dumping is carried in 2 no of waste dumps as proposed in the mining plan.	Nil

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.	Area not matured for reclamation and rehabilitation	Not applicable	Nil
5b	Area under backfilling of mined out area	Not applicable	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not applicable	Nil	Nil
5d	Total area fully reclaimed and rehabilitated	Not applicable	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.		Area not matured for reclamation and rehabilitation.	Nil

 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).	PMCP report to submitted. be subitted before 1 st July.		Nil
6b	Area available for rehabilitation (ha) .	Not applicable	Nil	Nil
6c	afforestation done (ha).	3 ha	3 ha	Gap planation has been carried out in 3 Ha area.
6d	No. of saplings planted during the year	2500 nos	13200 nos	gap plantation carried out.
6e	Cumulative no .of plants	2500 nos	13200 nos	Nil
6f	Any other method of rehabilitation	Not applicable	Nil	Nil
6g	Cost incurred on watch and care during the year	Rs 200000	Rs 200000	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not applicable	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not applicable	Nil	Nil

6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on on backfilled area	Not applicable Nil	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not applicable Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not applicable Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Not applicable Nil	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Not applicable Nil	Nil
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not applicable Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	environmental monitoring is proposed in core and buffer zone.	environmental monitoring is carried out. Nil

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	PMCP measures implemented as per the mining plan	Nil
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Mineral Conservation:

Sl.No.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	grade-wise sorting of mineral is proposed.	grade-wise sorting of mineral is carried out.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	Nil
7c	Different grade of mineral sorted out at mines.	+45%-54% Fe and +54% Fe	+45%-54% Fe and +54% Fe	Nil
7d	Any beneficiation process at mines	No proposal.	NA	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		grade-wise sorting of mineral is carried out.	Nil

Environment:

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not applicable	Nil	Nil

8b	Concurrent use or storage of topsoil	Not applicable	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	seperate dumps for OB is proposed and mineral rejects are temporarily stacked and blended with high grade ore.	seperate dumps for OB is maintained and mineral rejects are temporarily stacked and blended with high grade ore.	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not applicable	Nil	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2500 nos	13200 nos	
8g	Survival rate	No such specific proposal.	98%	Nil
8h	Water sprinkling on roads to control airborne dust	water sprinkling on haul roads is proposed for dust supression	carried out.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		aestthetic beauty in and around the mine area are mainatined	Nil

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Monthly and annual returns are to be submitted as per rule 45 of MCDR, 2017	submitted.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	(i) Graduate Mining Engineer - 6 (ii) Diploma Mining Engineer - 8 (iii) Geologist - 9	found to be in order.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	total land use area furinshed are 310.897 ha.	the land use pattern is not in line with approved minng plan	violation observed and communicated letter dated 06.09.2019
9d	Scrutiny of Annual return on afforestation	13200 nos	found to be in order.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	0.51 mil.t	0.51 mil.t	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock is 523092.365 t	found to be in order.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	production cost Rs.1565	Rs.1565	Nil
9h	Scrutiny of Annual return on fixed assets	Rs 512082100	Rs 512082100	Nil

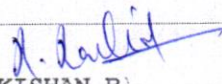
9k	Scrutiny of Annual return on mining machineries	BLAST HOST DRILL 165.000 MM - 2 BLAST HOST DRILL 102.000 MM - 1 SHOVEL (HYDRAULIC) 2.100 CUM - 10 SHOVEL (HYDRAULIC) 1.200 CUM - 3 DOZER 305.000 HP - 3	found to be in order.	Nil
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Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17 Rule 11(1)	06/09/2019				
Rule 45(7)	06/09/2019				

Date :

18/11/19


(RAMKISHAN R)

Indian Bureau of Mines