INDIAN BUREAU OF MINES
MINERALS DEVELOPMEMT AND REGULATION DIVISION

Review and updation of Mining Plan REPORT

Kolkata regional office

Mine file No : KOL/JHK/SB(W)/FE(V-1) **Mine code : 30JHK18015**

(i) Name of the Inspecting Officer and ID No. : **G004) OM PRAKASH GOPAL**

(ii) Designation : Regional Mining Geologist

(iii) Accompaning mine Official with Designation : Geologist - Debasis Das, QP sh. Gautam Kumar Guin

(iv) Date of Inspection : 17/03/2020

(v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **VIJAY - II IRON ORE MINE**

(b) Registration NO. :

(c) Category : A Fully Mechanised

(d) Type of Working : Opencast

(e) Postal address

State	: JHARKHAND
District	: SINGHBHUM (WEST)
Village	: GHATKURI
Taluka	: NOAMUNDI
Post office	: BARAJAMADA
Pin Code	: 833221
FAX No.	: 0657-2386056
E-mail	: rajesh.rajan@tatasponge.co
Phone	: 0657-7102462

(f) Police Station :

(g) First opening date : 16/08/2005

(h) Weekly day of rest :

2. Address for correspondance :

3. (a) Lease Number : JHK0047
(b) Lease area : 155.08
(c) Period of lease : 50
(d) Date of Expiry : 17/08/2055

4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : TATA STEEL LONG PRODUCTS LTD.
AT & P.O.- JODA, KEONJHAR
ORISSA
Phone:
FAX :

Owner : ASHISH ANUPAM
M/S TATA STEEL LONG
PRODUCTS LTD., 11 FLOOR,
TATA CENTRE, 43, JN ROAD,
KOLKATA KOLKATA WEST BENGAL
Phone:
FAX :

Agent : Mr. Sahabji Kuchroo
Tata steel Long Products
Ltd. Po - Joda, Dist -
Keonjhar Odisha - 778034
SINGHBHUM (WEST) JHARKHAND
Phone:
FAX :

Mining Engineer
Name : Debashish Mukherjee,Full Time
Qualification : B.E. in Mining Engineering
Appointment/ Termination date : 07/01/2021

Mining Engineer
Name : RAMASHISH KUMAR,Full Time
Qualification : DEGREE IN MINING ENGINEERING
Appointment/ Termination date : 03/07/2019

Mining Engineer
Name : SURESH KUMAR JENA,Full Time
Qualification : DEGREE IN MINING ENGINEERING
Appointment/ Termination date : 03/07/2019 07/01/2021

Geologist
Name : Debasis Das,Full Time
Qualification : M.Sc. Geology
Appointment/ Termination date : 03/07/2019

Geologist
Name : Ajoy Kumar Nandi,Full Time
Qualification : M.Tech in Geo Exploration
Appointment/ Termination date : 20/01/2021

Manager
Name : NAVEEN SRIVASTAVA
Qualification : Degree in Mining
20/02/2020

	Appointment/ Termination date	:		
6.	Date of approval of Mining Plan/Scheme of Mining	:	Modif.of approved Mining Plan	06/01/2009
			Mining Scheme rule 12 MCDR1988	20/08/2010
			Modif.approved Mining Scheme	14/06/2013

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	08 boreholes proposed for drilling in 2017-18.	No boreholes were drilled.	-
1b	Exploration over lease area for geological axis 1 or 2	19 boreholes proposed for drilling in 2018-19.	11 boreholes were drilled	-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No such proposal	-	-
1d	Balance area to be explored to bring Geological axis in 1 or 2	No such proposal	-	-
1e	Balance reserve as on 01/04/20	As per AR for the year 2018-19, Balance reserves as on 31/3/2019: 4.4 million tonnes (111) and 11.7 million tonnes (121)	-	-
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Vijay II mine is situated in the western limb of the regional horse shoe shaped synclinorium. The iron ore zone occur as oblong tabular body underlain by BHQ, phyllite etc. Iro ore occurs mostly in the NNE-SSW trending long and narrow ridge top over a strike length of about 2900 m.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks

2a	Location of development w.r.t.lease area	Quarry 1 and 2	Quarry 1 and 2	-
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Development of one bench each in soil & OB and 6 benches in ore	One bench each in soil & OB and 6 benches in ore as proposed	-
2c	Stripping ratio or ore to OB ratio	1:0.12	1:0.04	
2d	Quantity of topsoil generation in m3	267 m3	641 m3	-
2e	Quantity of overburden generation in m3	484650 m3	102393 m3	-
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	-

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two	Two	-
3b	Quantity of ROM mineral production proposed	4 million tonnes	2.496 million tonnes	Fresh EC for enhanced production capacity (4 million tonnes) not obtained so for.
3c	Recovery of sailable/usable mineral from ROM production	Entire ROM is useable	Entire ROM is useable	-
3d	Quantity of mineral reject generation	NIL	NIL	-
3e	Grade of mineral rejects generation and threshold value declared.	-	-	-
3f	Quantity of sub grade mineral generation.	NIL	NIL	-

3g	Grade of sub grade mineral generation	-	-	-
3h	Manual / Mechanised method adopted for segregating from ROM	Crushing and screening done to obtain optimum feed grade material	Crushing and screening done s proposed	-
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposal	None	-
3j	Provision of drilling and blasting in mineral benches	Yes	Yes	-
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	Not mentioned	-	-
3n	Ore to OB ratio for the pit/mine during the year.	1:0.12	1:0.04	-
3o	Total area put in use under different heads at the end of year	Area put to use at the end of plan period: Pits: 58.08 ha, Conveyer 2.1 ha, Roads: 5.2 ha, Mineral seperation plant:	Approximate area under different heads: Pits: 40 ha, Fines storage : 6 ha	-
3p	Production of ROM mineral during the last five year period as applicable	2015-16 - 2.5 million tonnes 2016-17 - 2.5 million tonnes 2017-18 - 2.5 million tonnes 2018-19 - 4 million tonnes	2015-16 - 2.045 million tonnes 2016-17 - 2.496 million tonnes 2017-18 - 2.499 million tonnes 2018-19 - 2.496 million tonnes	-

3q	General remarks of inspecting officers on method of mining etc.	-	-	-

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Proposal for seperate dumping of top soil and OB envisaged.	Seperate dumping of top soil and OB is in practice.	-
4b	Location of topsoil, OB and mineral reject dumps	Top Soil: N/S 52493 to 52480 and E/W 29116 to 29102 OB: N/S 54455 to 54240 and E/W 30232 to 29900	Top Soil: N/S 52483 to 52473 and E/W 29114 to 29104 OB: N/S 54455 to 54067 and E/W 30265 to 29997	-
4c	Number of dumps within lease area and outside of lease area	one	one	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Within UPL (Backfilling over mine out area)	Within UPL (Backfilling over mine out area)	-
4e	Number of active and alive dumps.	None	-	-
4f	Number of dead dumps.	None	-	-
4g	Number of dumps established.	None	-	-
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	-
4i	Length of Retaining wall or garland drain all along dumps	100	300	-
4j	Number of settling ponds	None	-	-

4k	Specific comments of inspecting officer on waste dump management	-	-	There is no external dumping and generated OB are utilised for concurrent backfilling of mined out area.

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.	Full extraction.	Full extraction.	-
5b	Area under backfilling of mined out area	0.59 ha	0.11 ha	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Spreading over backfillid area for plantation and restoration of mined out area.	Spreading over backfillid area for plantation and restoration of mined out area.	-
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	-
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	-

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).	-	Yes	-
6b	Area available for rehabilitation (ha) .	Not mentioned	-	-

6c	afforestation done (ha).	0.3 ha	0.5 ha	-
6d	No. of saplings planted during the year	1500	2710	-
6e	Cumulative no .of plants	-	11570	-
6f	Any other method of rehabilitation	Not mentioned	-	-
6g	Cost incurred on watch and care during the year	2 Crores	12 lakhs	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	0.59 ha	199x13x8	-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	0.59 ha	199x13x8	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	0.3 ha	0.35 ha	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposal	-	-
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No such proposal	-	-
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No such proposal	-	-

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No such proposal	-	-
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No such proposal	-	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposal for environemental monitoring envisaged.	Environmental monitoring is in practice.	-
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	The lease was transferred in the name of M/s Tata Sponge Iron Ltd and tranfer deed was executed on 17 August 2019. Further name of company was changed from M/s Tata Sponge Iron Ltd to Tata Long Products Ltd. wef 20 August 2019.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM dispatch after crushing and screening	ROM dispatch after crushing and screening	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised	Mechanised	
7c	Different grade of mineral sorted out at mines.	Not mentioned	-	-
7d	Any beneficiation process at mines .	No	No	-

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	-

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	267 m3	320m3	-
8b	Concurrent use or storage of topsoil	Concurrentr use	Concurrentr use	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Concurrent backfilling of waste proposed.	Generated fines are stacked seperately. Waste rocks are utilised for concurrent backfilling over mined out area is in practice.	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Concurrent backfilling of overburden for restoration of mined out area proposed.	Concurrent backfilling for restoration of mined out area is in practice.	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation proposal envisaged	Plantation done over backfilled area.	.
8g	Survival rate	-	65%	-
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	-

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	Mining difenitely distorts aesthetic beuty. To maintain aesthetic beuty, reclaimation and rehabilitation of mined out area has been taken up. Mined out area is restored by backfilling followed by plantation.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	-	Dually filled up AR submitted.	-
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer-Ramashish Kumar Geologist: Debasis Das	Mining Engineer and Geologist are in place.	-
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pits: 39.223 ha, Reclaimation: 1.5 ha Under waste disposal: 2.7 ha, Plant and building: 1.66 ha.	Details given in AR on area put to use appers to be correct.	-
9d	Scrutiny of Annual return on afforestation	2710 saplings planted inside the leas area.	Details given in AR on affoestation appers to be correct.	-
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Reject generation:NIL	Details given in AR on Reject generation appers to be correct.	-
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM stock : 23929 tonnes	Details given in AR appers to be correct.	-

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production: Rs. 853.46 per tonnes. Ore is dispathed for captive consumption	Details given in AR appers to be correct.	-
9h	Scrutiny of Annual return on fixed assets	Fixed Assets: Rs. 261805866/-	-	-
9k	Scrutiny of Annual return on mining machineries	Backhoe-14, Loader-12, Dumper-29, Dozer-2, Blast hole drill-1, crane -, crusher 2	Details given in AR appers to be correct.	-

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on

Date :

(**OM PRAKASH GOPAL**)

Indian Bureau of Mines