



**SECOND REVIEW OF MINING PLAN & SCHEME
OF MINING FOR THE YEAR
2013-14 TO 2017-18
OF
KATAMATI LEASE
OF
M/s TATA STEEL LIMITED
(Submitted under rule 12 of MCDR 1988)**

- (i) Name of the mine: Katamati Iron Mine
(ii) Lease area : 403.3238 Ha
(iii) Forest Area : 199.1720 Ha
(iv) Non Forest Area : 204.1518 Ha
(v) Category of Mine : Category A (Fully Mechanized)
(vi) Name of the mineral : Iron Ore
(vii) District : Keonjhar, Odisha
(viii) Period of Mining Scheme : 2013-14 to 2017-18
(ix) Date of Execution of Lease: 27-10-1984
(x) Lease execution period: 17.01.1983 to 16.01.2003
(xi) Date of Expiry: 16.01.2003
(xii) Date of Renewal applied: 05.09.2001
(xiii) Actual diverted forest land: NIL
(xiv) Area applied for diversion: 196.9719 ha

**अनुमोदित
APPROVED**

[Handwritten Signature]

**खान नियंत्रक (मध्यांचल)
Controller of Mines (Central Zone)
भारतीय खान ब्यूरो
Indian Bureau of Mines**

**PREPARED BY: TATA STEEL LIMITED
REGN. NO. : RQP/CAL/039/87/B**

**अनुमोदित
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RQP: TATA STEEL LIMITED
REGN. No.: RQP/CAL/039/87/B
Signature of Key Person

[Handwritten Signature]

Pankaj Srivastava

TATA STEEL LIMITED

Mines Division Noamundi, 833 217, India
Tel 91 92343-1340 Fax 91 6596 290737

Registered Office Bombay House 24 Homi Mody Street Mumbai 400 001

पत्र संख्या 314 (3)/..... 2012 एमसीसीएम (मध्य)/एमवी/
एमएस/पीएमसीपी, 31 दिनांक..... 15-4-2013
द्वारा अनुमोदित किया गया।
Approved vide letter No.314(3)/..... 2012
MCCM(CZ)/MP/MS/PMCP 31 dated..... 15-4-2013



CERTIFICATE-I

CONSENT LETTER FROM APPLICANT

The Second Review of Mining Plan & Scheme of Mining for the year 2013-14 to 2017-18 of Katamati Lease of M/s Tata Steel Limited, over an area of 403.3238 hectares for iron ore in village of Deojhar and Thakurani R.F. (Katamati), P.S. Joda under Champua sub-division of Keonjhar district of Odisha State, has been prepared by Mr. Pankaj Srivastava, Key Person of RQP: Tata Steel Ltd. (Registration No. RQP/CAL/039/87/B valid up to 22.11.2021).

I hereby undertake that I have understood the contents of the Second Review of Mining Plan & Scheme of Mining Plan of Katamati Lease and agree to implement the same in accordance with the law.

H.M. NERURKAR
Managing Director &
Nominated Owner
Tata Steel Limited
Singhbhum East
Jamshedpur- 1

Place: Jamshedpur
Date: March 2, 2013

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TATA STEEL LIMITED

Office of the Managing Director Jamshedpur 831 001 India
Tel 91 657 2424602 Fax 91 657 2431818 e-mail mdoffice@tatasteel.com
Registered Office Bombay House 24 Homi Mody Street Mumbai 400 001
www.tatasteel.com



CERTIFICATE-II

The Provision of Mines Act, Rules and Regulations made thereunder have been observed in the Second Review of Mining Plan & Scheme of Mining for the year 2013-14 to 2017-18 of Katamati Lease of M/s Tata Steel Limited, over an area of 403.3238 hectares for iron ore in village of Deojhar and Thakurani R.F. (Katamati), P.S. Joda under Champua sub-division of Keonjhar district of Odisha State, and where specific permissions are required the applicant will approach the DGMS. Further, standards prescribed by the DGMS in respect of miner's health will be strictly implemented.


Signature of Lessee

H.M.NERURKAR
Managing Director &
Nominated Owner
Tata Steel Limited
Singhbhum East
Jamshedpur- 1

Place: Jamshedpur
Date: March 2, 2013

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CERTIFICATE-III

CONSENT LETTER FROM APPLICANT FOR PROGRESSIVE MINE CLOSURE PLAN

The Progressive Mine Closure Plan of Katamati Lease complies all statutory rules, regulations, orders made by the Central or State Governments, Statutory Organizations, Court etc. and wherever specific permission is required the concerned authorities will be approached. I also give an undertaking to the effect that all measures proposed in this closure plan will be implemented in a time bound manner.

H.M. NERURKAR
Managing Director &
Nominated Owner
Tata Steel Limited
Singhbhum East
Jamshedpur- 1

Place: Jamshedpur
Date: March 2, 2013

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CERTIFICATE-IV

- A) This is to certify that the provisions of the Mines and Minerals (Development and Regulation) Act, 1957 and the Mineral Conservation and Development Rules, 1988 and rules made there under have been observed in the preparation of the Second Review of Mining Plan & Scheme of Mining for the year 20013-14 to 2017-18 of Katamati Lease of Tata Steel Limited, over an area of 403.3238 hectares for iron ore in village of Deojhar and Thakurani R.F.(Katamati), P.S. Joda under Champua sub-division of Keonjhar district of Odisha and wherever specific permissions are required, the applicant will approach the Indian Bureau of Mines.
- B) The information furnished in the Second Review of Mining Plan & Scheme of Mining of Katamati Iron Mine is true to the best of my knowledge.

PANKAJ SRIVASTAVA
KEY PERSON
RQP: TATA STEEL LTD.
REGD.NO.RQP/CAL/039/87/B
PO: NOAMUNDI – 833 217
DIST. SINGHBHUM WEST
JHARKHAND

PLACE: NOAMUNDI
DATE: 14.03.2013

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TATA STEEL LIMITED

Mines Division Noamundi 833 217 India
Tel 91 92343-1340 Fax 91 6596 290737

Registered Office Bombay House 24 Homi Mody Street Mumbai 400 001



CERTIFICATE-V

This is to certify that:

- A) The provisions of the Mines Act, Rules and Regulations made there under have been observed in the preparation of the Second Review of Mining Plan & Scheme of Mining for the year 2013-14 to 2017-18 of Katamati Lease of M/s Tata Steel Limited, over an area of 403.3238 hectares for iron ore in village of Deojhar and Thakurani R.F.(Katamati), P.S. Joda under Champua sub-division of Keonjhar district of Odisha State and wherever specific permissions are required, the applicant will approach the DGMS.
- B) The information furnished in the Second Review of Mining Plan & Scheme of Mining of Katamati Iron Mine is true to the best of my knowledge.

PANKAJ SRIVASTAVA
KEY PERSON
RQP: TATA STEEL LTD.
REGD.NO.RQP/CAL/039/87/B
PO: NOAMUNDI – 833 217
DIST. SINGHBHUM WEST
JHARKHAND

PLACE: NOAMUNDI
DATE: 14.03.2013

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CONTENTS

SL. NO.	DESCRIPTION	PAGE NO.
PART -A : REVIEW OF MINING PLAN		
1.	REVIEW OF MINING PLAN:	1
PART -B : PROPOSALS FOR THE NEXT FIVE YEARS		
2.	PROPOSAL UNDER SCHEME OF MINING FOR THE NEXT FIVE YEARS	14
3.	GEOLOGY & RESERVES	17
4.	CONCEPTUAL MINING PLAN	52
5.	MINING	66
6.	HANDLING OF SUBGRADE AND WASTE	85
7.	USE OF MINERAL	91
8.	MINERAL BENEFICIATION	93
9.	ENVIRONMENTAL MANAGEMENT PLAN	97
PART -C : PROGRESSIVE MINE CLOSURE PLAN		
10.	INTRODUCTION	112
11	MINE DESCRIPTION	117
12	REVIEW OF IMPLEMENTATION OF MINING PLAN	117
13	CLOSURE PLAN	117
14	ECONOMIC REPERCUSSIONS OF CLOSURE OF MINE & MANPOWER RETRENCHMENT	128
15	TIME SCHEDULING FOR ABANDONMENT	129
16	ABANDONMENT COST	130
17	FINANCIAL ASSURANCE	136

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PLATES

1	WET CIRCUIT PROCESSING FLOW DIAGRAM WITH MATERIAL BALANCE AT NOAMUNDI	I
2	DRY CIRCUIT PROCESSING FLOW DIAGRAM WITH MATERIAL BALANCE AT NOAMUNDI	II
3	FLOW SHEET OF PROPOSED MOBILE CRUSHING & SCREENING PLANT AT KATAMATI	III
4	METHOD OF PITTING & PLANTING	IV
5	METHOD OF PLANTING BY CONTOUR TRENCHING	V
6	FLOW SHEET WITH MATERIAL BALANCE OF PROPOSED TOTAL BENEFICIATION PLANT AT NOAMUNDI	VI

ANNEXURES

1	RQP CERTIFICATE	I
2	AIR QUALITY MONITORING DATA	II
3	WATER QUALITY MONITORING DATA	III
4	SOIL QUALITY & NOISE LEVEL REPORT	IV
5	LETTER TO IBM FOR PERMISSION TO SUBMIT SURFACE PLAN & GEOLOGICAL PLAN IN THE SCALE OF 1:5000	V
6	CERTIFICATE OF CHANGE IN THE NAME OF THE COMPANY	VI
7	FINANCIAL ASSURANCE (BANK GUARANTEE) WITH RECEIPT	VII
8	POWER OF ATTORNEY OF THE APPLICANT	VIII
9	COPY OF THE MINING LEASE DEED AND APPLICATION FOR LEASE RENEWAL WITH FORM-J & LEASE MAP	IX
10	COPY OF ENVIRONMENTAL CLEARANCE ALONG WITH COMPLIANCE REPORT OF THE CONDITIONS.	X
11	COPY OF FOREST DIVERSION PROPOSAL WITH APPROVED FOREST MAP	XI
12	SUMMARY OF HYDROLOGICAL STUDY	XII
13	BOREHOLE LOGS WITH FORM J	XIII
14	COPY OF BOARD OF RESOLUTION OF APPOINTMENT OF OWNER	XIV
15	COPY OF APPROVED GEO-REFERENCED CADASTRAL MAP	XV
16	LIST OF OTHER LEASES HELD BY COMPANY	XVI
17	FEASIBILITY REPORT	XVII
18	PHOTO ID OF APPLICANT WITH ADDRESS PROOF	XVIII
19	UNDERTAKING TO COMPLETE EXPLORATION IN TIME BOUND MANNER	XIX
20	COPY OF CHEMICAL ANALYSIS FOR ORE, SUBGRADE, WASTE & TAILINGS	XX



21	PHOTOGRAPHS OF THE MINE	XXI
22	COPY OF APPROVAL LETTER OF FIRST SCHEME OF MINING	XXII
23	BLASTING REPORT BY CIMFR SCIENTISTS	XXIII
24	DETAILS OF SURFACE RIGHT ACQUIRED	XXIV
25	COPY OF TRADING LICENSE FOR TRANSPORTATION OF ROM FROM KATAMATI TO NOAMUNDI	XXV
26	LEVELWISE/BENCHWISE CALCULATION SHEET FOR TONNAGE PROPOSED	XXVI
27	DETAILS OF EXPLORATORY AGENCY	XXVII
28	CALCULATION SHEET FOR ORE RESERVE & RESOURCES(Fe>58%)	XXVIII
29	CALCULATION SHEET FOR SUBGRADE RESOURCES(Fe>45%&<58%)	XXIX
30	DETAILS OF THE AREA COVERED BY EXPLORATION	XXX
31	VOLUMETRIC ESTIMATION OF EXISTING SUBGRADE DUMP NO.3	XXXI
32	RECEIPT OF SUBMISSION OF EIA-EMP AT IBM BHUBAMESWAR	XXXII

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LIST OF DRAWINGS

SL.No	DESCRIPTION	DRAWING NO.	SCALE OF DRAWING
1	KEY PLAN	MP/KIM/R2/01/12	1:50000
2	SURFACE PLAN	MP/KIM/ R2/02/12	1:5000
3	PART SURFACE PLAN OF PIT-I(EASTERN PIT)	MP/KIM/ R2/2A/12	1:1000
4	SURFACE GEOLOGICAL PLAN	MP/KIM/ R2/03/12	1:5000
5	PART SURFACE GEOLOGICAL PLAN OF PIT I	MP/KIM/ R2/3A/12	1:1000
6	PART SURFACE GEOLOGICAL SECTION OF PIT I	MP/KIM/ R2/3B,3C,3D/12	1:1000
7	TRANSVERSE GEOLOGICAL SECTIONS	MP/KIM/ R2/04/12	1:5000
8	TRANSVERSE GEOLOGICAL SECTIONS	MP/KIM/ R2/4A/12	1:5000
9	TRANSVERSE GEOLOGICAL SECTIONS	MP/KIM/ R2/4B/12	1:5000
10	LONGITUDINAL GEOLOGICAL SECTIONS	MP/KIM/ R2/4C/12	1:5000
11	EXCAVATION PLAN-FY'14-EASTERN PART	MP/KIM/ R2/05/12	1:2000
12	EXCAVATION PLAN-FY'15-EASTERN PART	MP/KIM/ R2/5A/12	1:2000
13	EXCAVATION PLAN-FY'16-EASTERN PART	MP/KIM/ R2/5B/12	1:2000
14	EXCAVATION PLAN-FY'17-EASTERN PART	MP/KIM/ R2/5C/12	1:2000
15	EXCAVATION PLAN-FY'18-EASTERN PART	MP/KIM/ R2/5D/12	1:2000
16	COMPOSITE EXCAVATION PLAN & SECTION OF WESTERN PART (PIT - II)	MP/KIM/ R2/5E/12	1:2000
17	COMPOSITE PLAN & SECTION	MP/KIM/ R2/5F/12	1:2000
18	COMPOSITE SECTION OF EASTERN PART (PIT - I)	MP/KIM/ R2/6/12	1:2000
19	YEARWISE EXCAVATION SECTION OF EASTERN PART(PIT I): A-A1	MP/KIM/ R2/6A/12	1:2000
20	YEARWISE EXCAVATION SECTION OF EASTERN PART(PIT I):B-B1	MP/KIM/ R2/6B/12	1:2000
21	PLAN AND SECTION OF PROPOSED DUMPS NO1,2 & 3	MP/KIM/ R2/07/12	1:2000
22	CONCEPTUAL PLAN	MP/KIM/ R2/08/12	1:5000
23	CONCEPTUAL SECTION	MP/KIM/ R2/09/12	1:5000
24	ENVIRONMENT PLAN	MP/KIM/ R2/10/12	1:5000
25	ENVIRONMENT MANAGEMENT PLAN	MP/KIM/ R2/10A/12	1:5000
26	SLICE PLANS	MP/KIM/R2/11-11A/12	1:5000
27	FINANCIAL ASSURANCE PLAN	MP/KIM/ R2/12/12	1:5000
28	PLAN & SECTION OF SLIME DESILTING & DISPOSAL	MP/KIM/R2/13/12	1:2000
29	PLAN & SECTION OF EXISTING SUBGRADE DUMP NO.3	MP/KIM/R2/14/12	1:2000

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ABBREVIATIONS & DEFINITIONS

1	MCDR 1988	Mineral Conservation & Development (Amend) Rule 2003
2	RQP	Recognized Qualified Person under Rule 22B of the MCR 1960
3	DGMS	Directorate General of Mines Safety
4	IBM	Indian Bureau of Mines
5	MoEF, GOI	Ministry of Environment & Forest , Government of India
6	ROM	Run of Mine
7	CIMFR	Central Institute of Mining and Fuel Research
8	MEMC Week	Mines Environment & Mineral Conservation Week
9	OMQ	Ore Mines & Quarries Division of M/s Tata Steel Limited
10	UNFC	United Nations Framework Classification
11	MTPA	Million Tonnes Per Annum
12	BHJ	Banded Hematite Jasper
13	DCM	Dry Circuit Material
14	SME	Site Mixed Emulsion
15	Nonel	Non Electric Initiation System
16	HEMM	Heavy Earth Moving Machine
17	KL	Kilo Liters
18	EMP	Environment Management Plan
19	OHSAS	Occupational Health & Safety Assessment Series

ROM:

The part of the excavation which has Fe content more than 58% and is fed to the dry or wet processing plant.

Subgrade:

The part of the excavation which has Fe content between 45% to 58% and is stacked separately in subgrade dump.

Waste:

The part of the excavation which has Fe content less than 45% and is dumped separately in waste dump.

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PART-A

Review of the Mining Plan

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REGN. No.: RQP/CAL/039/87/B
Signature of Key Person

Pankaj Srivastava



1.0 REVIEW OF SALIENT FEATURES OF APPROVED MINING PLAN

1.1 NAME OF THE MINE: KATAMATI IRON MINE
 M/s TATA STEEL LTD.
 Village: Deojhar
 Subdivision: Champua
 District: Keonjhar
 State: ODISHA
 PIN: 833217

1.2 PARTICULARS OF APPROVED MINING PLAN

The Mining Plan submitted in accordance with Rule 24A of the MCR'1960 for the grant of renewal of lease, was approved by the Indian Bureau of Mines vide letter no.314(3)/2000-MCCM(C)/MP-14 dated 06.07.2001 for the period from 2001-02 to 2007-08.

The approved mining plan was modified (for period 2006-07 to 2007-08) in accordance with provisions of Rule 10 of MCDR, 1988 in view of its proposed increase in production from the existing quarry and commencement of Crushing and Screening Plant at Katamati and change in beneficiation techniques at process plant of Noamundi (since a part of ROM was also processed at Noamundi). The modification of mining plan along with Progressive Mine Closure Plan was approved by the Controller of Mines (CZ) vide letter no. 314(3)/2007-MCCM(C)/MP-2 dated 19.07.2007. The First Review of Mining Plan & Scheme of Mining for the period from 2008-09 to 2012-13 was approved by Indian Bureau of Mines vide letter no.314(3)/2009/MCCM(CZ)/MS/19 dated 29.09.2009.

1.3 DATE OF COMMENCEMENT OF MINING OPERATIONS:

The Katamati Iron Mine lease was originally granted on 17.01.1933 for 30 years over an area of 12.17 sq. miles (3152.018 ha) including Joda West and Khondbond Blocks. It was renewed on 17.01.1963 for a period of 20 years over the same area. During the second renewal, Katamati formed an independent lease over an area of 403.3238 ha and renewed for a period of 20 years with effect from 17.01.1983. The third renewal of the mining lease was applied on 05.09.2001 for a period of 20 years with effect from 17.01.2003. The mine was initially worked manually by open cast method and subsequently operation was

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 Signature of Key Person

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खान नियंत्रक (मध्यांचल)
 Controller of Mines (Central Zone)
 भारतीय खान ब्यूरो
 Indian Bureau of Mines



discontinued in 1966. The mine was restarted in 1974 with semi-mechanised operation and during 2000-02 it became fully mechanised.

1.4(a) DEFICIENCIES, IF ANY, THAT EXISTED IN THE APPROVED MINING PLAN.

None

1.4(b) REVIEW OF COMPLIANCE OF SALIENT FEATURES OF THE APPROVED MINING PLAN (INCLUDING MODIFICATION PROPOSAL AND PROGRESSIVE MINE CLOSURE PLAN)

1.4(b).1: PRESENT NAME AND ADDRESS OF THE OWNER OF THE MINE

Name of the lessee:	Tata Steel Limited
Name & address of nominated owner:	Mr. H. M. Nerurkar Managing Director TATA STEEL LTD, Jamshedpur -

1.

Tel:0657-2145625
Fax: 0657-2424098

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RQP: TATA STEEL LIMITED
REGN. No.: RQP/CAL/039/87/B
Signature of Key Person

Pankaj Srivastava



The list of directors of the company has undergone a change since approval of the Mining Plan. The list of Board of directors as on 26th February 2013 is given below:

TABLE - 1.1
LIST OF BOARD OF DIRECTORS

S.No.	Name of the Directors	Address
1	Mr. Cyrus Pallonji Mistry	Bombay House,24, Homi Mody Street, Fort, Mumbai ,400001
2	Mr. B. Muthuraman	Bombay House,24, Homi Mody Street, Fort, Mumbai ,400001
3	Mr. Nusli Neville Wadia	The Bombay Dyeing & Mfg Co Ltd.,Neville House Ballard Estate Mumbai 400038 "Hemming Building" Pandurang Budhkar Marg,New Prabhadevi,Mumbai 4000025
4	Mr. Sam Palia	The Bombay Community Public Trust,Earnest House,8th floor Nariman Point,Mumbai 400021
5	Mr. Ishaat Hussain	Bombay House 24,Homi Mody Street,Fort, Mumbai ,400001
6	Mr. Subodh Bhargava	Tata Communications Ltd.,Videsh Sanchar Bhavan,Bangla Sahib Road,New Delhi 110001
7	Mr. Jacobus Schraven	Tata Steel Netherland BV,PO Box 10000,1970 CA Ijmuiden,The Netherlands
8	Mr. Andrew M. Robb	Tata Steel Europe Ltd.,30 Millbank,London SW1P 4WY,United Kingdom
9	Mrs. Mallika Srinivasan	Chairman & CEO,Tractors and Farm Equipment Limited,No.35,Nungambakkam High Road,Chennai 6000034
10	Mr.D.K.Mehrotra	Chairman,Life Insurance Corporation of India,7th Floor,West Wing,"Yogakshema",Jeevan Bima Marg,Nariman Point,Mumbai-400021
11	Mr. H. M. Nerurkar	Managing Director, Tata Steel Limited , Jamshedpur 831001,Jharkhand State
12	Dr. Karl-Ulrich Koehler	Chief Executive Officer & Managing Director,Tata Steel Europe Ltd.30 Millbank,London SW1P 4WY,United Kingdom
13	Mr. Kaushik Chatterjee	Bombay House,24, Homi Mody Street, Fort, Mumbai ,400001

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RQP: TATA STEEL LIMITED
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Signature of Key Person

Pankaj Srivastava



1.4. (b).2: EXPLORATION:

Exploration:

55 nos. of boreholes have been proposed in the First Scheme of Mining, primarily in the western part and partly in the eastern part in the forest areas at closer drill spacing to explore in detail and upgrade the resources as per UNFC norms. The actual exploration completed vis-à-vis the proposal in the First Review of Mining Plan & Scheme of Mining is given below:

TABLE - 1.2
EXPLORATION - PROPOSED v/s ACTUAL

YEAR	PROPOSED		ACTUAL	
	No.	Mtrs.	No	Mtrs
2008-09	NIL	0	NIL	0
2009-10	10	500	NIL	0
2010-11	15	750	3	138.55
2011-12	15	750	NIL	0
2012-13	15	750	NIL	0
Total	55	2750	3	138.55

Reasons and justification for deviation:

During the Plan period, out of 55 bore holes, 52 bore holes were proposed in forest area with an anticipation of getting forest clearance by 2009-10 for which the diversion proposal was submitted in April 2007. But the required forest clearance has not yet granted, therefore, we could not undertake the proposed exploration.

1.4(b).3: MINE DEVELOPMENT:

The mine development has been done in the area as proposed in the First Review of Mining Plan & Scheme of Mining but at a reduced scale of operation. Table - 1.3 shows the comparison between the proposed and the actual Development and ROM production.

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TABLE - 1.3

RQP: TATA STEEL LIMITED
REGN. No.: RQP/CAL/039/87/B
Signature of Key Person

Pankaj Srivastava



PROPOSED & ACTUAL PRODUCTION

(All figures are in million tonnes)

Year	ROM		Reject & Waste	
	Proposed	Actual	Proposed	Actual
2008-09	2.27	1.96	0.30	0.74
2009-10	3.10	1.63	0.96	0.16
2010-11	4.78	2.99	1.11	0.75
2011-12	7.02	4.42	0.89	0.60
2012-13	8.04	3.79*	1.04	0.62*
Total	25.21	14.79	4.30	2.87

*Actual figures of 2012-13 are upto Dec'12.

Reasons and Justification for deviation:

(i) The production during 2008-09 to 2010-11 and development during the year 2009-10 & 2010-11 was less than the target, since the production was restricted to 2 MTPA of ROM upto Nov'10 when the EC for 8MTPA was granted by MoEF.

(ii) In 2008-09, the removal of reject and waste is more than the proposed because of the sole reason to prepare the mine for higher volumes of production which calls for bigger capacity equipments and hence benches were developed to facilitate safe movement of the HEMM's.

(iii) The actual production in 2011-12 & 2012-13 was less than the plan as the mine is a captive mine and there was less requirement at Jamshedpur plant due to delay in commencement of new facilities to enhance the production at Jamshedpur.

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RQP: TATA STEEL LIMITED
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Pankaj Srivastava



1.4(b).4: ENVIRONMENT MANAGEMENT

- (a) **Afforestation:** Afforestation activities undertaken vis-à-vis the proposal is given below:

TABLE – 1.4
NO. OF TREES PLANNED v/s ACTUAL

Year	PLANNED	ACTUAL	
		TREE	VETIVER GRASS
2008-09	0	0	
2009-10	0	0	
2010-11	0	0	
2011-12	5000	1500	
2012-13	5000	5000	15000
Total	10000	6500	15000

During 2011-12, only 1500 saplings could be planted against the proposed 5000 saplings due to the fact that the major portion of dump was active only a part of the dump had become inactive over which plantation has been done.

(b) **Protective Measures:**

The protective measures like toe wall, garland drain & check dam constructed vis-à-vis the proposed is given below:

PROPOSED			ACTUAL		
YEAR	ITEM	LENGTH	YEAR	ITEM	LENGTH
2010-11	TOE WALL	200 m	2011-12	TOE WALL	231 m
2008-09	GARLAND DRAIN	200 m	2011-12	GARLAND DRAIN	430 m
2009-10	CHECK DAM	2 NOS.	Could not be constructed due to non-availability of forest clearance.		

During 2009-10, two nos. of check dams have been proposed one each in PitII & PitIII, but the workings in those pits could not be commenced due to want of forest clearance. Hence the proposed check dams could not be constructed.

(c) **Environment Monitoring:**

The Environment monitoring of following items has been conducted regularly and the report is attached in Annexures II, III & IV.

RQP: TATA STEEL LIMITED
REGN. No.: RQP/CAL/039/87/B
Signature of Key Person

Pankaj Srivastava