# MCDR INSPECTION REPORT

# **General**

S.	Particulars	Details
N.		
1	Name of the Mine	Kirari Limestone Mine Lease No.3
2	Total Lease Area (Ha) with breakup of Non-forest and	Total area – 167.048 Ha, All Non-Forest
	forest land	area
3	Minecode	38CH606001
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/378/2011
5	Name of the lessee, Address, phone, email and fax number	M/S Lafarge India Pvt. Limited, Equinox
		Business Park, Tower-3, Kurla, Mumbai
		Phone:02266306511
		E mail:ramesh.chandra@lafarge.com
	X7'11	Fax:022-66306510
6	Village	Kirari
7	Taluka/Mandal	Akaltara
8	District	Janjgir-Champa
9	Pincode	495663
10	State	Chattisgarh
11	Post office	Akaltara
12	Nearest police station	Akaltara
13	Nearest Railway station	Akaltara
14	Date of Grant of Mining Lease	19.04.2000
15	Date of Execution	26.08.2008
16	Date of opening of Mine	
17	Date of first Renewal, if applicable and its period & expiry	NA
18	Date of second Renewal, if applicable and its period &	NA
	expiry	NA .
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,	Mr.Ujjwel Batria,Lafarge India
	email, fax number and date of appointment	Limited, Equinox Business Park, Tower-
	••	3,East Wing,4 th Floor of Bandra,Kurla
		Complex,LBS Road Kurla (W),Mumbai
		Date of Appointment:

Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines   Mr.V.N.Singh,Post Kirari Limestone   Mine,Dist-Janjgir-Champa(C.G.)   Date of appointment in mines-26.04.2012	21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr.Ramesh Chandra Pathak, VP Arasmeta Cement Plant, Gopalnagar, District-Janjgir- Champa, Phone No07817-234234, Date of appointment-02.07.2014
experience with Address, phone, email, fax number and date of appointment in mine  24 Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.  25 Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.  26 Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.  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  28 Method of Mining(Opencast, Underground)  29 Category (Fully Mechanised, Others or Manual)  Experience reported, Kirari Limestone Mine, Post-Kirari, Tehsil-Akaltara, Dist. 'Champa-Janjgir.  Appointment notice not given  Letter no. 314(3)/99/MCCM©/MP-12 dated 20.11.2000  21.06.2013(Modification in approved scheme which was approved dated 21.06.2012)  22 Limestone  Open cast  Fully Mechanised	22		Mine,Dist-Janjgir-Champa(C.G.)
mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.  25 Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.  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 Limestone  28 Method of Mining(Opencast, Underground)  29 Category (Fully Mechanised, Others or Manual)  Appointment notice not given  Letter no. 314(3)/99/MCCM©/MP-12 dated 20.11.2000  21.06.2013(Modification in approved scheme which was approved dated 21.06.2012)  21.06.2012  22.06.2012  23 Method of Mining(Opencast, Underground)  24 Fully Mechanised	23	experience with Address, phone, email, fax number and	experience reported,Kirari Limestone Mine,Post-Kirari,Tehsil- Akaltara,Dist.:Champa-Janjgir.
with five-year period and specific condition in approval letter, if any.  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 Limestone  28 Method of Mining(Opencast, Underground)  Category (Fully Mechanised, Others or Manual)  dated 20.11.2000  21.06.2013(Modification in approved scheme which was approved dated 21.06.2012)  Limestone  Open cast  Fully Mechanised	24	mines satisfy the rule 42 & carrying out their duties as per	Appointment notice not given
of Mining with five-year period and specific condition in approval letter, if any.  27 Mineral(s) granted in lease and proved for mining  28 Method of Mining(Opencast, Underground)  29 Category (Fully Mechanised, Others or Manual)  Scheme which was approved dated 21.06.2012)  Limestone  Open cast  Fully Mechanised	25	with five-year period and specific condition in approval	
28       Method of Mining(Opencast, Underground)       Open cast         29       Category (Fully Mechanised, Others or Manual)       Fully Mechanised		of Mining with five-year period and specific condition in approval letter, if any.	scheme which was approved dated 21.06.2012)
29 Category (Fully Mechanised, Others or Manual) Fully Mechanised	27	Mineral(s) granted in lease and proved for mining	Limestone
	28		Open cast
30 Captive/Non Captive Captive	29	Category (Fully Mechanised, Others or Manual)	Fully Mechanised
	30	Captive/Non Captive	Captive

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. (Duplication of information in existing TMIS data sheets and draft write up has been avoided.)

#### **Exploration**

S.N.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous	2012-13:10	2014-15:15 nos	
	year	nos	2015-16:14 nos,Total	
		2013-14:15	29 nos bore holes	
		nos	reported.	
		2014-15:15		
		nos		
		Total 40 nos		
		boreholes in		
		scheme		
41	- · · · ·	period.	1001	
1b	Exploration over lease	Broadly the	Approx.130 ha.	
	area for Geological	lease area to		
	axis 1 or 2.	be covered	~4	
1c	Exploration Agency		Shriram	
	& Expenditure in lakh		Gemecom,Bilaspur,23	
	Rupees during the		lakhs	
1.1	year		4 20.1	
1d	Balance area to be		Approx 30 ha.	
	explored to bring			
	Geological axis in 1			
1.	or 2			
1e	Balance reserves as	35 million tons	36 million tons	
1.0	on 01.04.2015			The descrit
1f	General remarks of			The deposit is very uniform
	inspecting officer on			and sufficient
	geology, exploration			exploration is
	etc.			done.

#### **Development**

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development	649986.58 E to	Broadly as per	
	w.r.t. lease area	638384.28 E	proposal	
		2430482.23 N to		

		2430380.42 N		
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	One bench in soil and 3 benches in limestone	One bench in soil and 4 benches in Limestone	
2c	Stripping ratio or ore to OB ratio	0.15		
2d	Quantity of topsoil generation in m <sup>3</sup>	20000 m3	19745 m3	
2e	Quantity of overburden generation in m <sup>3</sup>	130000 MT	50689 MT	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.			The development is broadly done within a limit of proposal given

# **Exploitation**

S.N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	one	one	
3b	Quantity of ROM mineral production proposed	720000 MT	275269 MT	
3c	Recovery of salable/usable mineral from ROM production	No Proposal	NA	
3d	Quantity of mineral reject generation	No Proposal	Nil	
3e	Grade of mineral reject generation and threshold value declared	No Proposal	NA	
3f	Quantity of sub-grade mineral generation	No Proposal	Nil	
3g	Grade of sub-grade mineral generation	No Proposal	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	
3i	Any analysis or beneficiation study proposed & carried out	No Proposal	NA	

	for sub-grade mineral and reject			
3j	Provision of drilling & blasting in mineral benches	With deep hole drilling & blasting using 115mm drill machine	As per proposal	
3k	Provision of mining machineries in mineral benches	Yes	As per proposal	Excavators capacity- 1.8/1.2 m3,tippers 20 tons,rock breaker
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	yes	As per proposal	6 meter avg.bench height.
3m	Total area covered under excavation/pits	12.78 ha.	10.68 ha.	
3n	Ore to OB ratio for the pit/mine during the year	No specified proposal	1:0.122	
30	Total area put in use under different heads at the end of year	No specific proposal given yearwise	Total excavated area-10.68 ha.,afforestation-10.42 ha.	
3p	Production of ROM mineral during last five-year period, as applicable	Year Proposed (mt)  2011- 100000 12 2012- 720000 13 2013- 720000 14 2014- 720000 15 2015- 720000 16 Total 2980000	Year Actual (mt)  2011- 80658 12  2012- 253774 13  2013- 333063 14  2014- 308311 15  2015- 275269 16  Total 1251075	
3q	General remarks of inspecting officer on method of mining etc.	The method of mining proposed opencast Mechanised	The working has been carried out broadly as per proposal	

## **Solid Waste Management-Dumping**

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate dumping proposal given for soil & waste	Broadly as per proposal	
4b	Location of topsoil, OB & mineral reject dumps	649986.058 E to 638384.280 E,2430482.23 N to 2430380.42 N	Broadly as per proposal	
4c	Number of dumps within lease area and outside lease area	5 dumps within ML & outside ML nil	as per proposal,Outside ML no dump	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	In ML area	as per proposal	
4e	Number of active & alive dumps	2 active dump	as per proposal	
4f	Number of dead dumps	Three	Three	
4g	Number of dumps stabilished	Two	Two	
4h	Whether Retaining wall or garland drain all along dumps are there		yes	
4i	Length of Retaining wall or garland drain all along dump	NA	30000 meter garland drain	
4j	Number of settling ponds	one	one	
4k	Specific comments of inspecting officer on waste dump management			During inspection it was observed that two dumps are active and rest are old dumps and some plantation done on old dumps and somewhere by natural

		vegetation
		dump is
		stabilised

## **Solid Waste Management-Backfilling**

S.N.	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			There is no reclaimed and backfilled area.

# **Progressive Mine Closure Plan**

S.N.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2). Details should be given in the format as given in Annexure-20.		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 plants v) Any other specific method of rehabilitation	Nil	Afforestation done-10.42 ha.,no. of saplings planted during 2015-16:5000 nos,cumulative no of plants-31775 nos.	

	vi)Cost incurred on watch & care during the year			
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	Nil	Nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Methof of rehabilitation	Nil	Nil	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	quaterly	complied	
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations			

# **Mineral Conservation**

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Nil	Nil	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Nil	Nil	The mechanical method used sometimes to separate intercalated waste.
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			No mineral beneficiation

conservation & beneficiation		done.
issues		

## Environment

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Top soil used for plantation	
8b	Concurrent use or storage of topsoil	One top soil dump	As per proposal	Partly used for afforestation and rest put in dump
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	One reject dump	As per proposal	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	NA	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	NA	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)		Yes	
8g	Survival rate		70%	
8h	Water sprinkling on roads to control airborne dust	Water Tanker 20 KL	Water Tanker	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Due to some plantation and measures taken for dust suppression,etc no major adverse effect observed on aesthic beauty in and around mines.

#### **Compliance of Rule 45**

S.N.	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	MR submitted upto april'16 & AR upto 2014-15		
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			AR not submitted for 2015-16
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.			
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			

Details of violations observed during current inspection and compliance position of earlier violation pointed out:- Rule 13(1) of MCDR,1988 found violated.

Rajesh Kumar Das, Sr.ACOM, DOI-23.05.2016 (Name of inspecting officer with designation and date)