

INDIAN BUREAU OF MINES
 MINERALS DEVELOPMENT AND REGULATION DIVISION
 MCDR INSPECTION REPORT
 DEHRADUN REGIONAL OFFICE

Mine File No.	HP/SRM/LST-6	Mine Code:	38HPR 10002
i)	Name of the Inspecting Officer and ID No.		S038 SHAILENDRA SAKLANI
ii)	Designation		Assistant Mining Geologist
iii)	Accompanying mine Official with Designation		JAGDISH ANAND, OWNER
iv)	Date of inspection		08.05.2019
v)	Previous inspection date		18.08.2018

PART-I : GENERAL INFORMATION

1.	a)	Mine Name	BARWAS (04.91 HA)
	b)	Registration No.	IBM/555/2011
	c)	Category	A Other than Fully Mech.
	d)	Type of Working	Opencast
	e)	Postal Address	
		State	HIMACHAL PRADESH
		District	SIRMAUR
		Village	BARBAS
		Taluka	PAONTA SAHIB
		Post Office	KAMRAOO
		Pin Code	173029
		Phone No.	0135-2658467, +919411726576
		E-mail	Jagdishanand2@gmail.com
	f)	Police Station	PAONTA SAHIB
	g)	First opening date	13.10.1967
	h)	Weekly day of rest	SUNDAY
2.		Address for correspondence	JAGDISH ANAND (R.P. Anand & Sons) VPO-SATAUN, VIA-PAONTA SAHIB DISTRICT -SIRMOUR (H.P.) Mail-jagdishanand2@gmail.com
3.	a)	Lease Number	HPR0028
	b)	Lease area	04.91 ha
	c)	Period of lease	50 years

d)	Date of Expiry	31.03.2020 (As per section 8 (6) of MMDR, Act 1957)
4.	Mineral worked	Limestone (Main)
5.	Name and Address of the Lessee	RAM PRAKASH ANAND & SONS JAGDISH ANAND VPO-SATAUN, VIA- PAONTA SAHIB, DISTRICT - SIRMAUR (H.P.)
	OWNER	JAGDISH ANAND R.P. ANAND & SONS VPO- SATAUN, DISTRICT- SIRMAUR, HIMACHAL PRADESH PHONE : (01704) 262431, +919411726576
	AGENT	JAGDISH ANAND AT & P.O.-SATAUN VIA-PAONTA SAHIB DISTT. SIRMOUR (H.P.) SIRMAUR, HIMACHAL PRADESH PHONE: (01704) 262431, (0135) 2658467, 9411726576
	MANGER NAME QUALIFICATION APPOINTMENT/ TERMINATION DATE	SHRI S.C. TIRKHA FOREMAN CERTIFICATE HOLDER 01.07.2017
	MINING ENGINEER NAME QUALIFICATION	SHRI S.C.TIRKHA FOREMAN CERTIFICATE HOLDER
6.	Date of approval of Mining Plan/Scheme of Mining	Renewal under rule 22 MCR, 1960 dated 14.09.1989 Mining Scheme under rule 12 MCDR, 1988 dated 29.01.1998 Mining Scheme under Rule 12 MCDR, 1988 dated 01.08.2003 FMCP under Rule 23C(1) dated 08.06.2011 for surrendered area Mining Plan with PMCP under Rule 22 MCR, 1960 dated 05.07.2012 Modified Mining Plan with PMCP Rule 17(3) of MCR, 2016 and Rule 23(B) of MCDR, 1988 dated 02.02.2017 (4.91 hects) Modified Mining Plan with PMCP Rule 17(3) of MCR, 2016, 12(4A) of MCDR, 2017 and 23 of MCDR, 2017 dated 07.09.2018 (4.91 hects) •

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	<p>The mine was inspected for the purpose of examination of FMCP as the mine is going to expire on 31.03.2020. The modified mining plan was approved on 07.09.2018. As per MMP, it was proposed to carry out six bore holes(core) having a grid interval of 50 to 100 metres in compliance to provision 12(4A) of MCDR 2017 with a cumulative meterage of 338 metres. The inclination of boreholes were proposed from 35 degree to 52 degree from vertical.</p>	<p>During the inspection it was observed that no such boreholes were carried out as on date of inspection.</p>	<p>Violation cum show cause notice was issued to party for the violation of rule 12(4A) of MCDR 2017. The violation cum show cause notice shall be brought to logical end as per extant rules.</p>

1b	Exploration over lease area for geological axis 1 or 2	As per proposals contained in the modified mining plan entire area was proposed to brought under G-1 level by putting six number of boreholes.	During the inspection it is observed that within 50 meteres radius of working pits is considered under G-1 stage exploration which covers around 90% ML area. To fetch better value of mineral in depth four boreholes were proposed in fresh area and two in working pits. However, no such boreholes were carried out by the lessee which amounts the violation of rule 12(4A) of MCDR 2017.	Exploration over entire lease area has not been carried out. The mine was inspected for the purpose of examination of proposals incorporated in the draft FMCP.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No such proposals were incorporated in the MMP.	No prposed exploration (six boreholes) were carried out by the lessee. According to lessee, Udaipur MinTech were supposed to carry out exploration in the lease area but the same could not be commenced due to some reasons.	No exploration has been carried out.
1d	Balance area to be explored to bring Geological axis in 1 or 2	As per proposals about ten percent lease area was proposed to bring geological axis in by putting four boreholes in fresh area.	Proposed exploration has not been carried out.	
1e	Balance reserve as on 01/04/20	As per approved modified mining plan, a total of 0.268 million tonnes of limestone was assessed under 111 category and 1.172 million tonnes under 221 & 222 category.	After depletion of production 31319 tonnes during the year 2018-19, balance reserves as on 01.04.2019 is left to 0.237 million tonnes under 111 category.	No significant reserves are left under 111 category.

1f	General remarks of inspecting officers on geology, exploration etc	Adequate proposals for exploration were incorporated in the modified mining plan approved on 07.09.2018.	Proposed exploration has not been carried out as on date of inspection.	Violation cum show cause notice has been issued to lessee under intimation to State government on 07.06.2019.
----	--	--	---	---

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	As per approved MMP, mining was proposed in the western part of the lease area from 1430mRL to 1390mRL	Proposed mining were carried at earmarked place but mining is not carried out in a scientific manner. As per proposals mining shall be carried out by formation of nine benches maintaining the bench height of 5 metres each. During the inspection it was observed that only two benches were developed and the height of benches were also not maintained as per proposals leading to unsystematic mining.	Violation cum show cause notice has of rule 11(1) of MCDR 2017 has been pointed out to lessee on 07.06.2019.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No such proposals have been incorporated.	Hardly ten percent mineral rejects are generated during the course of mining in the form of dolomitic boulders.	
2c	Stripping ratio or ore to OB ratio	1:0.	1:0	Stripping ratio is maintained more or less.
2d	Quantity of topsoil generation in m3	No soil is generated hence no proposals are incorporated in the approved MMP.	Insignificant quantity of soil is generated at the mine.	

2e	Quantity of overburden generation in m ³	As per approved MMP, during the year 2018-19, generation of waste is not proposed. However, 2291 tonnes of mineral rejects are anticipated to be generated during the year 2018-19.	Insignificant quantity of waste has been generated at the mine which has been used for making parapet walls along the approach road. During the inspection it was observed that around 16 parapet walls were constructed along the approach road.	Insignificant quantity of waste generated during the year 2018-19.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Adequate pit development proposals are incorporated. During the year 2018-19, pit-3 is proposed for the development.	Proposed development is at earmarked place. However, the same has not been developed as per proposals leading to unsystematic mining. It is to mention here that lease area is situated on slope/hills and as such lacking of bench formation. The mineral is outcropping over the entire lease area and thus mineral is also obtained through development of roads also.	

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	During the year 2018-19 single pit(pit-3) is proposed for the mineral production during the year 2018-19.	Proposed workings were confined to pit-3. However, imprints of mining were also observed on the other side of the lease. However, at the time of inspection mining were in progress at pit-3.	Proposed workings were carried out at earmarked place at the time of inspection.

3b	Quantity of ROM mineral production proposed	In the earlier approved mining plan, a total of 50,000 tonnes of limestone was proposed for excavation during the year 2018-19. To comply the provisions of rule 12(4A) of MCDR 2017 the modified mining plan was approved on 07.09.2018 for a period from 01.092018-19 to 2019-20. The proposed production for the year 2018-19 (September 2018-19), 22912 tonnes of limestone was to be excavated.	Approximately 21000 tonnes of limestone was produced from september 2018-19 and cumulative production for the year 2018-19 was 31,319 tonnes.	No excess production has been achieved. Production was rather on lower side.
3c	Recovery of sailable/usable mineral from ROM production	Recovery of usable mineral from ROM production is proposed to 90%.	Recovery is more or less 90%.	
3d	Quantity of mineral reject generation	As per proposals, during the year 2018-19, 2291 tonnes of mineral rejects were anticipated to be generated. The mineral rejects are mainly dolomitic boulders or finer sized material.	Approximately 2000 tonnes of mineral rejects were generated during the year 2018-19 which is more or less as per proposals.	Mineral rejects are in the form of few dolomitic boulders or finer sized material.
3e	Grade of mineral rejects generation and threshold value declared.	No such proposals are incorporated.	The mineral rejects are mainly finer sized material or few dolomitic boulders.	grade of mineral rejects have not been quantified.

3f	Quantity of sub grade mineral generation.	No sub grade mineral generation is proposed.	No sub grade mineral generation is generated at the mine.
3g	Grade of sub grade mineral generation	Not applicable.	Not applicable.
3h	Manual / Mechanised method adopted for segregating from ROM	Not applicable.	Not applicable.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No beneficiation study is proposed.	None at present.

- | | | | |
|----|---|--|---|
| 3j | Provision of drilling and blasting in mineral benches | As per proposals, limestone being hard requires drilling and blasting. To maintain the height of bench to 5 metres, drilling by 64/115 mm dia drill machine is recommended. PF on an average is kept as 7-8 tonnes per Kg of explosive in the initial stage. However, in future efforts shall be made to improve it to reduce the generation of mines. Blasting frequency is recommended as twice in ever six days. Controlled blasting under the supervision of competent person is proposed. | The above proposals are being implemented. |
| 3k | Provision of mining machineries in mineral benches | As per proposals mining in general shall be carried out with the help of JCB adopting opencast method of mining. | At the time of inspection, deployment of JCB in mineral bench was observed. In addition to this two air compressors (76 cum/mn) and two dumpers of 9 tonnes capacity are also deployed at the site. |

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of mineral benches of five meteres each is proposed in the approved MMP.	Height of mineral benches of five meteres each is suitable for proposed method of mining. however, height of benches are not maintained as per proposals for which violation cum show cause notice has been issued to lessee.	Height of benches as per proposals are not being maintained.
3m	Total area covered under excavation/pits	As per approved modified mining plan, total area covered under excavated pits is 2.33 hectares.	Approximately 2.30 hectares of area has been covered under excavated pits so far.	
3n	Ore to OB ratio for the pit/mine during the year.	1:0	Insignificant quantity of waste is being generated at the mine which is being used for the construction of check dams and parapet walls.	
3o	Total area put in use under different heads at the end of year	As per approved MMP, total area put to use is 2.462 hectares.	Area is more or less as per proposals.	
3p	Production of ROM mineral during the last five year period as applicable	Year wise proposed production- year 2014-15- 35527, year 2015-16-35325 t, year 2016-17-34980t, year 2017-18- 35000t, 2018-19-50,000 tonnes.	Actual production obtained- year 2014-15- NIL, year 2015-16-8482, year 2016-17-37207t, year 2017-18- 25909 t, year 2018-19- 31319 tonnes.	Production obtained on lower side than proposed.
3q	General remarks of inspecting officers on method of mining etc.	Adequate proposals are incorporated for overall systematic mine development.	No systematic mine development has been carried out. number of benches as proposed have not been made and the height of constructed benches has not been maintained as per proposals. Exploration as proposed has also not been carried out.	Overall mine development is not satisfactory.

Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Insignificant quantity of soil and waste is generated. As regards to the mineral rejects to be generated shall be disposed off by means of stacking. The rejects shall be stacked near boundary pillar 10 & 11.	Very little quantity of rejects have been generated which is stacked at earmarked place seperately.	
4b	Location of topsoil, OB and mineral reject dumps	As per proposals near boundary pillar 10 and 11.	As per proposals.	
4c	Number of dumps within lease area and outside of lease area	One old dump	One old dump is observed.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Near southern side of the lease.	Near southern side of the lease.	
4e	Number of active and alive dumps.	None	None	
4f	Number of dead dumps.	None	None	
4g	Number of dumps established.	None	None	
4h	Whether Retaining wall or garland drain all along dumps are there.	One waste dump is already created within the limit of ML boundary. It is proposed that sloping side of the dump shall be made leak proof by constructing retaining wall having a dimension of 45m*2m* 1.5m.	None	

4i	Length of Retaining wall or garland drain all along dumps	One waste dump is already created within the limit of ML boundary. It is proposed that sloping side of the dump shall be made leak proof by constructing retaining wall having a dimension of 45m*2m* 1.5m.	None	
4j	Number of settling ponds	None	None	
4k	Specific comments of inspecting officer on waste dump management	None		Insignificant quantity of waste is generated at the mine.

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.	Since mining will not reach the ultimate pit limits(mineable limit), no back filling of pits is envisaged. The conceptual plan is for lease period (upto 31.03.2020) only whereas life of mine is more than lease period. So the entire mineable mineral is not possible to excavate. However, sides of the worked out area shall be dressed up properly. The stacking proposed will be as good as filling of void and can be considered as reclamation.	None at present.
5b	Area under backfilling of mined out area	This area has not been quantified.	None at present.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	None	None

5d	Total area fully reclaimed and rehabilitated	Since mining will not reach the ultimate pit limits(mineable limit), no back filling of pits is envisaged. The conceptual plan is for lease period (upto 31.03.2020) only whereas life of mine is more than lease period. So the entire mineable mineral is not possible to excavate. However, sides of the worked out area shall be dressed up properly. The stacking proposed will be as good as filling of void and can be considered as reclamation.	None at present except plantation.
----	--	--	------------------------------------

5e	General remarks of inspecting officers on backfilling and reclamation etc.	Since mining will not reach the ultimate pit limits(mineable limit), no back filling of pits is envisaged. The conceptual plan is for lease period (upto 31.03.2020) only whereas life of mine is more than lease period. So the entire mineable mineral is not possible to excavate. However, sides of the worked out area shall be dressed up properly. The stacking proposed will be as good as filling of void and can be considered as reclamation.	Reclamation work has yet not been taken up except plantation.
----	--	--	---

Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Proposals have been incorporated in the PMCP.	At the time of inspection, annual report for the year 2018-19 was not due for submission. However, annual report for the year 2017-18 has been submitted as required under rule 26(20) of MCDR 2017. However, envisaged proposals were not fully implemented for which violation cum show cause notice was issued to lessee.	Envisaged proposals were not fully implemented.

6b	Area available for rehabilitation (ha) .	As per proposals 0.05 hectares of area is proposed to be brought under afforestation as a reclamation measures. In addition to this 130m long wire fencing all along the pits, 272m long (cumulative length) parapet wallsto check rolling down are also proposed to be constructed. Reaining walls to check spreading of material is also proposed.	As on date of inspection, approximately 55 local saplings having a good survival rate were planted. But local cattles have dmadged the saplings. In addition to this about 11 parapet walls, check dams were also constructed during the year 2018-19. However the envisaged proposals were not fully implemented for which violation cum show cause notice has been issued to lessee on 07.06.2019.	Envisaged proposals were not fully implemented.
6c	afforestation done (ha).	As per proposals 60 saplings were proposed to be planted during the year 2018-19 covering an area of 0.05 hectares.	Approximately 55 saplings were planted during the year 2018-19 covering an area of 0.02 hectares.	
6d	No. of saplings planted during the year	60 saplings during the year 2018-19.	55 saplings during the year.	
6e	Cumulative no .of plants	140 saplings	Approximately 200 saplings with a survival rate of 70% approximately.	
6f	Any other method of rehabilitation	By way of constructing parapet walls, retaing walls, garland drain and fencing.	Few parapet walls, retaing walls and check dams were constructed during the year 2018-19.	
6g	Cost incurred on watch and care during the year	Proposals are not incorporated during the year 2018-19.	Approximately Rs. 1000 were incurred on watch and care.	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not applicable.	Not applicable.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not applicable.	Not applicable.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	Not applicable.	Not applicable.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not applicable.	Not applicable.
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Not applicable.	Not applicable.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Not applicable.	Not applicable.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not applicable.	Not applicable.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Not applicable.	Not applicable.

6p	Compliance of environmental monitoring (core zone and buffer zone)	Environmental monitoring measures have been incorporated in the MMP.	Air, water, noise pollution survey has been carried out and all the parameters were within permissible limits.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Adequate protective measures have been incorporated in the PMCP.	PMCP proposals were not fully implemented like construction of parapet walls, fencing, retaining walls etc for which violation cum show cause notice have been issued to lessee.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Gradewise sorting is not envisaged in the MMP.	Entire ROM is loaded into trucks from the mine to stock yard at their Sataun plot wherein manual sorting is carried out.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual sorting is proposed.	Manual sorting is carried out.	
7c	Different grade of mineral sorted out at mines.	Grade wise sorting is not proposed at the mine.	Entire ROM is loaded into trucks from the mine to stock yard at their Sataun plot wherein manual grade wise sorting is carried out.	
7d	Any beneficiation process at mines	None	None nor it is required at present as entire ROM is saleable.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No specific proposals for mineral conservation & mineral beneficiation is proposed.	The entire material is brought to their stock yard. After manual grade wise sorting it is being sold to different consumers.	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

8a	Separate removal and utilization of topsoil (Rule 32)	No specific proposals are incorporated for the removal of top soil as insignificant quantity of top soil is generated.	Insignificant quantity of top soil is generated from the mine. Whatever little quantity of top soil is generated is being used for the plantation purposes.
8b	Concurrent use or storage of topsoil	No specific proposals are incorporated for the removal of top soil as insignificant quantity of top soil is generated. However, it is proposed that whatever wquantity of soil will be generated during the course of minining shall be utilised for plantation purposes.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No prposals of dumping are incorporated. However, prposals for seperate stacking are incorporated.	whatever mineral rejects in the form of dolomitic boulder or fine sized material is being stacked seperately. Further waste rock is being used for the construction of check dams and parapet walls.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Prposals for utilisation of waste rocks are incorporated. Waste rock is being used for the construction of check dams and parapet walls.	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposals are incorporated by way of plantation, construction of parapet walls, garland drain and retaining walls etc.	Approximately 55 saplings were planted during the year 2018-19. In addition to this few parapet walls along the haul road and retaining wall have been provided.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Baseline information on existence of plantation and additional plantation proposals are given.	Approximately 55 saplings within the mining lease area were planted. cumulative plantation is around 200 saplings.
8g	Survival rate	Proposals are not incorporated.	Survival rate is around 50%.
8h	Water sprinkling on roads to control airborne dust	Proposals are incorporated.	Occasional sprinkling is carried out.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Annual return for the year 2017-18 has been submitted. All the monthly returns are being submitted timely.	Annual return for the year 2017-18 has been submitted. All the monthly returns are being submitted timely.	However, in the submitted annual return reserves have not been updated for which violation cum show cause notice has been issued to party on 07.06.2019.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information on mining engineer and manager is furnished in the return.	Information on mining engineer and manager is furnished in the return.	

- 9c Scrutiny of Annual return Lessee has been advised
Annual return on scrutinised on to correct the same in
land use pattern land use the annual return to be
for area under pattern Some submitted for the year
pits, reclaimed discrepancies 2018-19.
area, dumps etc. were observed
i.e area
covered under
current
workings were
not mentioned
as Nil. Lessee
has been
advised to
correct the
same in the
annual return
to be
submitted for
the year 2018-
19.
- 9d Scrutiny of Annual return on As per figures shwon appears to
afforestation information be correct considering
the annual the survival rate of
return 100 55%.
saplings have
been shown
planted during
the year 2017-
18 with a
survival rate
of 55%.
- 9e Scrutiny of Annual return on It is Information furnished
mineral reject mentioned that appears to be correct.
generation no rejects
(Grade and have been
quantity) generated
during the
year 2017-18.
- 9f Scrutiny of Annual return on Opening stock The figures furnished
ROM stock and/or (4609 t), are correct.
graded ore Production
25908t and
closing stock
5202 tonnes
and only
production of
cement grade
has been shown
in the annual
return.

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Details of cost of production is given as - Direct cost- Rs. 50 per tonnes, Mining- Rs. 50 per tonnes, Overhead cost- Rs. 20 per tonne and royalty as Rs. 230.	Figures furnished in the return appears to be correct.
9h	Scrutiny of Annual return on fixed assets	Figures on fixed assets is given as Rs. 1263690 (own capital).	Figures furnished appears to be correct.
9k	Scrutiny of Annual return on mining machineries	Two air compressor and two dumpers have been indicated.	The figure is correct. JCB is deployed on hired basis.

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)	07/06/2019	MCDR17	Rule 11(1)	07/06/2019
MCDR17	Rule 12(4)	07/06/2019	MCDR17	Rule 12(4)	07/06/2019
MCDR17	Rule 26(1)	07/06/2019	MCDR17	Rule 26(1)	07/06/2019
MCDR17	Rule 45(5)(c)	07/06/2019	MCDR17	Rule 45(5)	07/06/2019

Date :

(SHAIENDRA SAKLANI)

Indian Bureau of Mines