

MCDR INSPECTION REPORT

1.0 GENERAL

SL.N	PARTICULARS	DETAILS
1	File No.	CHG/DNT/TIN-4/60CHG03001
2	Name & Designation of the inspecting officer	Shri D.Dash, Senior Mining Geologist
3	Date of Inspection	25.08.2021 (MCDR)
4	Accompanying mine personnel	Shri. Vimal Luniya (Director)
5	Date of Last Inspection & Officer	17.03.2020, Shri S.Kartikeya, Junior Mining Geologist
6	Name of the Mine	Bade Bacheli Tin Ore Mine
7	Total Lease Area (Ha) with breakup of Non-forest and forest land	Forest Land: Nil. Non-forest land: 7.739 Ha Total land: 7.739 Ha
8	Mine code	60CHG03001
9	IBM Registration Number under rule 45 of MCDR, 2017	IBM/9859/2011
10	Name of the lessee, Address, phone, email and fax number	M/s Precious Minerals and Smelting Ltd. Semi Urban Industrial Area, Frezerpur, P.O.- Jagdalpur, Distt- Bastar Pin code-494001, Chhattisgarh Phone: 07782-228555/227247 Email: pmsl10@rediffmail.com, pmsl10@hotmail.com
	Village	Bade Bacheli
	Taluka/Mandal	Bade Bacheli
	District	Dantewada
	Pincode	494553
	State	Chhattisgarh
	Post office	Bacheli
11	Nearest police station	Bacheli
12	Nearest Railway station	Kirandul
13	Date of Grant of Mining Lease	11.10.2000 to 10.10.2020 for (twenty years) for lease period extension application submitted to the State Govt.
14	Date of Execution	11.10.2010
15	Date of opening of Mine	27.03.2002
16	Date of first Renewal, if applicable and its period & expiry	As per Section 8 A of MMDR amendment Act, 2015, mining lease has been reportedly extended up to 50 years. However, supplementary lease agreement for lease extension not made.
17	Date of Second Renewal, if applicable and its	NA

	period & expiry	
18	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA
19	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri. Vimal Luniya (Director) M/s Precious Minerals and Smelting Ltd. Semi Urban Industrial Area, Frezerpur, P.O.- Jagdalpur, Distt- Bastar Pin code-494001, Chhattisgarh
20	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri. Vimal Luniya (Director) M/s Precious Minerals and Smelting Ltd. Semi Urban Industrial Area, Frezerpur, P.O.- Jagdalpur, Distt- Bastar Pin code-494001, Chhattisgarh
21	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri.Somnath Sethiya , M/s Precious Minerals and Smelting Ltd. Semi Urban Industrial Area, Frezerpur, P.O.- Jagdalpur, Distt- Bastar Pin code-494001, Chhattisgarh Mob:9407696989 Email: pmsl10@rediffmail.com Date of appointment: 01.04.2018
22	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri.Urban Das Banjare (part time), B.E. Mining, M/s Precious Minerals and Smelting Ltd. Semi Urban Industrial Area, Frezerpur, P.O.- Jagdalpur, Distt- Bastar Pin code-494001, Chhattisgarh Mob:7697155494 Email: pmsl10@rediffmail.com Date of appointment: 01.04.2018
23	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Geologist Shri K.V. Krishna Rao M/s Precious Minerals and Smelting Ltd. Semi Urban Industrial Area, Frezerpur, P.O.- Jagdalpur, Distt- Bastar Pin code-494001, Chhattisgarh Phone: 07782-228555 Email: pmsl10@rediffmail.com Date of appointment: 21.02.2018
24	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Review of Mining Plan Approval letter no.& Date: Dnt/Tin/MPLN-1223/2019, Raipur, 22.06.2020. Proposal period: 2020-21 to 2024-25
25	Date of Approval of Scheme of	NA

	Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	
26	Mineral(s) granted in lease and proved for mining	TIN
27	Method of Mining (Opencast, Underground)	Opencast
28	Category (Fully Mechanized, Others or Manual)	Others
29	Captive/Non-Captive	Captive
30	EC for ROM Prod:	1500 TPA
31	FA amount Rs Valid up to:	Rs10,000,00 Valid up to: 31/03/2025

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. –

1.0 EXPLORATION

SN	ITEM	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	REMARKS
1a	Backlog of previous year	Nil	Nil	
1b	Exploration over lease area for Geological axis 1 or 2.	Nil	Nil	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	NA	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	40 Bore holes proposed during the period from 2021-22 to 2024-25 after that Entire Lease area will be explored under G1 Category		
1e	Balance reserves as 01.04.2021	Under 111 category: 681.884 Tones Under 211 category: 86.775 Tones		
1f	General remarks of inspecting officer on geology, exploration etc.	The Tin ore deposit of the mining lease area belong to Begpal series of archean period. The Bengpal series consist of Pegmatite reef (Tin ore bearing) and Amphibolites Sericite Schist. The pegmatite is associated with large crystal of Quartz feldspar with mica, tourmaline etc. in which tin ore is found in shape of cubic crystal. The pegmatites are deposited along the NW-SE trends. The major individual pegmatite range from less than 1 meters to 25 meters in width and 200 to 1500m in length 25 to 50 m in depth or more. The pegmatites are coarse and granular veined bodies. 40 Bore holes were proposed in year 2020-21 onwards after that Entire Lease area will be explored under G1 Category.		

2.0 DEVELOPMENT

SN	ITEM	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	REMARKS
2a	Location of development w.r.t. lease area	Pit 1 E -527788mE to-527888m E 900 2068700mN to 2068900mN	Pit 1 E -527788mE to-527888m E 900 2068700mN to 2068900mN	Development of pit is on lower side due to covid-19 and adverse law & order situation.
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Yes	Yes	
2c	Stripping ratio or ore to OB ratio	1:249	1:002	
2d	Quantity of topsoil generation in m ³	300	Nil	
2e	Quantity of overburden generation in m ³	1498	120	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Development was carried out in pit no. 1 as proposed. Development is on lower side due to covid-19 and adverse law and order situation.		

3.0 EXPLOITATION

S.N.	ITEM	PROPOSAL (2020-21)	ACTUAL WORK (2020-21)	REMARK
3a	Number of pits proposed for production	1	1	
3b	Quantity of Tin production proposed (Tonnes)	6	0.341	
3c	Recovery of saleable/usable mineral from Tin production (tones)	6	0.341	
3d	Quantity of mineral reject generation	Nil	Nil	
3e	Grade of mineral reject generation and threshold value declared	Nil,	Nil	
3f	Quantity of sub-grade mineral generation	Nil	Nil	
3g	Grade of sub-grade mineral generation	Nil	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual method adopted for segregating ores	Manual method adopted for segregating ores	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not Applicable	Not Applicable	
3j	Provision of drilling & blasting in mineral benches	No	No	
3k	Provision of mining machineries	Excavator-1	Deployed as	

	in mineral benches	Dumper -01 Tractor	proposed	
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	No year wise proposal for area to be covered under excavation furnished in approved plan. As per approved Mining Plan: Pit- 1.402 ha Waste- 1.057 ha Others- 0.423 ha.	No updated plan is maintained to determine the land use.	Violation Rule 31(4) of MCDR, 2017 pointed out for not maintaining updated plans & sections within 12 months.
3n	Ore to OB ratio for the pit/mine during the year	1:719	1:0.002	
3o	Total area put in use under different heads at the end of year	Pit- 1.402 ha Waste- 0.777 ha Others- 0.693 ha	Pit- 1.402 ha Waste- 0.777 ha Others- 0.693 ha	Since minimum mining activities have been carried out since approval of document.
3p	Production of Tin during last Five -year period, as applicable (tonnes)	2016-17	0.925	
		2017-18	0.696	
		2018-19	0.144	
		2019-20	0.410	
		2020-21	0.341	
3q	General remarks of inspecting officer on method of mining etc.	Method of mining is Open cast semi-mechanised mining method in which ore segregation is done manually.		

4.0 SOLID WASTE MANAGEMENT-DUMPING

SN	ITEM	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	REMARKS
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	yes	yes	
b	Location of topsoil, OB & mineral reject dumps	Southern Part of the Lease	Southern Part of the Lease	
4c	Number of dumps within lease area and outside lease area	Within Lease:6 Outside Lease: Nil	Within Lease:6 Outside Lease: Nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out side UPL	Out side UPL	
4e	Number of active & alive dumps	1	1	
4f	Number of dead dumps	05 inactive dumps	05 inactive dumps	

4g	Number of dumps stabilized	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	proposed	Not done	Violation of Rule 11(1) of MCDR, 2017 is pointed out.
4i	Length of Retaining wall or garland drain all along dump	Proposed . No length specified.	Not done.	
4j	Number of settling ponds	Not Applicable	Not Applicable	
4k	Specific comments of inspecting officer	Waste is properly handled.		

5.0 SOLID WASTE MANAGEMENT-BACKFILLING

SN	ITEM	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	REMARKS
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Nil	Nil	No area is not matured for Back filling.
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	Area is not matured for back filling.		

6.0 PROGRESSIVE MINE CLOSURE PLAN

SN	ITEM	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	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	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 vi) Cost incurred on watch & care during the	Nil	Nil	

	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	i) NA ii) NA iii) Nil iv) Nil v) Nil	i) NA ii) NA iii) Nil iv) Nil v) Nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	i) 150nos ii) 0 Ha iii) Nil	i) 150nos ii) 0 Ha iii) Nil	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Yes	Yes	
6f	General remarks of inspecting officer on PMCP compliance & progressive	Violation for noncompliance of proposal of garland drainage around waste dump is pointed out.		

7.0 MINERAL CONSERVATION

SN	ITEM	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	REMARKS
7a	ROM Mineral dispatch or grade-wise sorting within lease area	yes	Manual sorting	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual sorting	Manual sorting	
7c	Different grade of mineral sorted out at mines	yes	Manual sorting	
7d	Any beneficiation process at mines	Only Panning	Only Panning	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	By panning tin ore collected.		

8.0 ENVIRONMENT

SN	ITEM	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	REMARKS
8a	Separate removal and utilization of topsoil (Rule 32)	Yes	Separate removal and utilization of top soil is being	

			done.	
8b	Concurrent use or storage of topsoil	Yes	Concurrent utilization of top soil being done.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Planned	Separate dumps for overburden/waste rock and rejects.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed during the planned period.	Not done.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed during the planned period other than plantation.	Not done.	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	200	200 saplings	
8g	Survival rate	85%	60%	
8h	Water sprinkling on roads to control airborne dust	Yes	Water sprinkling on roads is being done water tanker to control air borne dust.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	EMP parameters are monitored regularly for control. Protection measure for waste dump in form of garland drainage has not been provided as proposed. Violation of Rule 11(1) of MCDR, 2017 is pointed out.		

9.0 COMPLIANCE OF RULE 45

S. N.	Item	Comments	Remarks
9a	Status of submission of monthly and Annual returns	M.R. Submitted up to–July, 2021 A.R. submitted up to- 2020-21,	Violation of Rule 45 (5) (c) of MCDR, 2017 pointed out for furnishing incorrect information in respect of land use, reserves and recovery
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under mining: 1.115 ha Waste dump site: 1.225 ha,	
9d	Scrutiny of Annual return on	Within Lease area: 200 nos.	

	afforestation	Outside Lease area: 00 nos.	quantity.	
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Nil		
9f	Scrutiny of Annual return on ROM stock and/or grade ore	Production: 0.341 T, Opening Stock: 0.208 T, Closing stock: 0.012 T		
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	Rs. 2110 per Kg ex-mine price and cost of production: Rs. 2110.00 per kg being a captive mine.		
9i	Scrutiny of Annual return on Fixed assets	Rs. 0.00 (Mentioned in Annual Return)		
9k	Scrutiny of Annual return on mining Machineries	Type of Machinery	Capacity of each Unit	No. of Unit
		Generator	75 kwh	01
		Pump	5 L/MN	01

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out: -

Details of the Violations Pointed out during Inspections:

नियम	उल्लंघन के प्रकार का ब्यौरा
11(1)	(i) No exploration has been carried out against proposal of vertical core drilling of 13 boreholes during the year 2019-20 . (ii) The waste dump has not been protected by garland drainage against the proposal.
31(4)	Plans and sections required under the Rule are not maintained up to date within 12 months .
45 (5) (c)	Following information are furnished incorrectly in submitted Annual Return for the year 2020-2021: (i) Surface area utilization. (ii) Mineral reserves (iii) Recovery quantity from smelter plant is not furnished although grade is furnished.
48	No record of boreholes in Form J maintained.

Violation of Rule 35(4) of MCDR, 2017 was pointed by Shri R.N.Mishra, SMG of this office vide letter dated 28.05.2021 for star rating of below 3 star. The lessee has not responded. Violation of Rule 11, 26, 45(7) and 46 of MCDR, 2017 were pointed out by Shri S.Kartikya, JMG vide his letter dated 12.06.2020. The lessee vide his letter dated 14.08.2020 has replied furnishing therewith point-wise compliance status. The violations were found to be complied.

Star rating for year 2020-21 has been examined and found to be 3 star . Accordingly, validated.

Date: 16.09.2021

(Debadurllav Dash)
Senior Mining Geologist

