

MCDR INSPECTION REPORT

Part-I: General

S. N.	Particulars	Details
1	Name of the Mine	Katasahi Manganese ore Mine.
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Total -196.86 Ha, non-forest area-123.988 Ha & Forest area-72.041 ha
3	Mine code	40ORI03068
4	IBM Registration Number under rule 45 of	IBM/4530/2011
5	Name of the lessee, Address, phone, email and fax number	M/s. Agrasen Sponge (P) Limited, At: Mandiakudar, PO: Chungimati, Kansbahal, Dist-Sundergarh
6	Village	Katasahi
7	Taluka/Mandal	Barbil
8	District	Keonjhar
9	Pin code	758052
10	State	Odisha
11	Post office	Chormalda
12	Nearest police station	Rugudi
13	Nearest Railway station	Barbil
14	Date of Grant of Mining Lease	03.07.2020
15	Date of Execution	06.07.2020
16	Date of opening of Mine	23.10.2020
17	Date of first Renewal, if applicable and its	NA
18	Date of second Renewal, if applicable and its period & 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, email, fax number and date of appointment	Mr.Murali Lal Sharma , M/s. AGRASEN SPONGE PRIVATE LIMITED, AT. MANDIAKUDAR ,P.O.- CHUNGIMATI, RAJGANGPUR ,Sundargarh , Phone No – 7894402799 Email – agrasensponge@gmail.com
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	----
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Mr. Sunil Kumar, At- Katasahi, PO-Chormalda, Keonjhar, Odisha-754004 date of appointment, 01.10.2020
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr. Sunil Kumar Diploma in mining Engineering with 2 nd class certificate of competency-1, 20 years of experience Address: At- Katasahi, PO-Chormalda, Keonjhar, Odisha- Date of appointment, 01.10.2020

24	Name of the Geologist, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr. .Chittaranjan Pani,Msc Mphil Geology ,16.10 years of Experience ,Phone no :9938213964 ,Email:chittaranjanpani566@gmail.com,DOA:14 .12.2021
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	The Modified Mining Plan was approved on 19.05.2022, vide IBM letter No. BBS/KJR/MN/2168/MPM/2022-23/147. No specific condition was there in approval letter.
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Modification of Mining Plan, Date of approval: 19.05.2022, Approval Period: 2022-23 to 2024-2025. No such special conditions are there.
27	Mineral(s) granted in lease and proved for	Manganese
28	Method of Mining(Open cast, Underground)	Open cast
29	Category (Fully Mechanized, Others or Manual)	OTFM
30	Captive/Non Captive	Non captive

Details about Mining Plan/ Mining Scheme

a) Letter No. and date of approval of mining plan	:	Letter No : MP/A/27-ORI/BHU/2020-21/2237,Date:02.12.2020
b) Letter No. and date of approval of Review of Mining Plan	:	Nil.
c) Period of mining plan/ mining scheme in force :	:	2020-21 to 2024-25.

PART II-

1. Scientific Mining:

Exploration:

S.N.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Previous year proposal was 100 nos	9 nos ,	Drilling stopped due to Forest clearance issue of lease area.
1b	Exploration over lease area for Geological axis 1 or 2.	175.529 ha	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	---	Nil, Due to lack of forest clearance.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	24.980 (G4 Area)	Work Stopped due to forest clearances.	
1e	Balance reserves as on 01.04.2023		604612.27 Mt.	

2. Development:

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	Quarry-6&7,Direction-N&E ,Benches-562,568,574 Rola Pit- Direction-N,S,E &W, Benches-586,592,598 Centre Pit- Direction-,E &W, Benches-598 &604	In between the proposed area.	As per approved MMP
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Dump-4, One Bench, Location -2429443N to 2429549 N /327613E to 327700E. Dump-5, One Bench, Location -2429443N to	As per proposal.	----do.....
2c	Stripping ratio or ore to OB ratio	28:1	7:1	
2d	Quantity of topsoil generation in m ³	Nil	Nil	No proposal in approved MP.
2e	Quantity of overburden generation in m ³	151520 m ³	35000.225 m ³	Actual work done only in 2 quarries .Other 2 quarries are not under operation due to lack of forest clearance and other field issues.

3. Exploitation

S.N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	5 nos(Quarry 6&7,Rola pit, centre pit ,Nala pit & GS Pit)	3 nos(Quarry 6&7, Centre pit & Rola pit)	GS Pit is under forest land.
3b	Quantity of ROM mineral production proposed	19291 t	4989.73 t	Less Production due to all pits are not under working condition.
3c	Recovery of salable/usable mineral from ROM production	Rom recovery percentage of Rom Mn ore pocket is considered as 40 %. As per geological report	ROM recovery % is not obtained as per the GR.	
3d	Quantity of mineral reject generation	16695 ton	4989.73 t	Less Production due to all pits are not under working condition.
3e	Grade of mineral reject generation and threshold value declared	Grade of mineral reject is 10-25%Mn & threshold value	Grade of mineral reject is 10-25%Mn & threshold value	

3f	Quantity of sub-grade mineral	16695 ton	4989.73 t	
3g	Grade of sub-grade mineral generation	10-25%Mn	10-25%Mn	
3h	Manual / Mechanized method adopted for segregating from ROM	Manual method	Manual method, of sorting, sizing and picking.	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No	Nil	
3j	Provision of drilling & blasting in mineral benches	Deep hole drilling & blasting is proposed for development of OB benches. Short hole drilling & blasting will be done in hard strata of ore bench	Not required as per the strata condition.	Manual method of mining is now going on.
3k	Provision of mining machineries in mineral benches	The mineral excavation will be done manually	The mineral excavation will be done manually	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	The height & width of benches are proposed to be mentioned 3-6m & 9 m respectively	The height & width of benches are maintained 6m & 9 m respectively	
3m	Total area covered under	10.152 ha	11.103 ha.	
3n	Ore to OB ratio for the pit/mine during the year	28:1	7:1	
3o	Total area put in use under different heads at the end of year	11.882 ha	Area covered under Mining: 11.103 ha and Under dumping: 6.774 ha.	

3p	Production of ROM mineral during the last five year period as applicable.	5600 t (2020-2022)	5170.335 t (2020-2022)	As this mine is an auction owned mines in the year 2020.
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4. Solid Waste Management-Dumping:

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate dumping of OB in two proposed dumps ,Dump-4&5 and mineral reject in Stack no-1	OB dumping is carried out in back filling dump and mineral reject in stack -1	No top soil generation is there.
4b	Location of topsoil, OB & mineral reject dumps	2429443N to 2429549N/327613E to 327700E AND 2429167N to 2429314N/327646 E to 327778 E	At the earmarked site.	
4c	Number of dumps within lease area and outside lease area	2 Dumps within the lease area. Outside :Nil	2 Dump within the lease area. Outside :Nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	D-4 : 2429443N to 2429549N/327613E to 327700E & D-5: 2429167N to 2429314N/327646 E to 327778 E	At the earmarked site.	
4e	Number of active & alive dumps	2 Dumps.	Only back filling is going on and one dump is active.	
4f	Number of dead	Nil	Nil	
4g	Number of dumps stabilized	Dump –D2	Dump –D2	
4h	Whether Retaining wall or garland drain all along dumps are there	At the toe of the backfilled area -620 m x1.5 mx 1.5 m Dump-2 (Garland Drain)	Yes it is there.	
4i	Length of Retaining wall or garland drain all along dump	Retaining wall: 620 m x1.5 mx 1.5 m Garland Drain: 100m x1.5 mx 1.5 m	Yes it is there.	
4j	Number of settling ponds	Nil	Nil	

5. 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	All quarries has to be backfilled after exhaustion of mineral.	Done as per the proposal.	No deviation
5b	Area under backfilling of mined out area	0.065	0.195 ha	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No top soil will be generated	No top soil is generated	
5d	Total area fully reclaimed & rehabilitated	No proposal	Plantation is done on waste dumps.	

6. 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	The PMCP return is already submitted.	
6b	Area available for rehabilitation (ha)	Nil	Nil	
6c	Afforestation done (ha)	1.0 ha(1000 saplings)	1000(Saplings)0.015 ha	
6d	No. of saplings planted during the year	250 saplings	500 saplings planted	
6e	Cumulative no. of plants	Nil	1500(Saplings)0.112ha	
6f	Any other specific method of rehabilitation	Nil	Nil	
6g	Cost incurred on watch & care during the year	Nil	Nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for	650 x 7.5 m	0.195 ha	
6i	Compliance on reclamation and rehabilitation by backfilling	4875 m ³	19143.825 m ³	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on the	Nil	Nil	

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making	Backfilling	Backfilling is continuing in the earmarked area .	
6l	Compliance on reclamation and rehabilitation by backfilling	Nil	Nil	
6m	Compliance of Rehabilitation of waste land within lease (i)Afforestation	Nil	Nil	
6n	Compliance of Rehabilitation of waste land within lease (ii) Area rehabilitated (ha) Method of rehabilitation	Nil	Nil	
6o	Compliance of Rehabilitation of waste land within lease (iii) Method of rehabilitation	Nil	Nil	
6p	Compliance of Environmental monitoring (core zone & buffer zone)	Quarterly environmental monitoring at 4 locations for air monitoring, 3 locations for water quality, 4 stations for noise level survey.	Monthly environmental monitoring at 4 locations for air monitoring, 2 locations for water quality (One is surface & other is ground water), 8 stations for noise level survey& Quarterly for soil sample study from 4 locations.	

7. Mineral Conservation:

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting within lease area	Grade wise sorting within lease area	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual	Manual	

7c	Different grade of mineral sorted out at mines	Low grade-25% to 35% Mn Mineral reject- Below 25%	Low grade-25% to 35% Mn Mineral reject- Below 25%	
7d	Any beneficiation process at mines	Nil	Nil	

8. Environment:

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No top soil proposed to be generated	No top soil is generated.	
8b	Concurrent use or storage of topsoil	No Proposal	Not Applicable	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes, the waste dump & mineral reject dump are proposed to be done separately	Yes, the waste dump & mineral reject dump are proposed to be done separately	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	As the quarries are active, the waste generated are proposed to be done separately for restoring	As the quarries are active, the waste generated are proposed to be done separately for restoring	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NA	NA	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	NA	1500	
8g	Survival rate	NA	80%	
8h	Water sprinkling on roads to control airborne dust	Yes, water sprinklers are proposed to deploy	Water sprinkling is carried out by water tanker.	

9. Compliance of Rule 45

S.N.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and Annual returns	Monthly Return and Annual return both are submitted regularly.	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer-1, Geologist-1 and Manager-1	Mining Engineer-1, Geologist-1 and Manager-1	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Mining/pits-13.667 ha, Dumping-8.881ha ,Mineral Storage-5.00 ha ,Reclamation -0.065 ha	Mining/pits-11.103 ha, Dumping-6.774 ha ,Mineral Storage-2.837 ha ,Reclamation - 0.060 ha	
9d	Scrutiny of Annual return on Afforestation	250 nos Saplings to be planted	500 nos Saplings planted inside the lease area.	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Quantity -16695 ton ,Grade-10-25%Mn	Quantity -4989.73 ton ,Grade-16-24%Mn	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Rom-19291 ton ,Mineral Reject-16695 ton ,and ROM Saleable mineral-2596 ton	Quantity -4989.73 ton ,Grade-16-24%Mn	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost etc.	Annual Return	Annual Return will be submitted before 30 th June 2023 as per MCDR-2017 Rule 45 (5) (c)	
9h	Scrutiny of Annual return on fixed assets	Annual Return	Annual Return will be submitted before 30 th June 2023 as per MCDR-2017 Rule 45 (5) (c)	
9i	Scrutiny of Annual return on mining machineries	Excavator-2(PC -300) ,Dumper 20 t -4 nos ,Water Tanker -10 kl -1 and Light Vehicle -1	Excavator-1(PC -300) ,Dumper 20 t -1 nos ,Water Tanker -10 kl -1, Light Vehicle -1 and one Loader	

Violation issued on previous inspection	Status of Compliance	Violations observed in current inspection, if any.
Nil Violation	NA	Nil violations observed.

