

MCDR INSPECTION REPORT (2018-19)

1.0 GENERAL -

SN	Particulars	Details
1	Name of inspecting office ,designation and Accompanying person	Shri Rajesh Kumar Das, Senior Assistant Controller of Mines, Mr Tembe Prasanna Kumar(Agent Mine) and Shri S.K.Paul,QP
2	Date of inspection	08.04.2019
3	Name of the Mine	Laindongari Iron Ore Mine
4	Total Lease Area (Ha) with breakup of Non-forest and forest land	14.40 Ha,Protected Forest Land – 9.50 Ha Non Forest Land – 4.90 Ha
5	Mine Code,File No.	30CHG08006,CG/KNK/FE-5/NGP
6	IBM Registration Number under rule 45 of MCDR, 1988	IBM/4800/2011
7	Name of the lessee, Address, phone, email and fax number	M/s Jayaswal Neco Industries Limited. F-8, M.I.D.C, Industrial Area, Hingna Road, Nagpur, District -Nagpur, State -Maharashtra, Pin - 440016, Phone - 07104-237276/ 236251/ 237471/ 237472, FAX - 07104-237583/ 236255, Emailid - contact@necoindia.com
8	Village	Barbaspur
8	Taluka / Mandal / District	Bhanupratappur, District-Kanker
10	State	Chhattisgarh
11	Post office &PIN	Hatkarra (494670)
12	Nearest police station	Korar
13	Nearest Railway station	Bhanupratappur
14	Date of Grant of Mining Lease	08/10/2014
15	Date of Execution	16/10/2014
16	Date of opening of Mine	24/12/2014
17	Date of first Renewal, if applicable and its period &expiry	Not Applicable.
18	Date of second Renewal, if applicable and its period &expiry	Not Applicable.
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Not Applicable.
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Megh Pal Singh (Nominated Owner) M/s Jayaswal Neco Industries Ltd, Steel Plant Division, Industrial Growth Centre, Siltara, Raipur (493111), Chhattisgarh Email ID meghpal.singh@necoindia.com , Fax - 07721- 264279/ 264240 Contact no - 07721- 264241/ 264263,9109119120,DOA:13.11.2014

SN	Particulars	Details
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr Tembe Prasanna Kumar (President, Metal Mines Division), M/s Jayaswal Neco Industries Limited, Metal Mines Division, Rana Niwas, Village-Chougel, Post- Bhanupratappur, District Kanker, Chhattisgarh, Pin-494669, District – Kanker, Phone - 07850 - 252735, Mob no - 9109119092, 9425502376 FAX - Nil Emailid - tembe.prasanna@necoindia.com bhanu.mines@necoindia.com Date of appointment—22.03.2017
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri Santosh Kumar Singh, M/s Jayaswal Neco Industries Limited, Metal Mines Division, Rana Niwas, Village-Chougel, Post- Bhanupratappur, District Kanker, Chhattisgarh, Pin-494669, District – Kanker, email- tembe.prasanna@necoindia.com santosh.singh HYPERLINK "mailto:email-tembe.prasanna@necoindia.com"@necoindia.com date of appointment—02.07.2018
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Santosh Kumar Singh, M/s Jayaswal Neco Industries Limited, Metal Mines Division, Rana Niwas, Village-Chougel, Post- Bhanupratappur, District Kanker, Chhattisgarh, Pin-494669, District – Kanker, email- HYPERLINK "mailto:email-tembe.prasanna@necoindia.com" santosh.singh HYPERLINK "mailto:email-tembe.prasanna@necoindia.com"@necoindia.com date of appointment—02.07.2018
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57.	Yes
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	(1) Mining Plan vide letter no KNK/FE/MPLN-1027/NGP dtd 11.06.2009 for proposal period 2014-15 to 2018-19. (2) Modification in Approved Mining Plan vide letter no KNK/FE/MPLN-1027/NGP/2015 dtd 06.05.2016 for proposal period 2015-16 to 2018-19 Specific condition - Nil
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	NIL

27	Mineral(s) granted in lease and proved for mining	Iron Ore.
28	Method of Mining(Open cast, Underground)	Open cast
29	Category (Fully Mechanised, Others or Manual)	Category – "A"(Fully Mechanised)
30	Captive/Non Captive	Captive
31	Existing EC Limit and validity	One Lakh Eighty Thousand

**Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. –
1.0 Exploration -**

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	14 Nos. vertical bore holes by way of Non core DTH drilling have been sunk during 2018-19.	To know existence of ore if any.
1b	Exploration over lease area for Geological axis 1 or 2.	Under G1 Category: Nil	7.53 Ha	Nil
		Under G2 category: Nil	NIL	Nil
		Under G3 category: Nil	NIL	Nil
		Under G4 Category: Nil	NIL	Nil
		Non-Mineralised: Nil	Nil	Nil
1c	Exploration Agency & Expenditure in lakh Rupees during the year	M/s Jayaswal Neco Industries Ltd. F-8, M.I.D.C, Industrial Area, Hingna Road, Nagpur District -Nagpur, State-Maharashtra, Pin -440016, Phone- 07104-237276/ 236251/ 237471/ 237472, FAX- 07104-237583/ 236255, Emailid- contact@necoindia.com Fax – 07104-237583/236255 Expenditure incurred = Rs. 18,43,200 /-		
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil		

SN	Item	Proposals	Actual work	Remarks
1e	Balance reserves as on 01.04.2019 (in Tonnes)	Under(111): 7,11,876 Tonnes	Under(111): NIL 222-16143	During the mining it has been observed that reserves reduced drastically because of drastic reduction in the area of

				mineralisation due to presence of irregularly distributed intercalated waste within insitu ore and float ore zone. Entire insitu ore and float ore has been mined out except at places where minor quantity of low grade material exist. Mining of such materials are not feasible economically.
		Under(211): 7,655 Tonnes	Under (211): NIL	NIL
		Under(222): NIL	Under (222): 16,143 Tonnes	
1f	General remarks of inspecting officer on geology, exploration etc.	The laindongri deposit is mainly characterized by lateritic soil with float ore spreading over entire southern eastern and western slopes of the hill. The upper elevated area of the hill is occupied by massive iron ore and lower part is occupied by shales and phylite and covered with float ore with lateritic soil. The area is broadly exposed but depthwise exploration not done.		

2.0 Development -

SN	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area (Range in UTM/Local Coordinate/Plot No./Location)	Mining will be done from top of the hill between longitude - E 81° 12'59.22" to E 81° 13'14.77" and latitude N 20° 16'11.65" to N 20° 16'24.12"	Mining has been with in the proposed area.	Nil
2b	Separate benches in topsoil, overburden and mineral (Rule 13)	NIL	NIL	Nil
2c	Stripping ratio or ore to OB ratio	1:1.10	1:0.05	Nil
2d	Quantity of topsoil generation in m3	Nil	Nil	Nil
2e	Quantity of overburden generation in m3	There is no overburden available as such. However, waste as SB will be	Nil as no waste generated.	Nil

		generated during development of mine and haul road. Waste generated during mining will be kept separately within the lease area.		
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	The development has been done broadly as per proposal and float ore removed upto depth of 0.5 mtr and waste generated. Entire float ore is sent for screening.		

3.0 Exploitation -

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	1	1	Nil
3b	Quantity of ROM mineral production proposed	1,80,000 Tonnes	9,568Tonnes	Non availability of expected mineralized ROM due to presence of intercalated waste within insitu ore and float ore zone.
3c	Recovery of salable mineral from ROM production	1,62,000 Tonnes	Production of processed lump & fines during 2018-19-14,499.430 Tonnes	Processing done from available ROM stacks of previous year 37,148.090 Tonnes + ROM produced 9,568 Tonnes during 2018-19, Total ROM being 46,716.090 Tonnes. During 2018-19, ROM processed 45,815.570 Tonnes and balance ROM available in the mine 900.520 Tonnes.
3d	Quantity of mineral reject generation	Nil	Nil	Nil
3e	Grade of mineral reject generation and threshold value declared	Nil	Nil	Nil
3f	Quantity of sub-grade	18,000 Tonnes	31,316.140 Tonnes	During processing Sub

	mineral generation			grade fines of below 55 % Fe generated during 2018-19.
3g	Grade of sub-grade mineral generation	Below 55 % Fe	Below 55 % Fe	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method	Mechanised method	Nil
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No.	The sub grade material after beneficiation dispatched to plant	Nil
3j	Provision of drilling & blasting in mineral benches	Drilling and blasting has been proposed subject to the availability of hard material.	Drilling and blasting has not been done as there does not exist any hard material.	Nil

SN	Item	Proposals	Actual work	Remarks
3k	Provision of mining machineries in mineral benches	As per Approved Modified Mining Plan for proposal period 2015-16 to 2018-19 machineries to be deployed – Jackhammer- 3 nos, Air Compressor- 1 no, Excavator 4 nos, Dumper 6 nos, Water Tanker 1 no, Pay Loader 1 no, Dozer 1 no, Crushing and screening unit-1 set	At present machineries deployed at mine's site- Excavator 1 no, Dumper 5 nos, Water Tanker 1 no, Pay Loader 1 no, Crushing and screening unit-1 Sett.	Jack hammer and compressor not required since no drilling and blasting is involved
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height- 3 to 6 mtr	Maintained as per proposal.	Nil
3m	Total area covered under excavation/ pits	6.370 ha	6.370 ha	Nil
3n	Ore to OB ratio for	1:1.10	1: 0	Nil

	the pit/mine during the year			
3o	Total area put in use under different heads at the end of year	8.866 Ha	8.866 Ha	Nil

SN	Item	Proposals		Actual work	Remarks
		Year	Production (Tonnes)	Production (Tonnes)	
3p	Production of ROM mineral during last five-year period, as applicable (in Metric Tonnes)	2014-15	60,000 Tonnes	59,700 Tonnes	Only collection of float ore.
		2015-16	1,62,000 Tonnes	59,663.850 Tonnes	(1)Proposed production could not be achieved because of delay in receipt of EC and CTO on dt 20.12.2016 and 23.01.2017 respectively. (2) Non availability of expected mineralized ROM due to presence of intercalated waste within insitu ore and float ore zone.
		2016-17	1,80,000 Tonnes	93,650.000 Tonnes	Non availability of expected mineralized ROM due to presence of intercalated waste within insitu ore and float ore zone.
		2017-18	1,80,000 Tonnes	1,13,280.000 Tonnes	- do -
		2018-19	1,80,000 Tonnes	9,568.000 Tonnes	- do -
		3q	General remarks of inspecting officer on method of	The method of mining is by opencast method using Shovel Dumper combination as proposed.	

	mining etc.	
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4.0 Solid Waste Management-Dumping -

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 36, 37)	<p>(1) No top soil is available in the area. If some top soil is encountered during development, same will be transported to 7.5 mtr non-mining zone at a specified site for future plantation.</p> <p>(2) Site for dumping waste has been selected near north western side inside lease area.</p> <p>(3) Site for dumping sub grade ore selected near north western side inside the lease area.</p>	<p>No top soil generated so far.</p> <p>As per proposal</p> <p>As per proposal</p>	<p>Nil</p> <p>Nil</p> <p>Nil</p>
4b	Location of topsoil, OB & mineral reject dumps (Range in UTM/Local Coordinate/Plot No./Location)	The site for dumping waste and sub grade fines have been selected towards north west side in the lease area.	<p>Waste dump - Lat- N 20° 16'20.02" to N 20° 16'22.84" and Long- E 81° 13'0.16" to E 81° 13'03.20"</p> <p>Subgrade Fines - Lat- N 20° 16'18.50" to N 20° 16'20.30" and Long- E 81° 13'0.70" to E 81° 13'2.68"</p>	<p>Nil</p> <p>Nil</p>

4c	Number of dumps within lease area and outside lease area	1 no waste dump and 1 no sub grade fines dump have been proposed within lease area.	As per proposal	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 14)	The site for dumping waste and subgrade fines have been selected beyond ultimate pit limit towards north west side in the lease area.	The location of the dumps have been given under Sr. No 4b.	Nil
4e	Number of active & alive dumps	1	1	Nil
4f	Number of dead dumps	NIL	Nil	Nil
4g	Number of dumps stabilised	NIL	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there	Garland drains will be provided around waste dump to arrest rain wash.	Garland drain with settling ponds are there in the mine as per proposal.	Nil

4i	Length of Retaining wall or garland drain all along dump	Garland drains will be provided around waste dump to arrest rain wash.	Garland drain of 581 mtr (L) x 2 mtr (W) x 2 mtr (D) has been erected side by the dumps and on western side of the lease area covering 0.116 ha	Nil
4j	Number of settling ponds	Not proposed	3 nos settling ponds covering 0.100 ha area have been erected.	Nil
4k	Specific comments of inspecting officer on waste dump management	The dumping has been done broadly as per proposal and no major dump and partially waste will be used for backfilling.		

5.0 Solid Waste Management-Backfilling -

SN	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No such proposal.	Nil	Nil

5b	Area under backfilling of mined out area	Not proposed	Not done	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 36)	No top soil is available in the area.	NIL	Nil
5d	Total area fully reclaimed & rehabilitated	After full extraction of mineral, the area will be rehabilitated by plantation.	Out of 14.40 ha area, 0.216 ha area is occupied by garland drain and settling tank, 3.47 ha area has already been planted where 1,500 plants are survived, rest 10.714 ha area yet to be planted. Thus total plantation area will be 14.184 ha	Nil
5e	General remarks of inspecting officer on backfilling, reclamation etc	The mining area not matured for backfilling in 2018-19 but during inspection of FMCP it was observed that backfilling started.		

6.0 Progressive Mine Closure Plan-

SN	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23. Details should be given in the format as given in Annexure-20.	As per approved document rehabilitation is proposed after complete exhaustion of mineral i.e. in 2019-20	Annual report on PMCP is being submitted regularly.	Nil
6b	Management of worked/mined out benches			
	i) Area available for rehabilitation (ha)	Nil	6.37 ha	Nil
	ii) Afforestation done (ha)	NIL	0.14 ha	Nil
	iii) No. of saplings planted during the year	NIL	110	Nil
	iv) Cumulative no. of plants	NIL	110	Nil
	v) Any other specific method of	NIL	NIL	Nil

	rehabilitation			
	i) Cost incurred on watch & care during the year	NIL	NIL	Nil

6c	Compliance on reclamation and rehabilitation by backfilling -			
	i) Voids available for backfilling (Area X D)	Not proposed	0.163 Ha x 5 m	Nil
	ii) Void filled by waste/tailings	Not proposed	To be filled by waste during 2019-20.	Nil
	iii) Afforestation on the backfilled area	Not proposed	To be done during 2019-20.	Nil
	iv) Rehabilitation by making water reservoir	Nil	Nil	Nil
	v) Any other specific means	Nil	Nil	Nil
6d	Compliance of Rehabilitation of waste land within lease	After full extraction of mineral, the area will be rehabilitated by plantation.	About 6.704 ha undisturbed waste land including safety zone is available within the lease area of which 3.25 ha has already been rehabilitated by plantation. Balance 3.454 ha will be rehabilitated by plantation during 2019-20.	Nil
	i) Afforestation	Nil	Nil	Nil
	ii) Area rehabilitated (ha)	Nil	3.25 ha	Nil
	iii) Method of rehabilitation	Plantation	Plantation	Nil
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Environmental monitoring will be done monthly.	Yes being done.	Nil
6f	General remarks of inspecting officer on PMCP compliance & progressive	Broadly done as per proposal.		

7.0 Mineral Conservation -

SN	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Entire ROM will be processed in the crushing and screening unit within the lease area.	Being done as proposed.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanically	Being done Mechanically	Nil
7c	Different grade of mineral sorted out at mines	Entire ROM will be sorted out mechanically.	Grades of mineral generated for the year 2018-19- Lumps Fe-60 to 62% Fines- below 55% Fines 55 to 58 % Fines 58 to 60 % Fines 60 to 62 %	Nil
7d	Any beneficiation process at mines	No beneficiation Proposed at mines site.	NA	Nil
7e	General remarks of inspecting officer on Mineral conservation &beneficiation issues	No beneficiation done within lease area except crushing and screening.		

8.0 Environment -

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 36)	No top soil is available in the area. If some top soil is encountered during development, same will be transported to 7.5 mtr non-mining zone at a specified site for future plantation.	utilised for plantation along the safety zone.	Nil
8b	Concurrent use or storage of topsoil	No top soil is available in the area.	- do -	Nil

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 37)	Separate Area has been marked	Maintained	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Waste generated during mining will be utilised for backfilling of excavated quarry as per requirement.	Backfilling started in small pit and most of the area mining is done as float ore mining upto depth of 0.5m.	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed	Not Required.	Nil
8f	Baseline information on existence of plantation & additional plantation done (Rule 44)	Plantation will be done @ 500 saplings over 0.5 ha per year as per guidance of Forest Department.	As per guidance of Forest Department. about 3500 nos plants have been planted over 3.47 ha within lease area till 2018-19. Out of which only 1500 plants are survived. Around 350 saplings distributed to the villagers residing adjacent.	Nil

SN	Item	Proposals	Actual work	Remarks
8g	Survival rate	80%	50%	Nil
8h	Water sprinkling on roads to control airborne dust	Arrangement for Water spraying has been proposed to avoid generation of dust.	Being done on regular basis	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	The mining is done basically by float ore mining and pit size is very small and preventive measure for dust suppression is followed therefore no such adverse impact on aesthetic beauty observed.		

9.0 Compliance of Rule 45 -

S.N.	Item	COMMENTS	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted on 09.04.2019 for March 2019. A.R. submitted up to- 2017-18 on 29.06.2018 AR for 2018-19 yet to be submitted.	

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	Yes given	Shri Santosh Kumar Singh, Mining Engineer & Manager, Shri Naresh Kumar Nirmalkar, Geologist	Scrutiny of AR for 2017-18
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes given	(i) Already exploited & abandoned by opencast (O/C) mining - Nil (ii) Covered under current (O/C) Workings – 4.46 ha (iii) Reclaimed/Rehabilitated – 3.47 ha (iv) Used for waste disposal – 0.051 ha (v) Occupied by plant, buildings, residential, welfare buildings & roads – 0.86 ha (vi) Other Purpose (Mineral storage, subgrade storage, internal road, mineral separation plant, garland drain) 1.462 ha	
9d	Scrutiny of Annual return on afforestation	Yes given	About 3500 nos plants have been planted	Survival rate is very less
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil		
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Yes given	Closing balance ROM 37148 Tons, Graded ore lumps 60-62%-1480 Tons, Fines below 55% grade-43150 Tons, 55-58%-402.46 Tons, 58-60%-2662.21 Tons, 60-62%-784.98 Tons	

S.N	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Yes given	the ex-mine price for - Lumps Fe-60 to 62- Rs1580/- Fines- below 55 -Rs1950/- Fine 55 to 58 -Rs1459/- Fines 58 to 60-Rs1450/- Fines 60 to 62 -Rs1900/-	
9i	Scrutiny of Annual return on fixed assets	Yes given	the value of fixed assets is -Rs 3,52,67,659/-	
9k	Scrutiny of Annual return on mining machineries	Loader- 1 no, Excavator – 1 no, Dumper- 5 nos, Water tanker – 1 no, Crushing and Screening unit – 1 set.		

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out:- The mines was presently inspected for Final Mine Closure Plan and no serious violation found.

In last inspection carried out by Shri J.S Hadda, Asstt Mining Geologist on 13.09.2017 violation under Rule26(2) of MCDR,2017 for non-submission of Annual report of the protective and rehabilitation work carried out for the year 2016-17 has been pointed out was complied.

The violation pointed out based on office record under Rule 11 of MCDR,2017 for non-submission of Review of Mining Plan 180 days before expire of approved document is complied as lessee submitted FMCP and it is approved.

(RAJESH KUMAR DAS, SENIOR ASSISTANT CONTROLLER OF MINES)