TECHNICAL DEPARTMENT

Ref:- DGM (Geo) / 15-16/ 50

20th May, 2015

Subject:- Ore Reserves.

MOIL has been exploring Manganese deposits within its Mining leases, since 1950. The cumulative exploration over the period has resulted is proving 61.18 Million Tonnes of Bed (Insitu) ore resources, inclusive of Reserves, by October 2010.

Exploration is a continuous process, and MOIL, has applied UNFC system. MOIL has explored fatensively from October 2010 to March 2014 which has led to enhancing total insitu (Bed) resources from 61.18 MT. to 70.78 M.T. The quantum jump of resources by 13.96 MT. i.e approx 23% during intervening period as a result of 33,847 meters of exploratory core drilling covering 160 bore holes in different mines.

Black dumps or Mineral dumps are the expressions of old mining activities in various mines. The non saleable fractions of ROM were segregated over a place is termed as Black dump. MOIL has estimated these Mineral Dumps in saleable & non saleable fractions in tune with market conditions. The estimate as on 01-04-2011 was, 1.13 Million Tonnes of dump Reserves and 5.67 Million Tonnes as Resources. Subsequently, yearly depletion on account of sale and addition as non saleable fraction of respective year, has resulted in 0.72 Million Tonnes of Reserves and 5.88 Million Tonnes under Resource category of Mineral dump. A statement is placed for ready reference.

The total Insitu (Bed) resources are estimated by graphical x-section method. Out of the total estimate of Resources, the quantum which has been established by development is placed under Reserve category of UNFC. The Bed resources are up dated yearly in consonance with exploration, and Reserves are updated by deducting the yearly production and by adding appropriate quantum from Resources, which is estimated as a result of development. A statement is placed showing the yearly updation of Insitu (Bed) Resource & Reserves from 01-10-2010 to 01-04-2014 for ready reference.

The Note is submitted to Competent Authority for kind approval of 13.96 Million Tonnes of Insitu (Bed) resources achieved through 33,847 Mtrs. drilling from

01-10-2010 to 01-04-2014. A draft SOP (Standard operating procedure) is being enclosed to implement recording of resources and reserves of Manganese ore elaborating procedure along with authority & accountability to be implemented from current fiscal year.

current fiscal year. Submitted for approval please. Dy. G.M.(Geo. Kindly Classify in to followy & Subsul-1.4,2014 TIL lusitu The informations is placed as ann C' Submitted for amoval Pl Zable attacked as derived above Caro Calm 27/4/15

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ORE RESERVE + RESOURCE STATEMENT OF BED FROM 1.10.2010-1.4.2014 (In Million Tonnes) AS PER UNFC

		RESE	RESERVE			Resource	urce			
	Opening		Resource to	Closing	Opening	Resource to	Added by	Closing	KESEKVE +	Total Drilling
Year	Balance	Production	Reserve	Balance	Balance	Reserve	Exploration	Balance	RESOURCE	Mtrs.
K	8	C	O	E=B-C+D	ш	Ó	Ξ	l= F-G+H	#3 =r	¥
Upto 30.9.2010	-							32.46		
1.10.2010-31.3.2011	28.71	0.61	0.35	28.45	32.46	0.35	3.86	35.97	64,42	3016.00
1.4.2011-31.3.2012	28.45	1.17	3.81	31.09	35.97	3.81	3.82	35.98	67.07	9540.00
1.4.2012-31.3.2013	31.09	1.19	1.49	31.39	35.98	1.49	0.3	34.79	66.18	7064.00
1.4.2013-31.3.2014	31.39	1.15	0	30.01	34.79	0	5.98	40.77	70.78	14227.00
as on 1.4.2014	30.01				40.77					

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		RESERVE +								
RUNEC		Closing	Balance				5.48	5.72	5.88	
T OF DUMP FROM 1.10.2010-1.4.2014 (In Million Tonnes) AS PER UNEC			vejeti below 10%				0.42	0.00	0.00	
14 (In Million	Resource	Added FROM					0.35	0.34	0.28	
2010-1.4.20		Resource to Reserve		9			0.12	0.10	0.12	
30M 1.10.		Opening Balance		Ĭ.			5.67	5.48	5.72	5.88
- DUMP FF		Closing		E=B-C+D		1.13	1.00	0.87	0.72	
ATEMENT O	RESERVE	Resource to Reserve		۵			0.12	0.10	0.12	
ORE RESERVE + RESOURCE STATEMEN	RESE	Production		C		0.20	0.25	0.23	0.27	
SERVE + RE		Opening Balance		В			1.13	1.00	0.87	0.72
ORE RE		Year		Å	Upto 30.9 2010	1.10.2010-31.3.2011	1.4.2011-31:3:2012	1.4.2012-31.3.2013	1,4,2013-31,3,2014	15 on 1.4.2014

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अं. एस. के. सारकार क्रानंधक (भूवेज्ञान) मॉयल लिमीटेड नागपूर.

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ORE RESERVE + RESOURCE STATEME	SOURCE S	TATEMENT C	JF BED FRO	M 1.10.20	10-1.4.201	4 (In Millio	NT OF BED FROM 1.10.2010-1.4.2014 (In Million Tonnes) AS PER UNFC	PER UNFC	
		RESERVE	NE.			Res	Resource		. D.C.C.D.V.C.
		NEOE.	Resource			Resource			KESERVE T
	Opening		to	Closing	Opening Balance	to Reserve	Added by Exploration	Closing Balance	RESUURCE
Year	Balance	Production	2012521						
		. (٥	F=B-(+D	U.	9		I= F-G+H	J=E41
A	B	ار							
				28.71				32.46	
Upto 30.9.2010	2127			1		10 O	У С	35.97	64.42
1 10 2010-31 3 2011	28.71	0.61	0.35	28.45	32.40	O.0			
1:0:40 OTOX:01:1		117	3.81	31.09	35.97	3.81	3.82	35.98	67.07
1, 2011-31.3.2012	78.45	1							ar in
	21.00	1 19	1.49	31.39	35.98	1.49	0.3	34.79	<u>₹</u> 7.00
1.4.2012-31.5.2015	01.0	1					L	77 01	70.78
	21 39	115	0	30.01	34.79	O	5.98		
1.4.2013-31.3.2014	01.0	1			I	i r			
2.001/10012	30.01				40.77				
10001:1:TIO SP				į	12	7		T-N-W	

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The Ore Reserves/ Resource as on 01-04-2014 is appended below

All figures mentioned are in Million Tonnes(M.T.)

Category	Insitu(BED) M.T	Dump M.T	Total M.T
Reserves	30.01	0.72	30.73
Resources	40.77	5.88	46.65
Total	70.78	6.60	77.38

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